RECENT DEVELOPMENTS IN ALCOHOLISM

VOLUME 18
RESEARCH ON
ALCOHOLICS
ANONYMOUS AND
SPIRITUALITY IN
ADDICTION RECOVERY

EDITED BY MARC GALANTER AND LEE ANN KASKUTAS

An Official Publication of the American Society of Addiction Medicine and the Research Society on Alcoholism.

This series was founded by the National Council on Alcoholism.

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The Twelve-Step Program Model Spiritually Oriented Recovery Twelve-Step Membership Effectiveness and Outcome Research



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Preface I

From the President of the American Society for Addiction Medicine

Recent Developments in Alcoholism has been an important contribution to the literature in Addiction Medicine for almost two decades. It is a bit ironic that this year's anthology addresses not one of the recent "new" things in recovery, but one of the oldest: the ability of active participation in Alcoholics Anonymous and other related peer-assisted recovery activities to help initiate or sustain recovery. It is not "new" that AA, NA, Al-anon and the like are available in communities around America and around the world or that thousands if not millions of persons in recovery have attributed to AA a major role in their recoveries. And it is not "new" that AA is, indeed, not "professional help" and should never be considered "treatment" by any patient, family member, public policy maker, insurance company or managed care utilization reviewer. What is a recent development is that it is no longer appropriate to say "there is no evidence about what AA is or how helpful it may be" or that "evidencebased medicine includes pharmacotherapies and specific professional counseling interventions as reported through randomized clinical trials, but it excludes peer-assisted recovery activities." The R. Brinkley Smithers Distinguished Scientist Award granted at the ASAM Medical Scientific Conference in 2007 honored the work of one of the co-editors of this volume, Lee Ann Kaskutas, Dr.P.H., of the School of Public Health of the University of California-Berkeley, examining effectiveness literature on AA and the role of spirituality in addiction and recovery.

Much of health care is showing increasing interest in not only the bio-psycho-social aspects of many health conditions, but the role of spirituality in recovery from illness. The addiction field can lead the way for the rest of medicine in uncovering insights about this essential aspect of human

Relationship Between Treatment and Self Help: A Joint Statement of the American Society of Addiction Medicine, the American Academy of Addiction Psychiatry and the American Psychiatric Association. Adopted 1997.

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experience. This volume includes important articles by Dr. Kaskutas and many other academicians to expand our knowledge base and to serve as an important compilation of contemporary thought and data. Related topics, such as the role of mindfulness meditation in recovery, are also addressed. As scientists such as Richard Davidson, Ph.D. of the University of Wisconsin HealthEmotions Research Institute, learn more about the neurobiology of emotion and the neurophysiologic changes that occur with meditation, we get closer to understanding the neurobiology of recovery itself, which will likely be shown through neuroimaging studies to be affected by peer-assisted activities and other "self-help" activities such as participation in 12-step groups.

Michael M. Miller, M.D., FASAM, FAPA

Preface II

From the President of the Research Society on Alcoholism

This volume of the Recent Developments in Alcoholism series "Research on Alcoholics Anonymous and Spirituality in Recovery" is an important and unique contribution to our scientific understanding of recovery from alcoholism. In essence, the body of work contained here frames an overall question of how the twelve-step process established by Alcoholics Anonymous (AA) intersects with spiritual beliefs to establish abstinence and guide recovery with little professional input. The scientific debate over AA and twelve-step programs has evolved from whether they are effective for individuals that utilize them to why they are effective and how to improve participation. This includes a detailed look at special populations and the self-selection bias reflected in a voluntary organization. The first four chapters address who participates in AA and how to make improvements in the participation of twelve-step programs. For individuals that "work" twelve-step programs, there appears to be increases in the spiritual growth and improvements in psychosocial functioning. Several chapters, beginning with Chapter 5, define spiritual experiences and the impact of spirituality on recovery and rehabilitation from many psychiatric disorders, including alcoholism. An expanded definition of spirituality includes meditative practices and this lends itself to experimental designs that address effectiveness. The "core spiritual beliefs" of AA and the explicit steps in enhancing spirituality are defined and examined. Chapters are devoted to understanding the role of spiritual growth through building a community by helping other alcoholics and participating in self-government. Several authors make the distinction that AA is more than a twelve-step approach to attaining sobriety. Nevertheless, it is also clear that the twelve-step program of AA sets a prototype "road to recovery" for many other addictions. Also included is how the research questions that address the effectiveness of AA and the role of spirituality are framed by historical perspectives, a lesson for how this volume will be received decades from now.

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The scope and depth of this volume will undoubtedly make it an important reference for the practicing physician and scientists interested in improving recovery from alcoholism or other addictions.

Kathleen Grant, Ph.D.

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The Twelve-Step Program

Thomasina Borkman, Section Editor

Introduction: The Twelve-Step Program Model of AA

Thomasina Borkman

Research on alcoholism treatment tends to operate from a conceptual prism of the professional treatment perspective which has become the gold standard of alcoholism treatment research, its terminology overwhelming other approaches. Senator Hughes, an anonymous AA member who in the early 1970s spearheaded the drive to form The National Institute of Alcohol Abuse and Alcoholism, would be surprised that the professional research on alcoholism treatment has become such a hegemonic perspective that alternative frameworks are usually invisible. The objectives of this section, illuminating those alternative frameworks, are (1) to present the history and describe the twelve-step program of Alcoholics Anonymous as a lay and non-professional spiritually based self-help/mutual aid organization and (2) to describe the impact of AA on professional treatment programs, non-professional "social model recovery programs," and other twelve-step addiction self-help/mutual aid groups.

An alternative perspective to medicalized treatment comes from the social sciences (sociology, anthropology, community psychology, social work, and the multi-disciplinary Third Sector research): This alternative perspective—AA as a self-help/mutual aid organization in the Third Sector—views AA as part of the community like the Red Cross, Boys Scouts, or a soccer club. Participants variously come and go and are involved in AA on their own terms without the monetary commitments or contractual obligations that clients have with treatment agencies.

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An extensive research literature on AA and other self-help/mutual aid organizations has developed since the 1970s by researchers from various disciplines who have conducted both quantitative and qualitative studies (see Kurtz 1997, Makela et al., 1996, Rappaport 1993).

This section focuses on AA in the United States and Canada where the fellowship originally started and expanded and the World Service organization of AA in New York City actually includes only the United States and Canada. The other international AA's have their own world service organizations but are not covered.

The chapters in this section utilize and emphasize the implicit or explicit concepts of spirituality found in Alcoholics Anonymous. Spirituality has been conceptualized narrowly as a belief in God (as it is in AA) and more broadly as a set of principles and practices (as it is in AA) that are non-materialistic, often altruistic: hope, forgiveness, lack of self-centeredness, and helping others. As an example of the non-materialistic focus, one promise in the main text Alcoholics Anonymous is that upon completing the first nine of the twelve steps "fear of... economic insecurity will leave us" (1976: 84) which is a promise of an emotional psychological state; there is no promise of actual economic security [materialistic] but a lack of fear of insecurity [non-materialistic].

The first objective of this section, to show how and why AA is a unique, voluntary self-help/mutual aid organization, is met with two chapters—a history article and the twelve-step recovery model treatment program.

Two eminent historians William L. White and Ernest Kurtz wrote the first chapter *Twelve Defining Moments in the History of Alcoholics Anonymous*. Kurtz' *Not-God* (1979), based on his Harvard University Ph.D. dissertation in American civilization, has become the nearly official history of AA; *AA: The Story* (1988) is an updated version. White wrote an encyclopedic history of the early forms of alcoholism treatment and mutual aid societies in the eighteenth, nineteenth, and twentieth centuries in the US titled *Slaying the Dragon: The History of Addiction Treatment and Recovery in America* (1998). He particularly focuses on early mutual aid societies for alcoholics (White 2001) and recovery (White 2006).

The Twelve Defining Moments in the History of AA encapsulate the critical events that shaped the spiritual nature of AA and steered it away from materialism or becoming a professionally based treatment in a resource-intensive organization. Their chapter also explains the historical basis for AA's concepts of spirituality and how AA is spiritual but not religious. A treatment agency requires extensive resources to pay salaries to professional staff, to develop and maintain records of clients, and to own or rent offices for staff, records, the clients, and accompanying paraphernalia. In contrast, AA operates as hundreds and thousands of self-sufficient small local autonomous groups whose financial and volunteer contributions support the state, regional, and national service level organizations of AA; no funding is accepted by AA except for its voluntary contributions from members. Sociologically, the survival of AA for

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over 70 years as a non-bureaucratic mutual help agency is very unusual (see Borkman 2006).

My chapter (Borkman) titled The Twelve Step Recovery Model of AA: A Voluntary Mutual Help Organization complements the White and Kurtz history by more explicitly explaining how AA is a voluntary self-help/mutual aid organization. A central issue separating professional treatment from self-help/mutual aid is the following: Who decides and controls what interventions are made to assist the alcoholic to change their drinking and recover from alcoholism? In professional treatment, the medical, psychiatric, nursing, psychological, or social work professional or team control the interventions and the decisionmaking process in their clinics or agencies. The patient or client often has input into the decision making and his/her cooperation is vital to the success of most interventions. In sharp contrast, the alcoholic or the individual with an alcohol problem who is a potential member of AA or other mutual help group is the decision maker who controls the interventions by virtue of choosing to attend AA meetings or not, to listen or not, to read AA literature or not, to find and connect with a sponsor or not, to interact with AA members inside and outside of meetings or not, to drink alcohol one day a time or not drink, and so forth. Inherent in AA is the mutual aid process which is the consistent and continuous assistance, emotional support, experientially based information, and guidance from peers who have successfully stopped drinking and are practicing the twelve-step "way of life."

I have studied self-help/mutual aid groups since 1970 looking first at Alcoholics Anonymous and non-twelve-step groups for people who stutter or for people with ostomies through a grant from the National Institute of Mental Health. As a visiting researcher 1978–1980 at the National Institute on Alcohol Abuse and Alcoholism, I learned much more about AA as well as "social model recovery programs" in California which I began researching while there (see Borkman 1983).

The second objective of this section is to examine the impact of AA on other alcoholic and substance abuse interventions including professional treatment, the "social model recovery programs" which include sober living houses, and other substance abuse-oriented self-help/mutual aid organizations. The question of AA's impact has been focused for this volume on its influence on other alcoholic and substance abuse interventions. What is excluded from the discussion is the impact of AA on non-substance abuse-related twelve-step anonymous groups and the self-help/mutual aid social movement in general which has spread to almost all industrialized countries, the impact of AA on US society at large (Bloomfield 1994), and internationally. White and Madara (1998) found 94 twelve-step anonymous groups such as Al Anon, Overeaters Anonymous, Gamblers Anonymous, and Codependents Anonymous.

Miller (2003) remarks on how unusual the alcoholism field is in contrast with the medical and psychological treatment of almost all problems which have been secularized.

Within mainstream Western psychology and medicine, spirituality was largely relegated to the realm of superstition or last resort. For the first time in thousands of years of recorded history, it became normative for healing to separate spirit from both body and mind. Alcoholism is a notable exception, an area where the importance of spirituality has never been lost but has retained a significant and sometimes central role in understanding the process of recovery....Much of the reason for this, of course, can be found in the international fellowship of Alcoholics Anonymous (AA) and its 12-step kin. Within AA, spirituality is regarded not merely as a piece of the puzzle, but as the puzzle itself, playing a central role in the development of and recovery from alcoholism.The 12 steps make no mention of disease, denial, neurotransmitters, or self-control. Instead they emphasize contact with God, humility, prayer and meditation, taking personal moral inventory, and serving others.

(Kurtz, 1988; Tonigan, Toscova, & Connors, 1999)

The birthplace at which AA principles and practices were combined with professional ones was Willmar State Hospital and Hazelden in Minnesota in the 1950s; the treatment approach became known as the Minnesota or Hazelden Model. The section is fortunate to have the chapter titled *The Impact* of AA on Professional Treatment authored by two Hazelden researchers, Valerie J. Slaymaker, Director, Butler Center for Research at Hazelden and Timothy Sheehan, Director, Hazelden Graduate School of Addiction Studies. The chapter traces the history of the Hazelden or Minnesota Model of treatment which from its beginning combined principles and practices from AA and from professional treatment. Studies of the effectiveness of twelve-step-based professional treatment are reported as well as AA's role during and following treatment in reducing alcohol use, achieving abstinence, and making positive life changes. Project MATCH, the first large-scale and multi-site randomized trial to examine whether patients could be "matched" to one of three treatment approaches, utilized twelve-step treatment. In addition to using cognitive behavioral therapy and motivational enhancement therapy, two respected professional strategies, Project MATCH chose for its third approach Twelve-Step Facilitation which was based on Minnesota/Hazelden concepts and practices. Twelve-Step Facilitation was essentially professionally driven education about AA, NA, and the twelve-step anonymous approach to abstinence in order to facilitate the patient's accessing AA or NA. Humphreys (2003) pointed out that AA and twelve-step alcoholism treatment are significantly different as a number of chapters in this section show. A research question that does not seem to have been addressed is, what kinds of processes and outcome differences are there for alcoholics who work the twelve steps in a professional treatment setting in comparison with AA or NA's self-help/mutual aid environment?

The second impact chapter titled *The Impact of AA on Non-professional Substance Abuse Recovery Programs and Sober Living Houses* was co-authored by Douglas L. Polcin and myself. All over the United States in the 1950s and 1960s,

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recovering AA members in their zeal to help their alcoholic peers (the twelfth step of service to other alcoholics) started store front programs, housing, and related recovery programs based on AA principles and practices; because of AA's traditions of non-affiliation with any other organizational entity, these programs were not referred to as AA programs but they became known in California as "social model recovery" programs. In most other places than California, these programs were absorbed by professional treatment programs beginning in the 1970s or disappeared due to lack of funding. This chapter chronicles the history of social model recovery programs in California where the approach has remained. In California, an advocacy movement of social model leaders and sympathizers succeeded in retaining social model recovery programs during the 1970s and 1980s, many of which were funded by county alcohol administrations (Borkman, Kaskutas, & Barrows, 1996). The forces of managed care, medicalization, and professionalization succeeded in sharply changing many residential and neighborhood social model recovery programs to hybrids in California in the later 1980s and 1990s (see Borkman, Kaskutas, & Owens, 2007). Sober living houses which operate with neither professional staff nor treatment and are self-supporting from the rents and fees charged from the usually employed residents have remained the primary "pure" social model recovery program extant. Douglas Polcin has extensive research experience with sober living houses and is a major contributor to our knowledge of sober living houses, especially those in California. On the east coast, the Oxford House movement-sober living houses grounded on the principles of AAis another kind of social model recovery program which is described in this chapter. Unfortunately, the major researchers (Jason, Ferrari, Davis, & Olson, 2006) who have studied and extensively published about Oxford House have conceptualized it as neither a social model recovery program nor a self-help organization, and as a result their findings cannot be integrated into addiction literatures.

The final chapter, titled *The Impact of Alcoholics Anonymous on Other Substance Abuse Related Twelve Step Programs*, is by Alexandre B. Laudet, Director of the Center for the Study of Addictions and Recovery at the National Development and Research Institutes in New York City. Dr. Laudet is well known for her extensive research on substance abuse-related twelve-step anonymous programs and is a pioneer with her colleagues in studying the relatively new and important twelve-step fellowships for dually diagnosed (substance abuse and mental illness). She reports on the findings of this pioneering research here. Furthermore, she describes the relatively new Methadone Anonymous for people who are on methadone maintenance. They are regarded as being on drugs by Narcotics Anonymous and are not permitted to share in NA meetings. In this chapter, she also summarizes the research findings on demographics, participation, and outcomes of major drug-dependency twelve-step programs such as Narcotics Anonymous (NA) and compares the similarities and differences

in meetings and recovery programs of the major twelve-step substance abuse-related programs.

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The Twelve-Step Recovery Model of AA: A Voluntary Mutual Help Association

Thomasina Borkman

Abstract: Alcoholism treatment has evolved to mean professionalized, scientifically based rehabilitation. Alcoholics Anonymous (AA) is not a treatment method; it is far better understood as a Twelve-Step Recovery Program within a voluntary self-help/mutual aid organization of self-defined alcoholics.

The Twelve-Step Recovery Model is elaborated in three sections, patterned on the AA logo (a triangle within a circle): The triangle's legs represent recovery, service, and unity; the circle represents the reinforcing effect of the three legs upon each other as well as the "technology" of the sharing circle and the fellowship. The first leg of the triangle, recovery, refers to the journey of individuals to abstinence and a new "way of living." The second leg, service, refers to helping other alcoholics which also connects the participants into a fellowship. The third leg, unity, refers to the fellowship of recovering alcoholics, their groups, and organizations. The distinctive AA organizational structure of an inverted pyramid is one in which the members in autonomous local groups direct input to the national service bodies creating a democratic, egalitarian organization maximizing recovery. Analysts describe the AA recovery program as complex, implicitly grounded in sound psychological principles, and more sophisticated than is typically understood. AA provides a nonmedicalized and anonymous "way of living" in the community and should probably be referred to as the Twelve-Step/Twelve Tradition Recovery Model in order to clearly differentiate it from professionally based twelve-step treatments. There are additional self-help/mutual aid groups for alcoholics who prefer philosophies other than AA.

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Alcoholism treatment has evolved to mean professionalized, scientifically, and theory-based forms of rehabilitation. Alcoholics Anonymous (AA), however, is not a treatment method and is far better understood as a Twelve-Step Recovery Program within a voluntary self-help/mutual aid organization of self-defined alcoholics. Recent interpretations of psychiatrists, psychologists, anthropologists, and psychoanalysts who have thoroughly analyzed the twelve-step program show that the AA recovery program is complex, implicitly grounded in sound psychological principles, and more sophisticated than is typically understood.

The twelve-step recovery model of AA is elaborated in three sections, patterned on the AA logo (a triangle within a circle): The triangle's legs represent recovery, service, and unity. The first leg, recovery, refers to the journey of individual alcoholics from the cessation of drinking to the adoption of a new "design for living" which includes the meetings, the experientially based narrative approach to gaining knowledge and understanding, working the twelve steps, sponsorship, and doing service. The second leg, service, refers to helping other alcoholics (twelfth step work) which not only aids the individual, but also connects the members and attendees into a fellowship—simultaneously providing volunteer effort to keep groups and the organization operating. The third leg, unity, refers to the fellowship of recovering alcoholics, their groups, and the larger state, regional, national organizations. The distinctive AA organizational structure of an inverted pyramid in which the members in autonomous local groups direct the organization through their self-financing and policy input to the national level of "servant" service bodies results in a democratic organization in which egalitarian relationships between recovering peers maximize recovery. The group and organizational relationships posited as twelve traditions (12 & 12, 1974) and twelve concepts (12 Concepts for World Service, 1986) are integral parts of the Twelve-Step Recovery Model and the three legs (individual recovery, service, and unity) reinforce one another. This is quite similar to the idea of a "therapeutic community" in which the total environment is shaped to enhance recovery and growth. This chapter concludes with a restatement and the implications of the twelve-step model being a prototype of voluntary self-help/mutual aid, rather than a treatment approach as understood in professional alcoholism treatment circles today. There is an increasing development of professionally based twelve-step treatments (Humphreys, 2003) and AA should probably be referred to as the Twelve-Step/ Twelve Tradition Recovery Model in order to clearly differentiate it from professionally based treatments that rely on a twelve-step approach.

1. Essentials of Self-Help/Mutual Aid

Self-help/mutual aid groups, as defined here and by many social science researchers, are self-governing groups of members who possess a common health concern and provide emotional support and aid; membership is

essentially cost-free and experiential knowledge is highly valued (Surgeon General's Workshop on Self-Help and Public Health, 1988). Self-help groups, mutual help groups, and mutual aid self-help (MASH) are other terms used to delineate contemporary self-help/mutual aid of which AA is regarded as the prototype. I will use self-help/mutual aid and mutual help interchangeably.

"Self-help/mutual aid" is used to connote and signify the complexity, if not the paradox, that these groups and organizations represent. Frank Riessman, a major contributor to self-help/mutual aid theory, research, and policy for 30 years states that self-help refers to the internal resources mobilized by the encouragement, hope, and support received from mutual aid and to the self-responsibility an individual assumes for resolving his/her issues within the context of mutual aid (Riessman & Carroll, 1995). Mutual aid connotes the distinctive relationships and help found among those who have similar experiences with an illness or condition in such groups. Twelve-step groups, like other mutual help organizations, are problem-solving groups whose attendees develop experientially based information and understanding rather than from professional knowledge, hearsay, or conventional wisdom (Borkman, 1999). In the voluntary self-help/mutual aid context, the relationships among experiential peers are egalitarian instead of the hierarchical relationship of the superordinate professional and subordinate patient/client; help is freely given as a gift (Medvene, 1984), not a commodity; and help is reciprocal (i.e., the "helper therapy" principle; Riessman, 1965). One party to the relationship may be more seasoned and further along in recovery, but he/she can only gain influence, not a different status, as a result.

Self-help/mutual aid is not a panacea and appeals to a small minority of people with a common problem regardless of whether it is a group for people with arthritis, prostate cancer, schizophrenia, Parkinson's disease, alcoholism, or parents whose children have cancer (Kurtz, 1997).

2. Methodologies and Frameworks of Social Science

Social science organizational analysis distinguishes between the *ideal* and *actual* practices in an ongoing organization (see Kitchin, 2002). The analysis of AA as *ideal* would be *textual* AA, that is, AA as written in its official literature and certain highly respected texts. The major texts are Alcoholics Anonymous (1976), known as the Big Book, The Twelve Steps and Twelve Traditions (12 & 12, 1974), Alcoholics Anonymous Coming of Age (AACA, 1957), the Grapevine magazine, and respected histories such as *Not God* (Kurtz, 1979). See White and Kurtz (this volume) for a full description of major texts.

The analysis of *actual* practices and beliefs is empirically based through indepth qualitative observation, interviewing, ethnography, field research (Agar, 1986; Gubrium, 1988), and "naturalistic inquiry" (Lincoln & Denzin, 2003). Given the nature of voluntary associations and mutual help groups one knows that *actual* living groups vary in small or large but unknown ways (relatively

few groups have been researched and documented) from the *ideal*. Diversity among AA groups is also highly likely because so much of the activity, transmission of beliefs and ideas, is oral rather than through the use of the literature (Makela et al., 1996).

The positivistic research of the medical scientist and epidemiologist that presumes there is a single knowable reality and uses well-developed methods of experimentation, reliable and validly established measuring instruments, and sample surveys with well-developed statistical techniques is inappropriate and limited for the study and understanding of AA in its very diverse cultural, social, and economic situations. Since ideal/textual AA expects each member to self-diagnose their drinking problem, to develop a relationship with a God or higher power of their understanding, to interpret their life story within AA's narrative framework, and to evolve their own recovery program in consultation with their sponsor, higher power, and friends, the individuality and lack of uniformity requires that in-depth field research or ethnography be used to study and understand the nuances and diversity. As a result, current AA researchers who are medical scientists and social scientists whose secular frameworks cannot easily accommodate nonscientific paradigms often parody, trivialize, or stigmatize AA.

Arminen (1998, 16–21) argues that two root metaphors have characterized analysts' descriptions of AA: (1) a religious sect with individuals undergoing a conversion process which can be traced to a sympathetic psychiatrist Tiebout (1944) influential at AA's founding; or (2) a voluntary association which can be traced to the sociologist Robert F. Bales (1944). While analysts can find evidence in support of either point of view, I selected the voluntary association root metaphor partly because it is compatible with my sociological training, but also for the following reasons: Textual AA says it is a spiritual, not a religious, organization (44 Questions, 1952); members are encouraged textually and in practice to interpret the higher power individualistically on their own terms; AA has diffused to a number of non-Protestant countries and is utilized by agnostics and atheists (Makela, 1993; Tonigan, Miller, & Schermer, 2002) making the religious connotations of *sect* limiting and problematic. The voluntary association metaphor fits best with and is informed by the research on self-help/mutual aid (of which AA is an examplar) and other Third Sector research on voluntary associations.

The study of voluntary associations, grassroots groups, NGOs (non-governmental organizations), mutual help groups, and other forms of voluntary action is maturing into an interdisciplinary research area known as the *Independent Sector* or the *Third Sector*—government being the first sector, private for-profit business being the second, and the family and informal friends and neighbors being the fourth (Van Til, 2000). The essential concept is that each sector has distinctive practices, forms of organization, values, laws and regulations, financing arrangements, policies, and culture that characterize and distinguish it.

Thus, AA is regarded here as a voluntary mutual help organization. The referent is the organization—from the point of view of AA as an organization, participating in its activities or membership is voluntary. There are no application forms, admission committees, tests of alcohol dependence or other membership criteria, or contractual or fiduciary relationships between the organization and the member. Even more radically, membership is self-defined: You are a member if you say you are and the minimal criterion is "a desire to stop drinking (alcohol)" (12 & 12, 1974, 143). The self-defined members choose which meetings to attend at what intervals and how much contact with what depth to have with other members. There is no mechanism in the organizational principles for terminating membership or rejecting deviant groups. From the point of view of potential attendees, participation may not be voluntary: An increasing number of people with DUIs are court ordered to AA or jail and many people attend because of social pressure or threats from spouses/partners, bosses, physicians, friends to do something about their drinking. Actual living AA groups may dispel disruptive drunk attendees or treat newcomers in such a way that they feel unwelcome. Actual AA groups often have norms and practices recommending that their members follow certain patterns of attendance and service.

In writing this chapter, I have the objectives of (1) reflecting the interpretations and findings from recent research and analysis of AA which reveals *actual practice*, not just *ideal* text and marking difference between ideal/textual and actual/practiced; and (2) contextualizing and informing the writing from the concepts and findings on self-help/mutual aid which is consistent with the thesis that AA is best understood as a voluntary mutual help organization (Makela et al., 1996; Humphreys, 2004; Kurtz, 1997; Borkman, 1999). I mostly use the term higher power rather than God in respect of their own designations of being spiritual not religious and to acknowledge that AA has evolved beyond its Christian roots.

3. Recovery

Recovery is a special term used in AA (and now the larger recovery movement of other twelve-step groups [White, 2006]) to connote the process by which alcoholics become abstinent and undergo the self-help/mutual aid journey to heal the self, relations with others, one's higher power, and the larger world. Recovery includes the belief system and program of action, groups and their meetings, the Twelve Steps, and helping others within the context of a network of recovering peers. Recovery is a personalized and self-paced journey that is undertaken interdependently with one's alcoholic peers and follows recognizable general stages. Recovery as self-help means that an individual (textually/ideally) decides on how many and what meetings to attend; how, when, and with what guidance he or she does the twelve steps; whether or not one has a relationship with a sponsor or is a sponsor; how spirituality and higher power are interpreted; what and how much service to give to others; and

with whom one interacts at meetings or other places. Recovery as mutual aid indicates that the journey is not done alone but is undertaken with experiential peers and one's higher power who reciprocally assist and support the individual especially when requested. *Actual* recovery means that an individual's choices of meetings, working the twelve steps, sponsorship, view of spirituality and higher power, and service, are shaped and influenced by the practices of the groups, sponsor, and friends with whom the individual identifies and interacts.

3.1. Basic Beliefs About Alcoholism

AA's pamphlet 44 Questions (1952, 7) describes the organization's definition of alcoholism as "an illness, a progressive illness, which can never be cured but which, like some other diseases, can be arrested." Although some drinkers think they are morally weak or mentally unbalanced, the view in AA is "that alcoholics are sick people who can recover if they will follow a simple program" (1952, 7). Once a person has become alcoholic, "free will is not involved, because the sufferer has lost the power of choice over alcohol...." What is important is to face the facts of the illness and use the help that is offered. Alcoholism is defined as a spiritual, mental, and physical illness and recovery requires healing all aspects of the illness. Abstinence from alcohol in and of itself is regarded as "being dry" and is insufficient because alcoholism is but a "symptom" of underlying character defects.

3.2. Becoming Abstinent

Recovery in AA is implicitly viewed in terms of an indeterminate number of phases or stages, at a minimum beginning, middle recovery, and oldtimer. Professionals such as Brown, a psychotherapist who worked with recovering alcoholics from AA, formalized a developmental model of four phases: drinking, transition, early recovery, and ongoing recovery. Others have models of change, such as DiClemente's (1993) transtheoretical approach, with five stages.

The transition (Brown, 1985, 1995) or beginning phase involves stopping drinking and giving up the illusion that one can control his/her drinking. In AA it is "hitting bottom"—surrendering or admitting defeat in self-controlling one's drinking. Brown and other treatment professionals refer to it as giving up "denial."

Newcomers are usually given extra attention and help as it is recognized that stopping drinking and accepting basic ideas of loss of self-control and the need to rely on an external power to stop drinking is difficult. A radical change of thinking is necessary; one cannot control one's drinking and the chaotic life that one has created is the result of abusing alcohol; and the key to restoration is not drinking (or using other drugs) and relinquishing control to an external power of one's choice. This transformation of belief is further discussed in Section 3.3.

Seasoned members give simple instructions to newcomers: go to meetings, don't drink, stay away from "slippery" places, say your prayers (i.e., ask for help from an external higher power). Alibrandi (1978), an anthropologist, asked a sample of established AA members to sort suggestions that would be given to newcomers versus those to be given to people in the program a month, 6 months, and so forth. She found that only a few simple suggestions are made to newcomers. Newcomers who want to make drastic changes to their job, family, or the like are cautioned to wait until they are more stable in their abstinence. More complex suggestions about working the twelve steps or making major life changes are made for members through the transition phase and into early recovery. Winegar, Stephens, and Varney's (1987) provocative analysis of alcoholic defense mechanisms shows how AA's actions toward newcomers confront their denial about drinking but let the newcomers maintain denial about other problems, which is therapeutically beneficial. They conclude that AA practices are complementary to their professional therapy—alcoholic defenses are selectively dealt with (denial is challenged to confront loss of control and the need to stop drinking) but denial and rationalization are retained in a positive manner at a time when realistically confronting other problems would send the alcoholic back to drinking. Steigerwald and Stone (1999) examined their cognitive restructuring theory in relation to the twelve steps and various AA practices such as meeting, using, and being a sponsor; and they found that the AA's twelve steps can lead to restructured thoughts, and "AA meetings...provide an atmosphere in which cognitive restructuring can take place" (Steigerwald & Stone, 1999, 323) and recommended further empirical research on the issue.

3.3. Identity Changes: From Drinking Nonalcoholic to Recovering Alcoholic

The drinking newcomer to AA, suffering from increasingly onerous and unacceptable effects of drinking, faces a belief system that is difficult for many to accept: Abstinence from alcohol is the first and necessary step toward recovery. The paradox of how to stop drinking for any length of time is to surrender control over your drinking. You must admit your powerlessness to control your drinking (Step 1) and develop a belief that a power outside yourself greater than alcohol can aid you in not drinking—by the early 1950s, the AA group was frequently mentioned as the higher power (12 & 12, 1974).

"The acceptance of loss of control and [assuming] the identity as an alcoholic form the core of the continuum of recovery" states Brown (1985, 11), a psychotherapist who has worked with alcoholics. AA regards the alcoholic not simply as a person who drinks too much alcohol but as a person whose human frailties are extreme—a self-centered and willful way of living that causes self-defeating unmanageability.

Social science analysts (Denzin, 1997; Pollner & Stein, 2001) have interpreted the AA process as involving two identity changes: (1) from the drinking

nonalcoholic to the alcoholic and (2) the recovering alcoholic who is not drinking and is facing his/her shame and remorse over past actions and repairing the damage and developing a spiritual and alternative way to live.

Original AA literature talks about a conversion process (Thiebout, 1944) of surrendering control to a higher power as a spiritual awakening and an identity change. Newcomers and critics often misunderstand the meaning of the self-labeling "alcoholic" as they interpret it with the conventional connotations of the drunken and stigmatized person who is out of control causing misery and havoc to himself/herself and others. But within the fellowship among seasoned members, the alcoholic identity is not regarded negatively but positively; it represents the shift from trying to control one's drinking to the positive alcoholic identity which offers hope for developing a constructive and useful life and for being "happy, joyous, and free" (AA, 1976). Newcomers to AA often describe their drinking to seasoned members and ask their opinion as to whether or not they are alcoholic. Veteran members and textual AA tell them that they have to decide for themselves; self-diagnosis is an important part of an individual developing his/her alcoholic identity.

The identity changes evolve within the context of AA meetings where members hear each others' personal narratives; when they identify with them, they gain experiential understanding of the alcoholic self from which they can reinterpret their past and develop their story. Personal stories follow the format suggested by the Big Book (AA, 1976, 58): "Our stories disclose in a general way what we used to be like [when drinking], what happened, and what we are like now." The drinking alcoholic self is "self-will run riot" who *engaged* in shameful, destructive, if not outrageous actions, whereas, recovering members manifest hope and the promise of living differently. Instead of a "drinking nonalcoholic" who denies the havoc that was associated with his/her drinking, a newcomer alcoholic can assume an alcoholic identity because he/she is among peers who have done similar things and because it contains a promise of being able to live differently.

Bruner (1990) contrasts the logico-scientific mode of cognitive functioning or thought with the narrative or story mode. Each is distinctive in its ordering of knowledge and irreducible to the other. The logico-scientific is excellent for testing hypotheses, sound empirical analysis, and developing universal statements. In contrast, the narrative mode which mutual help uses is good for gripping stories, histories, human intention, action and meaning, and identity construction. Social science researchers studying mutual help are increasingly turning to the narrative mode of analysis along with many other fields (Riessman, 1993; Mattingly & Garro, 2000). AA especially focuses on the narrative mode of communication: its oral tradition, the importance of people telling their stories, reshaping their identity based on recasting their life story (Cain, 1991), the talk in meetings being from one's own experience, and the significance of friendship in and around meetings.

Social scientists explain how the identity change occurs within the context of AA. Doubling back on the self is one mechanism: An individual examines himself/herself, listens to his/her self-talk and locates himself/herself within a structure of experience in which he/she is both object and subject to himself/herself. Doubling is especially practiced with self-deprecating humor and laughter which are potent resources for reinterpreting one's behavior and self (Pollner & Stein, 2001, 48)

Pollner and Stein (2001) posit that the abstinent AA member who accepts the *alcoholic identity* has a second identity, the *recovering alcoholic self*. Pollner and Stein (2001, 47))

In uttering the well known phrase "I am an alcoholic" and thus acknowledging an uncontrolled inner force, the rudiments of the recovering self are given voice: the recovering self is other than, and aware of, the alcoholic self as a potent and insidious source of trouble. In this sense, the alcoholic and recovering selves are twin born.

The recovering alcoholic self is portrayed in AA texts as learning to be constructive and usefully whole to serve others and, upon working the steps 4–9, to become "happy, joyous, and free" (AA, 1976) [The steps 4–12 are described in Section 3.4.]

Social identity theory (Forsyth, 2006) maintains that identity is socially bestowed, socially sustained, and socially transformed. People sustain and change their identity in interaction with others. Barrows (1980), a sociologist naïve about alcoholism recovery but sophisticated about group therapy, captured this process in situ while observing for several months at a social model recovery home whose staff were recovering alcoholics and practicing the AA Twelve-Step Recovery Program. Residents talked about the consequences of their drinking, their plans, and goals for the future. Barrows often heard the same person tell slightly different stories about the same event, reflecting changes in their self-images (Barrows, 1980, 6):

At one group session, one resident expressed disappointment with himself because...he had gotten angry at another resident who had been ranting at the morning meeting. Other residents who had witnessed the incident reassured him. They thought that he had been quite assertive; they had experienced similar feelings but only he had expressed them. On two subsequent occasions, I heard this individual recounting the same incident. Each time he had a more positive image of himself. Initially he indicated he had been disappointed and upset; later, he realized that he had experienced and expressed his anger in a nondestructive manner; that is, he had not gotten drunk!

Barrows' analysis (1980, 8) is that the resident initially showed his self-identity as an unworthy person who could not control his feelings. His peers did not validate his view of himself but countered with positive reactions that he had assertively and appropriately expressed his anger. The resident upon further

reflection and introspection modified his self-image. His new interpretation or story was then validated by his peers when it was recounted which helped him maintain the slightly different view of himself. "Further repeating the account of the incident and the subsequent validation sustained the self image and integrated the self-image into the person's identity" (Barrows, 1980, 8-9). What Barrows did not notice was that in the resident's final story he had been helped to link his assertive anger behavior to not drinking. The fact that the process occurred in a stable environment where the residents saw the incident that provoked his anger, that they felt the same way, and were there to validate him as he reflected and retold his story is important. Strangers to the incident would be unlikely to be socially validating in the same way. These social processes are facilitated when people are familiar with each other over a period of time which is an implicit reason that newcomers are advised to have a home group where people know them. Another reason for attending the same meetings is that as the member observes others over time he/she sees changes in their behavior and attitudes thereby confirming the effectiveness of the program in changing individuals.

3.4. Practicing the Program

Becoming abstinent is necessary but insufficient to maintain sobriety. Sobriety is viewed as a complex process not only of being abstinent but also of practicing the program to quell the very character defects that are causing one's self-centeredness and incapacity to live harmoniously with other people (AA, 1976). Practicing the program then involves going to meetings, helping other alcoholics, "working" the steps, using the tools in daily living, and asking for help and guidance from one's sponsor and from other seasoned members. Makela et al. (1996, Chap. 12) found in their study of eight societies that within and between societies there was extensive variability in how the program was actually practiced.

3.4.1. Designing and Building Sobriety

"A Member's eye view of Alcoholics Anonymous" (1970), a talk by a 16 years' sober AA member to a university class, became a General Service Conference-approved pamphlet. The writer compared recovery to building a house.

"The house that AA helps a man build for himself is different for each occupant because each occupant is his own architect.... What is really important is that AA has more than demonstrated that the house it builds can accommodate the rebel as well as the conformist, the radical as well as the conservative, the agnostic as well as the believer. The absence of formalized dogma, the lack of rules and commandments, the nonspecific nature of its definitions and the flexibility of its framework—all the things we have thus far considered contribute to this incredible and happy end" (1970, 20–21).

The house as the "design for living" is one's core place, safe from the elements, where one sleeps, eats, and plays but from which one ventures forth to one's job, family activities, friends and leisure time pursuits, and community activities. In AA the house is a metaphor for a new "design for living" that constitutes recovery, viewed as ongoing and potentially life long. In contrast, in professional treatment, the agency and professional staff are the architects who, more or less, consult the client/patient in the design but, having only a week to 28 days of treatment, designing and building a house are beyond their scope.

Within AA the newly abstinent alcoholic is not necessarily viewed as a competent architect but as a willful adult (with free will) who will make his/her own choices and decisions unless tamed by the first three steps and a willingness to listen to suggestions from seasoned members and a sponsor.

3.4.2. Practical Tools for Everyday Living

The program uniquely combines the once-in-a-lifetime experience of total identity change (see Section 3.3) with practical tools for dealing with the every-day *minutae* of life (Valverde & White-Mair, 1999). Action and practice is emphasized, not theory or abstractions. Valverde and White-Mair wrote that "the unity of AA is to be found in its techniques much more than its theories of alcoholism or views about God" (Valverde & White-Mair, 1999, 407). Among the practical tools are the slogans or aphorisms that are often pasted on walls at AA meetings: One day at a time; HALT; Easy does it but do it; Utilize, don't analyze; Progress, not perfection; Makela et al. (1996, 121) found 250 such sayings. To the novice or fact-free critic, they may seem vacuous or inane, but the slogans represent and signify various aspects of the practical philosophy to guide every-day behavior. "One day at a time", for example, is used to motivate (just do not drink today), to help equalize newcomers with old timers (we are equally vulnerable to taking a drink today), and to forgive relapses (irrespective of yesterday, you can be sober today) (Valverde & White-Mair, 1999).

The focus is on the individual examining his/her own motives, behavior, and feelings (especially through working the steps) combined with the prohibition of criticizing or judging others in meetings (i.e., no cross-talk in meetings). AA views human beings as essentially limited and fallible who can achieve wholeness through their interdependence with others (Kurtz, 1982). The attitude of "progress not perfection" creates permissive learning environments where seasoned members and newcomers alike can try out new behaviors and ways of being without being harshly judged (Zohar & Borkman, 1997).

3.4.3. Sponsorship and Guidance

A sponsor, a seasoned member having maintained sobriety and worked the steps for some time, acts as a guide to a newcomer or to someone with less experience in staying sober and working the AA program. The guide's knowledge rests on his/her experiential understanding of how to apply the program to drinking and living problems (Borkman, 1999; Pollner & Stein, 1996). One

learns methods of work, virtues, and experiential wisdom from role models—serenity, fortitude, or humility can only be learned experientially, not instilled by written dogma. The fact that learning is primarily based on role modeling and experience rather than didactic instruction adds to the variability in how the twelve steps, "sacred" texts, aphorisms, and virtues are interpreted. Members discuss with their sponsors private and secret material that would be embarrassing or inappropriate to discuss in meetings (Makela et al., 1996, 193)

There is extensive variability in the extent to which attendees have sponsors. Some use a sponsor for the fifth step primarily. Many people have sponsors in the beginning but later rely on their AA friends as confidents. Many members learn, primarily, from listening at meetings or talking to respected members before or after meetings.

3.4.4. Working the Steps

There is a saying that the person you are will drink again (12 & 12, 1974). Unless an alcoholic becomes less self-centered, less willful, and more concerned with others, his/her character traits will result in him/her picking up a drink. The answer is to practice the program, especially to "work the steps." The first three steps involved in becoming abstinent through relinquishing self-will to a self-defined higher power were discussed in Section 3.2. Steps 4–9 deal with character change—dealing with one's shame and remorse for the havoc caused by drinking, the wrongs done to others, one's awful secrets, prideful self-centered behavior that alienates one from others, and the like. Each person has his/her own list.

The psychoanalysts Khantzian and Mack (1994, 85–86) say:

A contemporary psychodynamic understanding of alcoholism suggests there are degrees of vulnerability in self-regulation involving self-governance, feeling life (affect), and self-care that are involved in the pre-disposition to become and remain dependent on alcohol. AA succeeds in reversing this dependency by effectively challenging alcoholics to see that they disguise and deny their self-regulation vulnerabilities. Implicitly, if not explicitly, AA employs group processes to highlight and then modify the vulnerabilities that plague the lives of alcoholics. The focus of AA on the loss of control over alcohol and the insistence on maintaining identity of the suffering individual as an alcoholic (i.e., it is always that one is "recovering," never "recovered") is a useful if not essential treatment device. It permits alcoholics to acknowledge and transform vulnerabilities in self-regulation.

Steps 4–9 describe a general process, spiritual in nature, that can be interpreted in various ways. Step 4 pertains to identifying one's shortcomings that have interfered in one's life, Step 5 admitting them to another person and one's higher power, undergoing a process of being willing to give up the character defects (Step 6) and humbly asking one's higher power to remove them (Step 7). Having become aware of his/her defects and taken responsibility for them, Steps 8 and 9 focus on repairing one's relationships with others. In Step 8 one

identifies the harm one's drinking has caused other individuals and in Step 9, the individual attempts to repair the harm unless to do so would cause more harm. Stolen money is to be reimbursed. Lies are to be righted. Members often find that they first need to forgive the other for the harm done to them since in many relationships harm was mutual.

Upon completing the first 9 steps, a series of promises are listed in the Big Book (AA, 1976, 83–84) which are often posted on a wall. Among others, these include freedom from self-centeredness, self-pity, and fear of economic insecurity, serenity, a new happiness, concern for others, no regret of the past, and "No matter how far down the scale we have gone, we will see how our experience can benefit others" (AA, 1976, 84).

Steps 10–12 are often referred to as the maintenance steps. Step 10 is to do a daily inventory, to identify the mistakes one made, and become willing to admit and to correct them. The emphasis is on taking responsibility for one's actions. Step 11 is a meditation and prayer step in order to maintain "conscious contact" with the higher power of his/her understanding and is viewed as important in maintaining a spiritual rather than a materialistic perspective. "The joy of living is the theme of AA's Twelfth Step, and action is its key word" (12 & 12, 1974, 109). Step 12 reads "Having had a spiritual experience as the result of these steps, we tried to carry this message to alcoholics and to practice these principles in all our affairs" (12 & 12, 1974, 109). The spiritual experience includes abstinence and freedom from obsession about drinking or compulsion to drink. In addition, having worked the 11 steps gives the recovering alcoholic an understanding of how one's willful and selfish demands to have one's desires satisfied irrespective of other people has contributed to unsatisfactory relationships and lifestyle; a knowledge of the principles inherent in the steps for maintaining abstinence and dealing with other living problems; and the importance of doing twelfth step work to "carry this message to alcoholics."

Helping other alcoholics is the "helper therapy" principle (Riessman, 1965), the idea that helping others benefits the helper, not just the recipient. Carrying the message is viewed as helping alcoholics in any and all aspects of the program, which is viewed as spiritual—the individual getting beyond his/her self-centeredness to be concerned for the other. Empirical studies of outcomes of degrees of AA involvement indicate that among those with similar lengths of time in AA, sponsors are more likely to maintain sobriety than non-sponsors (see section on effectiveness and outcome research in this volume).

Khantzian and Mack (1994) interpreting the steps and program from within their psychoanalytic framework find that the steps address core issues:

The spiritual and religious elements in AA act as an important counterforce to the egoistic aspects of chronic drinking by directly confronting the denial, rationalizations, and allusion of control that support the persistence of alcoholic behavior. Through its appeal to a higher power, AA's insistence on humility acts as an anodyne to the self-serving grandiosity and the wallowing self-pity of the alcoholic.... Step 3 and the remaining steps in the 12-step

tradition of AA help the alcoholic move from a self-centered posture to a more mature one by helping the individual give up the overly prominent, grandiose parts of the self. The self-examination involved in taking "a moral inventory" (step 4), "making amends" (step 9), and "carrying the message to others" (step 12) are steps that inspire and instill a real concern for others and an increasing capacity for mature altruism. This effect of AA is genuine and lasting (i.e., for those who embrace it) and suggests that AA may produce permanent structural change, a result that has clinical and conceptual significance for psychoanalytic theory and practice.

(Khantzian & Mack, 1994, 78-79)

3.5. Long-Term Recovery

Long-term recovery has been of little research interest (De Soto, O'Donnell, & De Soto, 1989). Previous researchers lumped together people sober for weeks or months with those sober several years and found no difference in symptomology, but De Soto et al. (1989) in their 4-year follow up of 249 AA members in the Baltimore, MD area found reduced symptoms, better work and family history, and diminished risk of relapse among those sober 5 years or more.

The noteworthy exception to short-term follow ups is Vaillant (1995) 50-year longitudinal study that followed a community sample of working class Core city men and of upper middle class College men, observing who developed alcoholism, who had treatment and went to AA with what results. Vaillant warns about the methodological errors of making generalizations about AA from studying clinic treatment samples and then observing over 6 months or a year who has AA involvement. With his Community sample, he found that alcohol abusers in both groups were more likely to get sober in AA than in professional treatment (Vaillant, 1995, 388). Similarly, a third sample of 100 alcohol clinic attendees who were followed for 8 years were more likely to get sober through AA but this would not have been observed in the short run (Vaillant, 1995, 257). He saw extensive variety in the kinds of involvement in the larger Core city sample who became sober through AA: Some went to AA initially for a few weeks, then stopped going; others went for a few years, then stopped attending while "for others AA became a part of their stable life structure" (Vaillant, 1995, 257).

Vaillant (1995) categorized the Core city men who were continuously abstinent three or more years as "securely abstinent." Although the "securely abstinent" were initially as symptomatic and antisocial as the "progressive alcoholics," they were less likely to die and more likely to enjoy their lives in the long run. Vaillant concludes "Given adequate time to rebuild their lives, abstinent alcoholics resemble the general population far more than they resemble actively drinking alcoholics or nonalcoholics with personality disorders" (Vaillant, 1995, 270).

When the research predominantly focuses on clinic samples followed for 6 months or a year, a focus on longer term recovery disappears. What happens to the abstinent recovering alcoholic long term? Research on mutual help organizations shows that nonmedicalized and normal lifestyles within the mutual

help organization are created (Borkman, 1999). The community psychologist Rappaport (1993) characterized established mutual help organizations as having a "normative narrative community" or an organizational wide story that is an alternative to professionalized views of illness and disease. For example, GROW, a twelve-step mutual help organization for people with mental illness experiences, has a "caring and sharing" community narrative in which committed members are unlikely to be rehospitalized in mental hospitals and they drop their identities as ex-mental patients even as they continue their psychiatric medication. AA's paradoxical stance of referring to alcoholism as an illness and within the medical purview but the "treatment" being sociological and psychological is being noted by social scientists (Valverde & White-Mair, 1999): A fellow recovering alcoholic is best suited to help a newcomer get sober; live within the community anonymously to the outside world but identify as a recovering alcoholic within the AA fellowship; and engage in work, family life, and community activities as a conventional member of society. AA members may be totally involved in AA but lead community lives as ordinary citizens. Viewing AA as treatment or analogous to treatment (as the scientists do who are primarily concerned with AA's effectiveness with drinking outcomes) obscures and distorts AA as a "normative narrative community" that provides a nonmedicalized and conventional way of living in the community for its members.

4. Service

Service is the second leg of the triangle in the AA logo. Service is defined very broadly to include taking a turn at a meeting, sharing with others before, during, or after meetings, sponsoring, assisting with maintenance of a group or the larger organization or twelfth step work. Service can be making coffee and folding chairs at a meeting (even newcomers are encouraged to do this type of service), listening to a fellow member, helping a newcomer, opening a meeting or being its treasurer, taking a meeting to a jail, hospital, or other institution, or making twelve-step calls—typically made to someone actively drinking who is in trouble. (With the development of so many professionalized treatment centers, twelve-step calls have been considerably reduced.)

The service of helping others is freely given—a gift, not an economic exchange (Medvene, 1984). The gift comes without money, contracts, or any explicit incentives involved. The help given is personalized, spontaneous, and often available seven days a week, around the clock (Medvene, 1984; Makela et al., 1996). In AA the incentive to give is mixed—giving to others helps the giver stay sober because the giver gets beyond his/her self-centeredness to focus on someone else. Giving to other alcoholics simultaneously furthers the single purpose of AA—to stay sober and help other alcoholics achieve sobriety. Thus, the AA program explicitly recognizes the significance of the "helper therapy principle" although not by name. There are some initial limited empirical tests which are verifying the usefulness of the "helper therapy" principle.

Project MATCH (Pagano, Friend, Tonigan, & Stout, 2004), a longitudinal prospective study of three alcoholism treatments had a total of 1,501 patients with complete data at baseline and 3 months follow up at the end of treatment. A 13-item AA involvement scale measured working of the program. Helping others was indicated by whether or not in the last 90 days they had been a sponsor or they indicated they had completed Step 12. There was a correlation between number of AA meetings attended and helping others. Relapse in the 12 months following treatment occurred for 75% of the sample: those helping other alcoholics were less likely to relapse (60%) than those who did NOT help their peers (78%).

Zemore and Kaskutas (2004) looked at the relationship between AA involvement and kinds of helping. A scale of Recovery Helping measured the amount of time spent the day before with such items as sharing experience being clean and sober, giving moral support and encouragement, and explaining the program. Community Helping measured conventional volunteer activities (see Thoits & Hewitt, 2001). The sample (N=200) was from AA meetings (60%), but also included some from Women in Sobriety, and treatment programs. Looking at the sample from AA, they had higher rates of Recovery Helping and AA involvement. AA involvement and working the twelve steps was positively associated with Recovery Helping. Longer sobriety for the entire sample was associated with more Community Helping and negatively with Recovery Helping.

Third Sector studies of volunteer membership and volunteer work find a bidirectional relationship: that volunteers are self-selected among those with resources and physical and mental well-being but social causation also operates—that engaging in volunteer work enhances their well-being (Thoits & Hewitt, 2001). Could similar findings be true of alcoholics? The Zemore and Kaskutas (2004) findings of longer sobriety associated with more Community Helping needs to be further explored. Which recovering alcoholics leave AA and which ones stay—does their previous volunteer activity predict their reaction to AA? Gottlieb and Peters (1991) found that the Canadians who belonged to mutual help groups (including AA) were indistinguishable from the Canadians who belonged to other voluntary associations. Does an alcoholic's previous volunteering experience predict who helps their peers and who does not? This Third Sector tradition of studying the impact of volunteering could fruitfully be applied to AA and enlarge our understanding.

Help giving as a gift relationship rather than as an economic transaction means (Medvene, 1984)

Its essence is the motivation to be responsive to the others' needs and to reciprocate in a spirit of generosity and spontaneity, expecting that others will do the same. Unlike economic transactions, people tend not to keep score and there is an assumption that over the long run the pattern of giving and receiving will be mutually satisfying...

(Medvene, 1984, 15–16)

Such gift giving and reciprocal relationships contribute to the solidarity and unity of groups. Studies of social support and of mutual help groups (Uehara, 1995; Medvene, 1984) find that many follow moral norms of reciprocity found in society at large and believe that they should give back, if not to their immediate benefactor, to some generalized other in the future (Medvene, 1984). How norms of reciprocity might relate to patterns of service in AA has not been studied—are recovering alcoholics who believe in the norm of reciprocity more likely to do service in return for the help they received as newcomers and help they continue to receive? How does the presence or absence of friendship networks in AA relate to an individual's reciprocity and to service done?

From a Third Sector perspective, service work in AA and other mutual help groups is volunteering (Borkman, 1999). Third Sector research regards membership organizations like AA as only helping their members, rather than contributing to public service by helping others outside its organization. However, we must ask: How many thousands are mandated by courts to attend AA for drunk driving offenses? How many others with drinking problems go to AA members for help, whether or not they become members of the organization? In national surveys of volunteers, AA members' contributions (or other mutual help groups) are not counted. AA (at no cost to the tax payer) now aids more alcoholics per year than the professionally based treatment programs that cost millions of dollars (Miller & McGrady, 1993). Furthermore, the criminal justice system refers many DUIs to AA or jail with little concern about the impact of coerced clientele being sent to a voluntary association (Makela et al., 1996). In interviewing AA members over the years, I have heard of many cases of members assisting newcomers and other AA members by giving them a place to sleep on their sofa for a few weeks in order to avoid homelessness, free legal assistance, jobs to earn money such as painting or cleaning, work in their businesses, and the like. I know of no research that has shown interest in the kinds of material aid that AA members give others that act as a safety net or how AA members as a whole contribute to the public good without cost to the tax payers.

AA has also been the model and inspiration for other twelve-step groups (see Laudet's chapter in this volume), for social model recovery programs and sober living houses (see Polcin and Borkman chapter in this volume), and for many aspects of professional substance abuse treatment (see Slaymaker's chapter in this volume).

5. Unity

Unity is the third leg of the triangle. *Unity* is the first organizational principle known as the Traditions: Tradition 1 states "Our common welfare should come first; personal recovery depends upon AA unity." "Without unity, AA dies....The group must survive or the individual will not" (12 & 12, 1974, 10). Unity also refers to the *fellowship*, the network of relationships among

members and attendees, their groups and organizations, families, and friends. The unity or cohesion of the diverse meetings, groups, fellowship, and larger organization are knit together by common principles and beliefs. The Twelve Traditions and the Twelve Concepts are the organizational principles for the groups and their relationship with members, the larger organization, and the outside world.

Khantzian and Mack (1994) think that AA's group focus of meetings, fellowship, and relationships is extremely important and adds to its effectiveness in helping alcoholics become abstinent and psychologically more mature. They say:

Alcoholics Anonymous is effective because it appreciates that the underpinnings of self are connected with social structures and institutions. Self-governance comprises a set of functions that derives from the individual's participation in a variety of group and institutional activities and affiliations. Alcoholics Anonymous helps alcoholic individuals to achieve sobriety by providing a network of stable individual and group relationships which powerfully impact on the governance of drinking behavior

(Khantzian & Mack 1994, 76).

5.1. Groups and Their Meetings

An AA group has a name, meets in a specific (rented) location, elects members to fill its various positions on a rotating basis, hosts meetings, and takes responsibility for refreshments, financial matters, affiliating with the larger AA organization, and may host other events such as social activities or take meetings to jails, hospitals, or other institutions. Any and all members can initiate a new group; there is a saying that all it takes to start a new group is two drunks with a resentment and a coffee pot (12 & 12, 1974). There are no franchises or territories. Members learn how to run a group and conduct meetings by observing and participating in groups and meetings.

5.1.1. Meetings

Meetings are the primary place where the ritualized aspects of AA are practiced, where members learn the belief system, observe how seasoned members behave, learn how to tell their stories, and through listening, observing, and taking their turn talking, gain new identities, and the "experience, strength, and hope" to resolve their drinking and living problems. Current research is revealing much greater diversity in meetings than researchers have previously presumed and many early generalizations based on tiny samples of culturally similar meetings need to be discarded.

There are various kinds of meetings, the most important distinction being between open and closed meetings. Closed meetings are for those who self-identify as an AA member while open meetings welcome AA members, their families and friends, or any interested person (such as a college student doing a paper on AA). There are speaker meetings where several people will tell

longer drunk-a-logs and discussion meetings or literature meetings in which a major text (such as AA [1976] or 12 & 12 [1974]) is read and used as the basis of a discussion. Special populations, such as women's meetings, gays and lesbians, young people, lawyers, and so forth, develop meetings but these meetings are expected to admit any AA member who shows up. Histories are beginning to be written of the struggles within AA that stigmatized statuses, such as gays and lesbians, have faced in hiding/revealing their situation and their challenges of starting specialized meetings (see Borden, 2007). Reading Borden's history as a sociologist, my impression is that the attitudes toward gays and lesbians in the larger society very much influenced the reactions of AA members in different locales, although AA groups were often somewhat more tolerant than the surrounding cultural milieu.

Major commonalities among meetings include: opening rituals, announcements, discussion, money collection, serving of refreshments, and closing rituals although the order of items varies from place to place (Makela et al., 1996). The main part of the meeting is the discussion during which attendees talk in turn. Makela et al. (1996, 138) found that the major difference between conversation and talk in an AA meeting is that turns of talk are preallocated. The Chair has the right to talk first and to comment after each person speaks. Meetings usually have their own customs for turn taking. Small meetings often speak in order of seating. In larger meetings a variety of customs may prevail: The Chair may select the next speaker or choose among volunteers who raise their hands or the current speaker may select the next speaker. Individuals do not speak or reply to the next or to the last speaker as in ordinary conversation (Makela et al., 1996, 139). Unlike group therapy, passing one's turn and not speaking is accepted.

Ten customs for discourse in AA meetings were identified from research in Finland; these also apply to AA meetings in the United States and other countries:

- 1. Do not interrupt the person speaking.
- 2. Speak about your own experiences.
- 3. Speak as honestly as you can.
- 4. Do not speak about other people's private affairs.
- 5. Do not profess religious doctrines or lecture about scientific theories.
- 6. You may speak about your personal problems in applying the program but do not attempt to refute the program.
- 7. Do not openly confront or challenge previous turns of talk.
- 8. Do not give direct advice to other members of AA.
- 9. Do not present causal explanations of the behavior of other AA members.
- 10. Do not present psychological interpretations of the behavior of other AA members. (Makela et al., 1996, 140–141)

These customs of discourse, especially the second one of talking personally from your own experience, create discourse in which disagreements and hostilities are unlikely to surface within the meeting. Disagreements and hostilities can and do surface between individuals before and after meetings or online (Kitchin, 2002). Therapists are often concerned that there is no trained facilitator to negotiate conversation in an AA meeting (or other mutual help meetings) but the rules of discourse in twelve-step meetings create settings which preclude the kinds of eruptions that therapists fear might happen.

In the United States, other customs on discourse include minimizing details of one's socioeconomic standing, area of residence, or occupation that would set you apart from others (Robertson, 1988).

5.2. Fellowship

Fellowship refers to the network of relationships among AA attendees, members, families, and friends. Egalitarian relationships between experiential peers were recognized as critical by the co-founders of AA (Borkman, 2006) and are necessary to the "sharing circle" of mutual help (Borkman, 1999); the co-founders' insistence on maintaining egalitarian and nonhierarchical relationships not just in the "sharing circle" of a meeting but also throughout the entire organization is a major contribution to the theory and practice of mutual help. The egalitarian and nonhierarchical relationships were also regarded as important to counteract the alcoholic's character defects of self-centeredness and demands for more than his/her share of power, prestige, sex, or money (12 & 12, 1974).

Some AA attendees think that their sobriety is based on their friendships rather than working the steps. Others work the steps and AA members become their major friendship networks. As Maxwell described, talking to fellow members before and after meetings is as significant as the meetings per se. He writes: "Thus, within local groups, there are dyads, triads, and circles of very close relationships. Generally, it is within these intimate clusters that the most uninhibited and meaningful interactions take place, in an atmosphere of caring and mutual trust" (Maxwell, 1984, 10).

Little recent empirical research was found on actual friendship networks of recovering AA members. An exception is Humphreys and Noke (1997) who studied male veterans' friendship patterns 1 year after discharge from treatment (among those who had not previously had twelve-step involvement). Almost half (49%) of the final sample of 2,337 were African-Americans, the others mostly non-Hispanic Caucasians (45.2%). They examined twelve-step involvement in AA, NA, or CA and its predictiveness in close friendships with twelve-step attendees. AA, NA, or CA involvement predicted for both African-Americans and Caucasians larger friendship networks, with more close friends of more frequent contact. However, as expected by researchers who study the diversity and idiosyncrasy of AA, a few with mutual help involvement had *no* twelve-step friendship network.

5.3. Principles of Organization: Traditions and Concepts

AA is unusual as an organization in that it began as and continues to have a democratic, egalitarian, and nonbureaucratic structure that is self-financed by its members, 72 years after its founding (Borkman, 2006, 2007). AA describes its organizational structure as an inverted pyramid in which the unincorporated local groups set policy through their representatives at a conference for the national-level service bodies—the General Service Board (12 Concepts for World Service, 1986). This essentially tri-partite structure is unincorporated with only the national-level service units being legally incorporated. AA has no government in the sense that there is a body that can make and implement binding rules and has sanctioning power against those who break the rules. Instead of a government, order and coherence organizationally are maintained through twelve "traditions" (12 & 12, 1974) which are principles of group functioning and twelve "concepts" (12 Concepts for World Service, 1986) which are principles for the relationship between the individual and the organization or between organizational units. The binding power of the principles appears to be cultural (Hall, 1987) and is learned, primarily, from the motivated and direct personal experience of members and by oral transmission and, secondarily, from AA literature. The approval of two-thirds of all AA groups internationally would be required to institute any major changes to the steps, traditions, or the literature.

Founded in 1935, AA has grown to over two million members in over 180 countries. It is an alternative organization, eschewing money, property, prestige, professionalization, and bureaucratic organization (Borkman, 2006; Room, 1993). AA describes itself as a spiritual (but not religious) organization. AA has but one primary goal (Tradition 5); there are no secondary goals of advocacy, reform, or education.

AA operates with a philosophy and accompanying practices that minimize the need for money. It owns no real estate, operates no treatment centers, hospitals, clubs, or any entity other than its local groups and related service entities. Organizational service units obtain monies to operate from the contributions of local groups and by selling AA literature and tapes.

Groups are relatively autonomous within the "traditions" and many local issues are decided within each group. The second level of organization is a system of elected or volunteering delegates from local groups who participate in district and area committees; they select an area (state) level delegate who attends the yearly policy-making body, the General Service Conference, hereafter *Conference*. They rely on AA Traditions and the money from AA groups for their authority over the umbrella organization, the General Service *Board*. The *Conference* charter is not a legal document but clearly states the scope and limits of the policy-making *Conference*. Paraphrasing a long quote, the *Conference* shall observe the spirit of AA. Traditions in all its proceedings and never become the seat of perilous wealth or power; that none of the members shall ever be placed in a position of unqualified authority over any other; that all decisions

shall be reached by discussion, vote, and hopefully substantial unanimity; that its actions should never be personally punitive nor incite public controversy; and, like the Society of Alcoholics Anonymous which it serves, always remain democratic in thought and action (AA Service Manual, 2006–2007, 62).

The third level, the General Service Board, is the legally incorporated 501C3 organizational body that directs two incorporated national-level entities: the World Service Office and the Grapevine. The World Service Office publishes and distributes AA literature and tapes, maintains the copyrights, logos, and domain names of the organization, answers queries, and serves the member groups. The Grapevine is the member-supported magazine that features member's recovery stories.

The General Service Board and other formalized service bodies cannot dictate or sanction AA groups or members (Tradition 9). AA on all levels—General Service Board in NYC, policy-making Conference, and local groups—"...has no opinion on outside issues; hence the AA name ought never be drawn into public controversy" (12 & 12, 1974, 12). The heart of the twelve traditions is to subordinate personal objectives to the common good (12 & 12, 1974, 13). Tradition 12 states "Anonymity is the spiritual foundation of all our traditions, ever reminding us to place principles before personalities." The spiritual is defined here again as focusing on service to alcoholics and the group instead of personal desires for prestige, power, or wealth.

Given the autonomy of local groups combined with a large organization that has no governance, sociologically, one would expect deviant groups that violate the twelve steps and/or the twelve traditions to evolve. As an example, a recent article in Newsweek (Summers, 2007) alleged a group named Midtown in Washington, DC, violates a number of traditions and behaves like a cult in restricting newcomers to associating with the Midtown group members only. Sexual impropriety and other violations of AA norms were also alleged. But, deviance is newsworthy and the professional who wants to refer a client can easily avoid such groups by becoming acquainted with members from a group: as with professional treatments, quality varies.

6. Conclusion

AA is a voluntary mutual help association that functions very differently than professionally based treatment or twelve-step treatment. A fundamental difference is its base of experiential knowledge rather than scientific or professional knowledge (Borkman, 1999). Recovery, service, and unity represent the key facets of the Twelve-Step/ Twelve Tradition Recovery Model. *Recovery*—an individual's journey as an architect constructing a house with one's assisting peers symbolizing a new, more productive, and meaningful way of living; *Service*—an individual reciprocates for the help received as a new-comer learning to become abstinent by helping others, contributing to group functioning, and becoming a sponsor, thereby manifesting the "helper therapy"

principle; *Unity*—the fellowship of self-examining recovering alcoholics framed by democratic and egalitarian meetings of groups who support their "servant" organization. The AA logo's circle contains and reinforces the three elements: *recovery* is service and the unity of fellowship which shapes and energizes the organization; *service* rests on healthy recovery and promotes fellowship which fuels the organizational functioning; *unity* is the special relationships of peers who underwent similar miseries with alcohol and who share similar benefits of abstinence and valued experience working for a *single purpose* in an egalitarian organization.

It is time to update our views of AA. "In fact, the assertion that 12 step programs for substance abusers are a white, middle class phenomenon may say more about where researchers and clinicians focus their attention than it does about biases within the AA or NA organizations" (Humphreys, Mavis, & Stoffelmayr, 1994, 178). Makela reports that long-term AA has been found since the 1990s in "all wealthy non-communist, non-Islamic countries and some industrialized Asian countries" (1993, 228), that females are over-represented in AA in comparison with their proportion in treatment facilities or national surveys of heavy drinking in countries for which there are data (Mexico, US and Finland) (1993, 228-229); agnostics and atheists may not be as attracted to AA as the nominally religious but benefit from it equally (Tonigan et al., 2002). Chenhall's (2007) recent study of aboriginal Australians, who attribute their alcoholism in part to the consequences of the oppression of European colonization, details how they have adapted AA to reclaim their cultural heritage and aboriginal spirituality. The extreme demographic diversity, the differing opinions and interpretations of spirituality and working the steps, the varying quality and integrity of meetings and groups, and the attendees, ranging from the skeptical and minimally involved to the zealous converts, would seemingly result in total anarchy and it is not surprising that some label AA as a minimalist organization (Seabright & Delacroix, 1996). However, as an organizational analyst looking at the totality of AA and recognizing historically that for more than 70 years the organization has maintained its democratic nonbureaucratic structure while dramatically expanding beyond its Protestant Christian white male beginnings, we categorize it as a learning organization (Zohar and Borkman, 1997). The genius of AA is its adaptability.

Ernie Kurtz said in 1982 that it was (past) time to take AA seriously intellectually. This is finally happening:

- A major national NIAAA research study chose twelve-step facilitation (TSF) as one of the three "treatment" conditions for its controlled trial known as Project MATCH (Pagano et al., 2004).
- The idea of recovery, a concept borrowed from AA and its offshoots, is being applied to mental health, a field having more mutual help groups than professional and government treatment agencies (Goldstrom et al., 2006). The National Institute of Mental Health has

- funded eight states to transform their public mental health systems to be conducive to *recovery* of the person with mental health problems.
- Psychiatrists, psychoanalysts, social workers, sociologists, and organizational analysts are studying AA in relation to their theories and knowledge but not from a doctrinaire perspective and concluding
 - "The remarkable success of AA, which we have argued is to be attributed to its skills in combining technologies for governing the self with techniques for running democratic organizations, raises a serious challenge to the conventional thesis about the domination of 'experts' over everyday life in the late twentieth century" (Valverde & White-Mair, 1999, 407).
 - Organizationally there is an isomorphic relationship between AA's ideology and structure unlike many modern organizations (Seabright & Delacroix, 1996).
 - Khantzian and Mack (1994, 68) conclude: "...beyond achieving abstinence and providing support, AA is effective because it is a sophisticated psychological treatment whose members have learned to manage effectively and/or transform the psychological and behavioral vulnerabilities associated with alcoholism."

In addition to accolades to AA, its limitations must be addressed. AA, like all mutual help organizations, appeals to only a minority of potential members for a variety of reasons. A recent and reasoned article (Walters, 2002) suggested twelve reasons why alternatives to AA are needed (spirituality, view that recovery is life long, abstinence rather than social drinking, and its other beliefs and practices that are abhorrent to some). But mutual help groups for alcoholics who do not like AA already exist, including Moderation Management for those who are not alcoholic, Rational Recovery, Women for Sobriety, Secular Organizations for Sobriety, and Laudet's chapter in this volume describes Christian-based twelve-step groups who find AA not religious enough. The American Self-Help Clearinghouse's web site (http://mentalhelp.net/selfhelp) can help with those and other mutual help groups.

The twelve-step recovery model of AA within a mutual help organization provides a nonmedicalized and anonymous "way of living" in the community that is significantly different from the medicalized alcoholism treatment as measured in scientific research studies.

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Twelve Defining Moments in the History of Alcoholics Anonymous

William L. White and Ernest Kurtz

Abstract: Misconceptions about Alcoholics Anonymous (AA) abound in spite of (or because of) the thousands of theses, dissertations, books, professional and popular articles, and Internet commentaries that have been written about AA. One of the most pervasive characterizations of AA is that it is a "treatment" for alcoholism—a characterization that distorts the meaning of both mutual aid and alcoholism treatment. This article describes 12 character-defining moments in the history of AA that highlight the differences between AA and alcoholism treatment.

1. Introduction

There is a long history of recovery mutual aid groups that pre-date the founding of Alcoholics Anonymous—Native American recovery "circles"; the Washingtonians; Fraternal Temperance Societies; Ribbon Reform Clubs; institutional support groups such as the Ollapod Club, the Godwin Association, and the Keeley Leagues; and early faith-based recovery fellowships such as the Drunkards Club and the United Order of Ex-Boozers (White, 2001). There is a similarly rich history of modern adaptations and alternatives to Alcoholics Anonymous that include an ever-growing list of twelve-step fellowships, as well as explicitly religious (e.g., Alcoholics Victorious, Overcomers Outreach, Liontamers Anonymous, Celebrate Recovery and Ladies Victorious) and

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secular (e.g., Women for Sobriety, Moderation Management, Secular Organizations for Sobriety, Rational Recovery, LifeRing Secular Recovery) frameworks for addiction recovery (Kurtz & Kurtz, 2007).

Alcoholics Anonymous (AA) has earned its place as the benchmark by which all other mutual aid groups are compared (Kurtz & White, 2003). That distinction is the product of AA's

- Historical survival and longevity (White, 1998)
- Growth (nearly 2 million members and more than 106,000 local groups) (Alcoholics Anonymous, 2007)
- Geographical dispersion and accessibility (150 countries) (Alcoholics Anonymous, 2007)
- Role in inspiring larger social reform movements (Johnson, 1973; Roizen, 1991)
- Influence on the modern treatment of alcoholism and other drug dependencies (White, 1998)
- Influence on the popular culture (Room, 1989, 1993).

Because of its emergence as an enduring, international movement, AA has been subjected to a level of scrutiny beyond that of any of its predecessors or current rivals. In 1994, Pittman and Bishop published a bibliography of AA literature that listed more than 2,900 books, dissertations, theses, and articles written on AA. Such attention, particularly scientific attention, has since increased, as has the literature of an AA backlash movement whose books/articles have spawned their own mini-industry (see the writings of Peele, Bufe, Ragge, and Trimpey as illustrative examples) and Internet websites (e.g., http://www.orange-papers.org/orange-not_good.html, http://www.aadeprogramming.org/index_frames.html). Often responding to such public criticisms of AA are recently sobered and grateful alcoholics—the least qualified persons to speak about what AA is and is not, for given the value that AA places on humility and tolerance and its traditions of anonymity and non-involvement in outside issues, the AA member who is the first to step into the limelight to defend AA is by definition the least qualified to do so.

The ever-growing definitions of AA have reached a point where they tell us more about each author than about AA as an organization or a framework of alcoholism recovery (Miller & Kurtz, 1994). AA has been variably depicted as a society (Wilson, 1949), social movement (Room, 1993), culture of recovery (White, 1996), system of beliefs and speech event (Makela et al., 1996), spiritual program (Miller & Kurtz, 1994), and a religious cult (Bufe, 1991). One of the most pervasive characterizations of AA is that of a "treatment" for alcoholism (Bebbington, 1976; Tournier, 1979; Emrick, 1989; Najavits, Crits-Christoph, & Dierberger, 2000; McGovern & Carroll, 2003).

In 1994, psychologist William Miller and AA historian Ernest Kurtz wrote a seminal article noting popular and professional misconceptions

about AA. Using AA's own literature, Miller and Kurtz challenged these misconceptions.

AA writings do not assert that: (1) there is only one form of alcoholism or alcohol problems; (2) moderate drinking is impossible for everyone with alcohol problems; (3) alcoholics should be labeled, confronted aggressively or coerced into treatment; (4) alcoholics are riddled with denial and other defense mechanisms; (5) alcoholism is a purely physical disorder; (6) alcoholism is hereditary; (7) there is only one way to recover; or (8) alcoholics are not responsible for their condition or their actions.

(Miller & Kurtz, 1994, p. 165)

This chapter extends the work of Miller and Kurtz by using AA's own history to elucidate the essential character of AA. That historical evidence confirms that AA is not a treatment for alcoholism and that such a characterization distorts the nature of and diminishes the potential value of both AA and alcoholism treatment.

There are moments in the lives of individuals, families, organizations, and countries that can profoundly and permanently shape character and identity. Each of the following seminal events in the history of Alcoholics Anonymous offers a window of insight into those dimensions of character that separate AA from other recovery mutual aid groups and from professionally directed alcoholism treatment. Unless otherwise noted, the historical incidents described are drawn from four AA publications which will be subsequently referenced using their acronyms, *Alcoholics Anonymous Comes of Age (AACA)*, "Pass It On": The Story of Bill Wilson and How the AA Message Reached the World (PIO), Dr. Bob and the Good Oldtimers (DBGO) and Twelve Steps and Twelve Traditions (TSTT), and Ernest Kurtz's scholarly study, Not-God: A History of Alcoholics Anonymous.

2. Jung's Refusal

In 1926, Rowland Hazard, a Yale graduate and prominent Rhode Island businessman, was treated for alcoholism by the renowned psychoanalyst Carl Jung (Bluhm, 2006). Following a relapse in 1927, Hazard requested further treatment from Jung. Jung refused this request on the grounds that Hazard had received the best of what psychiatric and medical science had to offer and that hope for future recovery would have to be found elsewhere. In this communication with Hazard, Jung added that the rabid appetite for alcohol had been quelled in some alcoholics through the medium of a powerful spiritual or religious experience. He suggested Hazard seek such an experience. That recommendation led to Hazard's subsequent involvement with the Christian evangelical Oxford Group. Sobered within the Oxford Group, Rowland Hazard began carrying his message of hope to other alcoholics. In November 1934, Hazard carried such a message of hope to Ebby Thacher. On the verge of being sentenced to Windsor Prison, Thacher was instead released to Hazard's custody. In late November 1934, the newly sobered Thacher carried that same

message of hope to his long-time friend Bill Wilson. Thacher's visits created no instantaneous conversion, but they did start a new "internal dialogue" that triggered a crisis in Wilson's drinking and served as a catalyst for the subsequent events that marked the founding of Alcoholics Anonymous (Alcoholics Anonymous, 1984, p. 115).

The Jung–Hazard–Thacher–Wilson chain of interactions mark the earliest catalytic moments in the founding of Alcoholics Anonymous. Jung brought an affirmation of the limitations of professional assistance in recovery from alcoholism, and he added professional legitimacy to the transformative power of spiritual experience. The Hazard–Thacher–Wilson connections established the "kinship of common suffering" (one alcoholic sharing with another alcoholic) as the basic unit of interaction in the yet-to-be-born organization of AA (AACA, p. 59). Sociologist Frank Riessman (1965, 1990) later described the potential catalytic, self-healing effects of helping others as the "helper principle."

The legitimacy of the helper in the Hazard–Thacher and Thacher–Wilson relationships came not from the kind of external authority that Jung and other service professionals possessed, but from "experiential knowledge" and "experiential expertise" (Borkman, 1976). Credential verification came not from a university registrar's office, but through a presentation and acceptance of one's own life story. Stanley Jackson (2001) recently noted of this "wounded healer" tradition: "They have established their credentials as persons who know first-hand about suffering, who have suffered and emerged from the experience stronger and wiser, and who have the capacity to serve others as healers of souls" (p. 6). The Hazard–Thacher–Wilson relationships were built on a foundation of moral equality, emotional authenticity, and a profound level of mutual empathy and identification.

The Hazard–Thacher–Wilson chain also offers the first evidence we have of the coming importance of story construction and storytelling in AA. AA's unique storytelling style was described as follows in 1939: "Our stories disclose in a general way what we used to be like, what happened, and what we are like now" (Alcoholics Anonymous, 1939, p. 70). What one offers in interactions within AA is not "feedback," "counseling," "treatment," or even "advice," but one's own "experience, strength, and hope" couched in the form of story. Within AA, this distinctive style of interaction evolved into what Borkman (1999) has described as the "sharing circle"—an egalitarian exchange of life stories detailing the experiences of alcoholism and alcoholism recovery. Such storytelling was institutionalized as a form of spiritual communion within the fellowship of AA.

As people in recovery assumed paid roles as alcoholism counselors and as this role became progressively professionalized, self-disclosure of their recovery status and their recovery stories became viewed as "unprofessional" and a sign of "poor boundary management" (White and Popovits, 2001). The differences in the relationship between counselor and the client in alcoholism treatment and the relationship between AA member and AA member, as

well as the sponsor and sponsee relationship, were further widened when AA promulgated guidelines for AA members working in the alcoholism field (AA Guidelines for AA n.d.). The attributes identified in these guidelines that were seen as essential for working professionally in the alcoholism field were defined, not in terms of technical skill, but in terms of the ability to maintain clear role separation and in terms of such traits as faith, courage, self-discipline, humility, patience, and tolerance.

3. A "Hot Flash" and Failed Evangelism

Following Ebby Thacher's visits, Bill Wilson's drinking reached another point of crisis, and on December 11, 1934, he was re-hospitalized for detoxification at the Charles B. Towns Hospital in New York City. At age 39 and unbeknownst to him, Bill Wilson had taken the last drink of his life. A few days into this belladonnafacilitated detoxification, Wilson, a confirmed agnostic, underwent a profound spiritual experience in the aftermath of a deepening depression:

The last vestige of my proud obstinacy was crushed. All at once I found myself crying out, "If there is a God, let Him Show Him self! I am ready to do anything, any thing!" Suddenly the room lit up with a great white light. I was caught up into an ecstasy which there are no words to describe. . . . And then it burst upon me that I was a free man. . . . All about me there was a wonderful feeling of Presence, and I thought to myself, "So this is the God of the Preachers!"

(Alcoholics Anonymous, 1957)

Later questioning whether he was losing his sanity, Wilson described the experience to his physician, Dr. William Silkworth. Silkworth, known in AA folklore as "the little doctor who loved drunks," framed the event as a potential conversion experience.

No. Bill, you are not hallucinating. Whatever you got, you had better hang on to; it is so much better than what you had only an hour ago. (AACA, 1957, p. 13)

What easily could have been understood as an organic psychosis or a toxic side effect of medication was instead interpreted by Silkworth as a potentially life-transforming spiritual experience.

Bill Wilson's "Hot Flash" as it came to be known within AA—drawn from a popular phrase used in the mid-twentieth century to convey a sudden idea of great value or a life-changing event or experience—is important in several ways in the larger story of AA. It further validated that medical care for alcoholism was necessary but in itself insufficient (a fact confirmed by Wilson's prior hospitalizations) and that spiritual experience could open a pathway to long-term recovery. Wilson's experience at Towns Hospital established early in AA history the potential for what psychologists today describe as "quantum"

or "transformational" change—a sobering personal transformation in identity and character that is unplanned, vivid, positive, and permanent (Miller & C'de Baca, 2001; White, 2004). Dr. Silkworth's response to Wilson's transformational change experience also underscored the limits of medical/psychiatric treatment and, like Jung's earlier response, set a precedent for professional humility and respect for the potential role of spirituality in alcoholism recovery.

In the months following his discharge, Bill Wilson tried to sober up the world, but the drunks at the Towns Hospital and Calvary mission to whom he described his Hot Flash were uniformly unimpressed and unmoved. Wilson eventually discovered that others would achieve successful recovery through a quite different process. This imbedded the idea of the varieties of recovery experience within AA's earliest history and led Wilson to later affirm that "the roads to recovery are many" (Wilson, 1944). The distinctions between and legitimacy of a climactic "spiritual experience" and a slower process of "spiritual awakening" were judged to be important enough to later discuss in a special appendix of the book *Alcoholics Anonymous*.

Bill Wilson himself soon discovered on a visit to Akron, Ohio, that undergoing a profound spiritual experience does not automatically silence the siren call of the bottle.

4. Panic at the Mayflower Hotel

In May 1935, Bill Wilson, demoralized at the end of a failed business trip, found himself in the lobby of the Mayflower Hotel fearing that he might take a drink and destroy his hard-earned sobriety. His sense of what he needed to prevent his return to drinking was not to reach out to a professional, but to find another alcoholic with whom he could talk. A series of phone calls led him to Dr. Robert Holbrook Smith who was at that time struggling with his own alcoholism. Their growing friendship, mutual support, and vision of helping other alcoholics marked the formal ignition of AA as a social movement. The date of Dr. Bob Smith's last drink in June of 1935 is celebrated as AA's founding date. Soon after that last drink, Bill Wilson and Dr. Bob Smith began the search for AA number three.

The mutual discovery that Bill Wilson and Dr. Bob Smith could achieve together what they had failed to achieve alone became the glue that held AA together. The discovery that the gift of sobriety could only be retained by giving it to others rose to consciousness in these earliest days of AA. The call from the Mayflower Hotel was the first incident in AA history in which an alcoholic picked up a telephone rather than a drink, affirming the potential of replacing dependence upon a drug with interdependence between members of a

That date has been celebrated on June 10, but recent historical research suggests the date of Dr. Bob Smith's last drink was probably June 17, 1935 (White & Merton, 2006).

recovering community. This event also set the basic relationship within AA as one in which no member could claim moral superiority over another.

There are several aspects of this early encounter that distinguish it from other relationships intended to help the alcoholic. Facing the most severe test of his early sobriety, Wilson sensed that he needed not professional counseling but the communion that comes from shared experience and mutual vulnerability. The Wilson–Smith relationship was voluntary as opposed to coerced, reciprocal (service to others as service to self) as opposed to fiduciary (one party having obligation to care for the other), sustained as opposed to transient, personal as opposed to paid, and free of even a whisper of contempt. An event in New York soon threatened the future of these critical characteristics.

5. Professionalism: AA's First Temptation

By late 1936, fledgling groups of recovered alcoholics were meeting within the larger framework of the Oxford Group in Akron, Ohio, and the New York City area. Bill Wilson was staying sober and laboring full time to spread what would become the AA movement, but a crisis was brewing in terms of the poverty in which he and his wife Lois were living. It was in this circumstance that Charles B. Towns, owner of the Towns Hospital where Wilson had repeatedly been treated and whose corridors he now roamed trolling for drunks who might be interested in his nascent program, offered Wilson paid employment at the hospital as a "lay alcoholism therapist." Wilson's first instinct was that this was the perfect solution to his financial straits and his desire to work full time to spread this new message of hope to alcoholics. There was after all a precedent for this lay alcoholism psychotherapy role. Towns' offer to Bill Wilson was preceded by a tradition of distinguished lay therapists in the alcoholism arena that included Courtenay Baylor, Francis Chambers, and, most importantly, Richard Peabody whose book, The Common Sense of Drinking, was currently popular. Bill Wilson could have easily become part of this growing network of lay therapists.

The response of his fellow recovering alcoholics to Bill Wilson's employment opportunity marked one of the first examples of what would come to be called "group conscience" in Alcoholics Anonymous. The group rejected the idea on the grounds that their emerging fellowship could be hurt by tying itself to a hospital and that Bill's accepting a paid position could destroy this fledgling community of recovered alcoholics. "Why should we do for nothing what you'd be getting paid for? We'd all be drunk in no time" (Alcoholics Anonymous, 1984, p. 177). Eventually convinced of the wisdom of what he was hearing, Wilson turned down the Towns' offer. In that act, even before the young fellowship had found its own name, Alcoholics Anonymous escaped its first temptations: professionalism and the potential use of AA by an AA member for personal financial gain. By defining itself as a spiritual program, the fellowship declared that its most essential elements were not for sale. In retrospect, one can only

speculate on what might have happened had Bill Wilson accepted the proffered patronage of Charles Towns and his hospital.

By the end of 1937, the fellowship had 40 sober members. At this point, one man seeking entrance tested its character and indeed its very soul.

6. Who Can Be an AA Member?

In 1937, a man approached the numerically larger Akron group to inquire about possible membership. He ended his appeal with the following words:

But will you let me join your group? Since I am the victim of another addiction even worse stigmatized than alcoholism, you may not want me among you. Or will you?

(Alcoholics Anonymous, 1981, p. 142)

The question of inclusion was not whether this man was an alcoholic. It was that he was homosexual. In the social climate of the late 1930s, this question set the conscience of the group to boiling. Initial concerns were raised about how this could bring disgrace to the fellowship and keep some people from seeking its help. There was precedent for such exclusion. Some nineteenth-century recovery mutual aid societies developed membership criteria that excluded all but "reputable drunkards" (White, 1998). An emerging AA was on the verge of just such a decision. Bill Wilson later explained how the deadlock was broken.

And finally the day of resolution came. A bunch of us were sitting in Dr. Bob's living room, arguing. What to do? Where upon dear old Bob looked around, and blandly said, "Isn't it time folks to ask ourselves, "What would the Master do in a situation like this?" Would he turn this man away?" And that was the beginning of the AA tradition that any man who has a drinking problem is a member of AA if he says so, not whether we say so.

(Borden, 2007, p. 18)

When AA experienced rapid growth in early 1940s and before the Twelve Traditions had been created to govern its organizational life, it was not unusual for local groups to develop all manner of membership criteria and even to blackball some seeking membership (White, 1998; Wally, 1995).

So beggars, tramps, asylum inmates, prisoners, queers, plain crackpots, and fallen women were definitely out. Yes sir, we'd cater only to pure and respectable alcoholics! Any others would surely destroy us.... We built a fine mesh fence around AA.

(Alcoholics Anonymous, 1952, p. 140)

As groups began to communicate with each other, it became clear that, "If all those rules had been in effect everywhere, nobody could have possibly joined AA..." (Alcoholics Anonymous, 1952, p. 140). The 1937 Akron principle prevailed and was later codified in AA's Third Tradition. The phrase "honest desire

to stop drinking" in the original 1939 statement of AA's singular membership requirement was simplified in 1949 to "desire to stop drinking" to assure inclusiveness.

This milestone marks an important contrast between AA and alcoholism treatment organizations. Where the latter would evolve elaborate admission criteria that served as exclusion as well as inclusion criteria and the practice of administratively discharging clients who lacked sufficient motivation or drank following their admission, AA's threshold of engagement was simple but non-negotiable. No one within or outside AA had the authority to bar entrance to AA or throw someone out of AA as long as a single criteria was present: a desire to stop drinking.

7. A Rich Man's Warning About Money

Bill Wilson's decision not to accept the offer of employment at Towns Hospital did not quell his larger vision of AA missionaries and AA hospitals—a vision that continued to propel his search for philanthropic funds to support a growing AA. The quest for financial support led in February 1938 to a meeting with the staff of John D. Rockefeller, Jr. Rockefeller was widely known for his philanthropy and his support for other projects that had sought to address alcohol-related problems. After reviewing AA's past work and future plans and the recommendation of his staff to provide \$50,000 in funding to AA, Rockefeller expressed his fear that money might harm this quite remarkable movement (Kurtz, 1991). Rockefeller's hesitance was his concern that material assets could corrupt the spiritual nature of the rising AA movement.

Rather than provide the requested \$50,000, Rockefeller placed \$5,000 in the treasury of Riverside Church to provide temporary financial support for Dr. Bob Smith and Bill Wilson. Today, one could only speculate how receipt of \$50,000 in 1938 (the equivalent of over \$600,000 today http://www.westegg.com/inflation) would have shaped the subsequent organization and core values of AA as well as its historical fate. AA might have easily morphed into just one more service agency if such funding would have necessitated a board of directors, a paid director, a paid service staff, the inimitable policy and procedures manuals and financial/service reporting systems, and future licensing and accreditation processes. AA co-founders later reflected that Rockefeller's refusal had saved them from themselves. The fellowship's pledge of corporate poverty is in marked contrast to a multi-billion dollar addiction treatment industry and the pressure addiction treatment organizations' experience to maintain and increase their revenues.

8. The Split from the Oxford Group

Between 1935 and 1937, the growing number of sobered alcoholics (the "alcoholic squadron") that constituted AA's first generation continued to meet

within the larger framework of the Oxford Group (OG), but there was strain in the relationship between alcoholic and non-alcoholic OG members, particularly in New York City. Bill Wilson was criticized for his pre-occupation with alcoholics, and alcoholics at the OG-affiliated Calvary Mission were discouraged from attending meetings at Bill Wilson's Clinton Street home. Wilson would later say of this tension, "The Oxford Group wanted to save the world, and I only wanted to save drunks" (Kurtz, 1991, p. 44). Differences in their central missions, core beliefs, and meeting rituals eventually led to a split between the OG and AA. That split occurred in New York in 1937 and in Ohio in 1939, but a distinct AA identity did not gel until 1939. The first meeting independent of the OG that called itself Alcoholics Anonymous occurred in Cleveland on May 18, 1939.

The departure from the OG was another critical milestone in AA history for several reasons. First, the split affirmed that whatever this new group was, it was not a religion, nor did it have any religious affiliation: "We are not allied with any particular faith, sect or denomination, nor do we oppose anyone" (Alcoholics Anonymous, 1939, p. viii). This transition opened the doors of entry to AA to future generations of alcoholics of multiple faiths and of no faith. Second, in breaking with the OG, AA emancipated spirituality from its religious roots in a manner later self-characterized as "spiritual but not religious." AA forged what it was, in part by figuring out, via group conscience, what it was not.

The centrality of spirituality is a distinct feature of AA. Alcoholism treatment institutions and practitioners may talk about the role of spirituality in alcoholism recovery, but few would claim that spirituality is the core of their approach to treatment. AA unashamedly claims just that. That stance separated AA from alcoholism treatment and from later explicitly religious and explicitly secular recovery mutual aid societies.

9. "Here Are the Steps We Took..."

Plans for a book describing their program of recovery proceeded in tandem with the growth of sober members. As AA separated from the OG, its members articulated six principles adapted from the OG that had guided their recoveries:

- 1. We admitted that we were licked, that we were powerless over alcohol.
- 2. We made a moral inventory of our defects or sins.
- We confessed or shared our shortcomings with another person in confidence.
- 4. We made restitution to all those we had harmed by our drinking.
- 5. We tried to help other alcoholics, with no thought of reward in money or prestige.
- 6. We prayed to whatever God we thought there was for power to practice these precepts. (AACA, 1957, p. 160)

In December 1938, Bill Wilson expanded these six principles to twelve steps that reflected the experience of AA's earliest members. These steps were included in the crucial fifth chapter of what came to be known as AA's "Big Book." Refinements resulting from group discussions were made in the wording of the steps and a prologue was later added that stated, "Here are the steps we took, which are suggested as a program of recovery" (Alcoholics Anonymous, 1939, p. 71).

The codification of the AA program in book form was a central vehicle for the diffusion of AA and the crucial means of maintaining the integrity of the AA program as Alcoholics Anonymous experienced explosive growth in the years following the book's publication. The decision that the fellowship would publish its own materials also heightened its organizational autonomy and generated a substantial portion of the income that would support its central service structures. A critical examination of AA's twelve steps further underscores the differences between AA and the professional treatment of alcoholism.

Professional treatments for alcoholism purport to be theory-grounded, science based, professionally delivered and supervised, and externally accountable (to a variety of regulatory and funding bodies). AA's steps and the larger body of literature in which they are imbedded have little to say about alcoholism, its etiological roots, or its treatment. The steps and all other AA literature focus instead on the experience of the alcoholic. What statements that can be found on the etiology of alcoholism and on alcoholism recovery depict alcoholism as a malady of spirit and character (e.g., "self-centeredness," "self-will run riot") and its resolution as a spiritual rather than medical or psychological process (Kurtz, 2002). Alcoholics Anonymous makes no claim to scientific truth; it claims only the lessons of collective experience. AA's steps are not intervention protocol performed by and supervised by professionals, but actions taken by members who are achieving the goals of sobriety and serenity. The "we" and "our" in AA's steps refer not to a relationship between a therapist and a client, but relationships within a community of recovering people. Where the centerpiece of treatment is made up of clinical protocol and the professionals who deliver it, the centerpiece of AA is the shared experiences of and interpersonal relationships between its members as they seek resources within and beyond themselves to quell the appetite for alcohol.

AA's steps focus not on treatment offered by others, but on the actions taken by alcoholics that have resulted in successful recoveries. Treatment, in the alcoholism context, is what a professional administers to an alcoholic. Recovery, in this same context, is what the alcoholic experiences on his or her way to health and wholeness. The relational context of the steps is not one of professional therapy, but one of mutual support. The actions suggested in the steps are ones taken not in the context of professional treatment, but in the context of membership in a community of shared experience.

10. Growing Pains

The speedy decline of the Washingtonians following their rapid growth to more than 400,000 members in the early 1840s confirmed the dangers posed by the sudden growth of recovery mutual aid societies (White, 1998). Alcoholics Anonymous experienced both local and national surges in membership in the 1940s. This growth was generated in great part by early media coverage: a September 1939 article on AA in *Liberty Magazine*, a series of *Cleveland Plain Dealer* (in October and November) of that same year, and newspaper sports page coverage of the spring 1940 announcement that the Cleveland Indians' star catcher had joined AA. This early visibility was followed by a *Saturday Evening Post* article in March 1941 that led AA's membership to grow from 2000 members to 8000 members in that year alone. AA learned several lessons during this first period of dramatic growth.

The calls coming into AA in Cleveland were so great that members with minimal sobriety time were asked to make twelve-step calls. When both the newly sobered and their new recruits stayed sober, Alcoholics Anonymous learned that its message could be conveyed by very imperfect messengers. AA also learned that it could grow by expansion or by at times a more conflictual cell division. The inevitable personality tensions that emerged during the rapid induction of new members spawned new meetings and triggered the adage, "The only things required to start a new AA meeting are a resentment and a coffee pot."

Early AA members found creative ways to reach alcoholics in communities that did not yet have local meetings. Letter writing and visits by AA members who traveled as part of their jobs were particularly relied upon to reach those in need. The dissemination of the book, *Alcoholics Anonymous*, played a pivotal role in spreading AA's message. A unique approach to inducting new members (sponsorship) also emerged in Cleveland and was rapidly diffused throughout AA. By 1944, Alcoholics Anonymous had learned that as an organization it could survive rapid growth and in the process began to see itself as a movement that could spread throughout America and beyond. AA's self-awareness as a growing social movement heightened the difference between AA and professional treatment, but the question remained whether AA would need a paid professional class and special institutions to support this growing movement.

11. AA and the Business of Alcoholism Treatment

Alcoholics Anonymous faced a critical challenge in the late 1930s and early 1940s. Most alcoholics reaching out to it were in late stages of alcoholism. Alcoholics in such a state could and did die from alcohol withdrawal. Yet helping professionals generally eschewed work with alcoholics, and many hospitals had morality clauses that refused admission to alcoholics. These were the conditions that contributed to Bill Wilson's early vision of AA missionaries and

AA hospitals. Rockefeller's refusal to provide \$50,000 to AA tempered but did not eliminate this vision. AA members who were part of the medical profession (e.g., Dr. Bob Smith in Akron and Teddy R. in New York City) have helped open alcoholism treatment units in local hospitals, and AA committees were organizing alcoholism services in what has been described as the *Knickerbocker Paradox*. At the Knickerbocker Hospital in New York City, AA members remodeled a newly opened alcoholism unit. AA members had admitting privileges and visited patients daily in the unit. Patients were only discharged to AA sponsors. And yet local AA declared that AA had no official role in Knickerbocker's alcoholism treatment unit—developing a clear distinction between what was done by AA as an institution and what was done by AA members either individually or collectively (White, 1998).

The closest AA itself came to owning and operating a hospital for the treatment of alcoholism was in Cleveland in the early 1940s. Several occurrences moved AA members to abort this effort, including the sudden illness of the individual raising funds for the project, but in the end it was the AA's group conscience that ended the vision of paid AA missionaries and AA hospitals. After the collapse of the Cleveland project, AA's position on such outside projects hardened. As one AA trustee declared, "Better do one thing supremely well than two things badly" (quoted in White, 1998, p. 164). This position was soon expanded:

Neither AA as a whole nor any AA Group ought to enter any other activity than straight AA As groups, we cannot endorse, finance or form an alliance with any other cause, however good.... But, if these projects are constructive and non-controversial in character, AA members are free to engage in them without criticism if they act as individuals only, and are careful of the AA name.

(Dangers in linking AA to Other Projects, 1947)

What emerged within AA was an understanding that Alcoholics Anonymous was not a treatment for alcoholism and that treatment for alcoholism was an outside endeavor to which AA should not be formally linked. The view of the distinction between AA and treatment became most clear in a crisis at High Watch Farm.

As noted earlier, many AA members acting as individuals helped establish hospital-based alcoholism treatment units and volunteered or were employed in such units. AA members were also involved in non-hospital settings that provided post-detoxification rehabilitation—places referred to as "AA farms" or "AA retreats" until AA objected to such designation. High Watch Farm was a retreat in Kent, Connecticut, where, beginning in 1940, AA members could initiate or strengthen their recovery from alcoholism. A small board of AA members, including Bill Wilson and Marty Mann, oversaw the management of High Watch. Daily operations were directed by Ray C., who provided a structured program of lectures, assigned reading, meditation, and AA meetings. But Ray C. was a psychologist, and the spiritually grounded philosophy of the High Watch soon drifted from AA immersion to an increasingly

psychological approach, leading to tension between the manager and the board (Harbaugh, 1995). This conflict eventually led to the resignation of Marty Mann from the board. Her resignation letter offers a window into the growing distinction between AA and treatment in the 1940s.

At Blythewood, a particular method of treatment, psychiatry, was used by one man, Dr. Tiebout, to help me get well. At the Farm, now, a particular method of treatment (the word is Ray's own: one might call it metaphysical psychology...) is being used by one man, Ray C_____, to help others get well. I repeat: I have nothing against either method of treatment. But they belong in one classification; and the Farm as it used to be, and AA as it is, belong in another....

(White, 1998, p. 174)

The boundary between treatment and AA again threatened to become blurred in the late 1940s and early 1950s with the development of the "Minnesota Model" of alcoholism treatment. This model incorporated AA principles and practices into treatment, hired AA members as alcoholism counselors, and spawned a halfway house movement that also relied heavily on a twelve-step philosophy. The 1950s mark the beginning of AA's profound and widespread influence on alcoholism treatment—an influence that grew as the Minnesota Model was replicated across the United States and indeed the world in the 1970s and 1980s. To avoid potential misunderstandings about the distinction between AA and professional alcoholism treatment, AA discouraged the use of names for institutions (e.g., "Twelve Step House") and roles (e.g., "AA Counselor," "Two-Hatter") that conveyed affiliation or sponsorship by AA. This experience also led AA's General Service Office to issue special guidelines for AA members who worked in the professional alcoholism field (Alcoholics Anonymous, n.d.).

As AA concepts and treatment concepts became increasingly blurred in the 1990s, there was growing concern within Alcoholics Anonymous about the effect treatment was having on the fellowship and even its program. (The percentage of people entering AA via referral from treatment increased from 19% in 1977 to 40% in 1989, Makela et al., 1996.) AA old-timers lamented the distortion of AA spirituality with what they perceived as the pop psychology of alcoholism treatment, complained that some AA meetings were turning into group therapy sessions filled with pained confessions and discussions of "codependency issues" and how to get in touch with one's "inner child," and expressed fears that the growth in treatment had weakened the service ethic within AA.

This infusion of treatment language and concepts into Alcoholics Anonymous prompted historian Ernest Kurtz (1999) to define "real AA" as represented in the fellowship's own experience and literature. He suggested five criteria through which authentic AA meetings could be identified: (1) the use of a language of spirituality (as opposed to the vocabulary of therapy), (2) humor and appreciation of paradox, (3) the distinctive AA story style ("what we used to be like, what happened, what we are like now"), (4) respect for the Twelve Traditions, and (5) an experience of community (based on members' *need* to be there).

12. The NCEA Affair

In 1944, Mrs. Marty Mann, one of the first women to get sober in AA, developed a personal vision that would change America's perceptions of alcoholism and the alcoholic. To fulfill this vision, she created the National Committee for Education on Alcoholism (NCEA)—precursor to today's National Council on Alcoholism and Drug Dependence. Mann proposed five ideas as the centerpiece of her public education campaign:

- 1. Alcoholism is a disease.
- 2. The alcoholic, therefore, is a sick person.
- 3. The alcoholic can be helped.
- 4. The alcoholic is worth helping.
- 5. Alcoholism is our No. 4 public health problem, and our public responsibility. (Mann, 1944, p. 357)

Mann and NCEA went on to establish local branches that (1) conducted public education campaign on alcoholism, (2) encouraged local hospitals to admit alcoholics for acute detoxification, (3) established alcohol information centers, (4) established clinics for the diagnosis and treatment of alcoholism, and (5) created "rest centers" for the long-term care of alcoholics (Mann, 1947, p. 255).

Several things for a time blurred the boundary between AA and NCEA. First, Mann started NCEA with the blessings of AA's co-founders, broke her AA anonymity in her NCEA role (initially with the permission of Bill Wilson), and talked extensively about AA in her non-stop lectures around the country. Second, the names of Bill Wilson and Dr. Bob Smith appeared on the NCEA letterhead, suggesting an affiliation between AA and NCEA. This blurring of boundaries reached a point of crisis in 1946 when NCEA sent out a solicitation of funds on the letterhead bearing the Wilson and Smith names. The storm of protest from local AA members prompted the conclusion that "total non-affiliation was the only solution" to AA's relationship with other organizations (Alcoholics Anonymous, 1984, p. 320).

The NCEA affair confirmed three things. First, it established that AA is not an organization whose focus includes public education and public policy advocacy. AA's mission is not one of social change: it is not a temperance movement or a movement to change alcohol-related social policies and programs. Second, it confirmed the need for complete organizational autonomy and separation of AA from all other organizational entities. Finally, it affirmed the need for a set of principles that could guide AA's organizational life.

13. "Bill's Damned Traditions"

The rapid growth and considerable internal conflict experienced within local AA groups in the early 1940s set the stage for the development of AA's Twelve Traditions (Wally, 1995; Pearson, 1985). Bill Wilson, through his travels to AA groups across the country and through his prolific correspondence, spent a growing amount of time offering guidance and learning lessons from local groups' experience on the many points of contention. It was Earl T., one of the original Chicago members, who first suggested the need for a set of principles of self-governance for AA. That suggestion assumed greater weight when Bill Wilson read a 1945 AA Grapevine article on the rise and fall of the Washingtonians in the 1840s from many of the very issues that were then plaguing AA (Wilson, 1945). The resulting principles of self-governance—AA's Twelve Traditions—linked personal recovery to AA unity; acknowledged God as the ultimate authority in AA as expressed through group conscience; posited a model of servant leadership; established a single membership criteria ("a desire to stop drinking"); affirmed local group autonomy; committed AA to a singular purpose ("to carry its message to the alcoholics who still suffer"); established the principles of non-affiliation and financial self-support; eschewed professionalism and excessive organization; declared a position of silence on outside issues; confirmed a public relations policy based on attraction rather than promotion; and posited anonymity as the "spiritual foundation" of all of the traditions ("principles before personalities") (Alcoholics Anonymous, 1981).

The Twelve Traditions were first formulated and disseminated in 1946. Early reviews were lukewarm, with groups occasionally referring to them as "Bill's damned traditions." Some groups during this period invited Bill to speak if he would agree NOT to talk about the traditions. But support for the traditions grew as they came to be seen as a synthesis of AA's hard-earned experience. They were formally adopted at AA's first International Convention in 1950. AA's Twelve Traditions allowed the fellowship to chart a path that avoided the pitfalls of centralization of organizational power, charismatic leadership, money and property, professionalism, and organizational growth and decay that had plagued earlier recovery mutual aid efforts (White, 1998; Room, 1993; Borkman, 2006). Few organizations have a mission, vision, or values statement as visibly influential on the daily life of the organization as the Twelve Traditions are within the life of AA. That alone is a remarkable feat. Even more remarkable has been AA's ability to avoid the evolution from a mutual help movement into a formal, hierarchical organization with centralized leadership and a paid class of service professionals (Katz, 1981).

AA's Twelve Traditions make it clear that AA is not in the business of alcoholism treatment and that its members must forever reject any effort to professionalize AA service work:

That we must, at all costs, avoid the professionalization of AA; that simple Twelve Step work is never to be paid for; that AA's going into alcohol

therapy should never trade on their AA connection; that there is not, and can never be, any such thing as an "AA therapist."

(Wilson, 1983, p. 27)

The traditions freed AA members to work in paid and volunteer roles in alcoholism treatment or in alcoholism-related political advocacy, but to do so only as individuals who did not bring the AA name into such endeavors.

AA's commitment to singleness of purpose and its non-affiliation stance protects the fellowship from co-optation and colonization. When individuals and other groups concerned about other problems asked if they could join AA, they were politely told that they were welcome to adapt the AA program to those problems but that they could not join Alcoholics Anonymous unless they met its single criterion for admission. This policy led to the wide adaptation of the twelve steps to nearly every conceivable problem while protecting the AA process of mutual identification—one alcoholic talking with another alcoholic. Even family members of AA members were excluded from AA's closed meetings, which led in 1951 to the adaptation of the AA program via the Al-Anon Family Groups.

A central test of all recovery mutual aid societies is whether that community of recovery can survive the passing of its charismatic leader(s) and first generation. Three events mark AA's mastery of this test: (1) the death of co-founder Dr. Robert Smith on November 16, 1950, (2) the replacement of the Alcoholic Foundation with the General Service Board of Alcoholics Anonymous in 1954 and the subsequent transfer of responsibility for AA service from the co-founders and old-timers to AA membership, and (3) the death of co-founder Bill Wilson on January 24, 1971. These events successfully tested the ability of AA to self-sustain itself without centralized, charismatic leadership. Thirty-five years later that test has been met. AA's policy of elected and rotating leadership continues. AA's unique organizational structure guided in great part by the Twelve Traditions has withstood the test of time.

14. Alcoholics Anonymous and Alcoholism Treatment: Separate and Distinct

Seen as a whole, the twelve defining moments summarized in this chapter shaped the character of Alcoholics Anonymous as an organization in ways that clearly distinguish AA from the process of alcoholism treatment and the institutions that provide such treatment. The intent of this review is not to portray one as superior to the other, but to suggest that they are distinct entities whose respective value requires separation and boundary protection. Alfred Katz (1981) articulates this principle of separation and respect when he notes that formal human service organizations and mutual aid groups have distinct qualities that should remain separate and be mutually respected. Ernest Kurtz argues a similar position regarding AA and therapy, noting that both have value, but that "it abuses both to present either as the other" (Kurtz, 1999, p. 164).

AA chose a minimalist approach to organizational infrastructure, whereas alcoholism treatment institutions are formal organizations with often elaborate hierarchies and levels of professional status. There are no CEOs, CFOs, or directors in Alcoholics Anonymous. Where treatment institutions are subject to considerable governmental oversight and all the accompanying regulatory requirements (e.g., service documentation), AA is accountable only to its membership who act through each group's Group Service Representatives. There are no audits, no site visits, no records on individual members, and no monthly service reports. Treatment institutions rely on external funding and are heavily influenced by the dictates of funding agencies; Alcoholics Anonymous is supported only by the contributions of its members and the sale of its literature.

Service relationships in alcoholism treatment are hierarchical (inequality of power), fiduciary (one party having legal obligation for the care of the other), and commercialized (one party is being paid to be there); service relationships in AA are non-hierarchical, reciprocal (mutuality of support), and noncommercialized (no member is paid for his or her support of another member). Clinical staff in alcoholism treatment programs are expected to be credentialed (educated, certified, and licensed) by external authorities; status within AA comes solely from one's history, character, and conduct within the AA community. Where the former focuses on the importance of professional assessment and diagnosis and professionally directed treatment planning, AA emphasizes self-diagnosis and following the steps that others have found successful. The emphasis on the knowledge and technique of the treatment professional and adherence to service protocol in alcoholism treatment is replaced in AA with an emphasis on what each AA member must do each day to sustain his or her recovery.

There are significant risks of potential harm resulting from alcoholism treatment, e.g., stigmatizing diagnoses; expensive and potentially prolonged sequestration; pressure for intimate self-disclosures; "therapeutic" confrontation; potential side effects of medications; and significant consequences for failure to complete treatment and resuming alcohol and drug use. Such potential for harm is recognized and addressed, in part, through the mechanisms of informed consent, confidentiality procedures, clinical supervision, and codes of professional conduct. The degree of personal invasiveness and harm in AA is minimized by the absence of treatment procedures, discouragement of taking others' "inventory," discouragement of cross-talk (feedback, advice, confrontation in response to another's disclosure), and through the protective mechanisms of AA's Twelve Traditions and group conscience.

The process of treatment and the process of AA are fundamentally different. Alcoholism treatment often involves getting into yourself by exploring painful aspects of one's personal history. In contrast, the AA experience is more one of getting out of oneself—connecting with resources and relationships beyond the self. Where alcoholism treatment often focuses on personal pain, Alcoholics Anonymous focuses on personal character, e.g., increasing capacity

for honesty, forgiveness, gratitude, and tolerance. Where alcoholism treatment often focuses on increasing self-esteem, AA focuses on ego deflation, cultivation of humility, and a shift in focus from "I" to "We."

AA is not a treatment for alcoholism, nor is AA a policy advocacy organization, a public information agency, or a religion. AA is a self-governed community of men and women who offer each other their "experience, strength, and hope" toward the goals of (1) maintaining recovery from alcoholism, (2) enhancing quality of life of those recovering from alcoholism, and (3) carrying a message of hope to the still suffering alcoholic. As stated in its own literature, AA is "not a social service organization," "not a cure," nor does it "prescribe treatment for alcoholism." "The sole purpose of AA is to help the alcoholic who wants to stop drinking" (Typical misconceptions about AA, 1951).

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The Impact of AA on Professional Treatment

Valerie J. Slaymaker and Timothy Sheehan

From its humble origins in Ohio in 1935, Alcoholics Anonymous (AA) has grown to one of the most commonly sought sources of help for alcoholism (Weisner, Greenfield, & Room, 1995). With over 100,000 groups across 150 countries, membership is estimated to exceed 2 million people (AA General Service Office, 2006). Clearly, AA touches the lives of many people. Yet the impact of AA does not stop there. This chapter focuses on the profound effect AA has had on the way alcoholism is addressed and treated in the United States.

1. The Integration of AA into Professional Treatment

While stigma, discrimination, and access to treatment remain significant problems today, imagine for a moment what conditions were like in the late nineteenth and early twentieth centuries. At best, a person struggling with alcoholism could find help in asylums or homes for "inebriates." By the time prohibition ended its 13-year reign in the early 1930s, most alcoholics were detoxified and institutionalized with the chronically mentally ill in the locked wards of state psychiatric hospitals. Not surprisingly, conditions were poor and the custodial system of care typically resulted in revolving-door cycles of admission, detoxification, release, relapse, and readmission.

During the 1950s, several forces were taking shape in Minnesota that paved the way for a revolution in alcoholism treatment. First, AA meetings

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had been springing up throughout the state as the fellowship of men and women seeking to support each other in sobriety grew. Second, a residential treatment center named Hazelden was establishing itself in rural Minnesota (McElrath, 1987). Founded in 1949 by members and friends of AA, treatment was based on the premise of one alcoholic helping another. To this end, recovering alcoholics acted as lay therapists to those who sought help at the restful farm setting. The program's goal was to provide residents time to learn about the AA philosophy and embrace it.

Meanwhile, two men—Dan Anderson, a young psychologist, and Nelson Bradley, a psychiatrist and hospital administrator—were working at the Willmar State Hospital in Minnesota. The men took a particular interest in the care of the "inebs" who were considered by many to be hopeless cases. Anderson and Bradley had a special affinity for struggling alcoholics and sought to improve care and outcomes. The men shunned the psychoanalytic theories and custodial treatment of the time and separated the alcoholic patients from the chronically mentally ill, unlocked the hospital ward doors, eliminated unnecessary rules, and implemented a lecture series to educate patients about alcoholism (Anderson, McGovern, & DuPont, 1999; McElrath, 1999).

As AA grew throughout Minnesota, Anderson and Bradley became increasingly curious about the movement. Initially skeptical, they came to appreciate what AA had to offer. Wrote Anderson, "Dr. Bradley and I met for hours with visiting recovering alcoholic AA members who did their best to help us professional cynics not only understand how the program worked, but have hope for recovery" (Anderson, McGovern, & DuPont, 1999, pp. 111–112). Impressed, Bradley hired a recovering alcoholic to work with patients as a "placement coordinator" in 1951 (McElrath, 1999), and AA members were brought in to the hospital on Saturday evenings to tell their stories of recovery.

One of the most innovative changes Anderson and Bradley made was to establish a multi-disciplinary team of professionals to treat the alcoholic. As their appreciation for AA grew, they decided to include non-degreed recovering alcoholics as professional counselors working alongside psychologists, psychiatrists, physicians, nurses, and other professionals. Due to their efforts, a civil service position of alcoholism counselor was created in 1954 (McElrath, 1999). As counselors, lay people brought the philosophy of AA and the Twelve Steps to their work. While alcoholism counseling is an established and credentialed profession today, this approach represented a radical departure from the typical medical model of treatment offered at the time.

Developing the multi-disciplinary team and including recovering alcoholics as counselors were innovative developments in the treatment of alcoholism. But Anderson himself did not see them as the most crucial elements to the new vision of care. Instead, he wrote, "The most important attributes of our program, thinking back to the care I saw at Willmar State Hospital in the 1950s, were these two characteristics: First, our program was rooted in a profound respect for individual, unique alcoholic people and their families; and

second, we were committed to the idea that it was possible, with the help of a higher power and the fellowship of AA, to get better" (Anderson, McGovern, & DuPont, 1999, p. 112).

As word spread about the new approaches in Willmar and at Hazelden, it was inevitable that staff from both locations would develop professional relationships. Bound by their shared commitment to help alcoholics in humane and respectful ways, staff from both facilities began to talk regularly and share strategies for care. In the early 1950s, Anderson and Bradley were invited by Pat Butler, one of the founders of Hazelden, to assist with the development of Hazelden's treatment programming (McElrath, 1987). In the late 1950s, Anderson began spending Saturdays at the center providing lectures and psychological testing, and in 1961, he accepted a full-time position there as Hazelden's executive director and vice president.

It was at Hazelden that Anderson continued to evolve the new model of care, based firmly on the philosophy of AA, that eventually became known as the Minnesota or Hazelden Model. Ultimately, the model developed into a comprehensive, evidence-based treatment strategy that recognizes addiction as a chronic biopsychosocial and spiritual disease oftentimes complicated by other medical and psychiatric disorders. Consistent with the model's origins at Willmar State Hospital, treatment is delivered by an interdisciplinary team of professionals of substance abuse/addiction counselors, psychologists and psychiatrists, spiritual care professionals, nurses and physicians, and fitness and recreation specialists. The Twelve Steps of AA form the foundation upon which care is based.

Throughout the 1960s, word quickly spread about the new approach to addiction treatment that was in place at Hazelden. Former patients, visiting professionals, and Anderson's teaching and speaking engagements across the country facilitated the dissemination of information. As a result, community-and hospital-based treatment programs across the United States began emulating the Minnesota/Hazelden Model which today remains one of the most commonly used treatment approaches in the United States (Fuller, 1989; Institute of Medicine, 1990). With regard to the use of the Twelve Steps specifically, the National Treatment Improvement Evaluation Study (Center for Substance Abuse Treatment, 1997) found that of 519 outpatient, residential, and specialty care facilities surveyed, 71% placed "moderate" to "great" emphasis on the Twelve Steps.

2. How the Twelve Steps Are Applied in Treatment

Within the professional treatment context of the Minnesota/Hazelden Model, the Twelve Steps form a foundation for the provision of care. Applied systematically, they provide a framework to examine substance dependence, mental health, physical health, emotional well-being, relationships, spirituality, and more. In tandem with the Twelve Steps, cognitive-behavioral strategies are

consistently employed to identify and restructure the "stinkin' thinkin' " associated with substance use. The model emphasizes treating all patients with dignity and respect. To this end, confrontational or "hot seat" approaches are not used. Instead, motivational enhancement techniques facilitate problem recognition and promote subsequent engagement in treatment.

Following extensive chemical use, medical, and psychological assessments, a carefully planned treatment strategy is developed to lead the individual patient through a process of therapeutic change. Each of the Twelve Steps is divided into a series of milestones that facilitate the individual's progress along emotional, spiritual, and psychological dimensions. Via individual and group counseling, patients begin to use the steps as a guide for living, recognize and reduce obstacles for change, and address relapse risk factors.

Interested readers are referred to Sheehan and Owen (1999) for a thorough description of the integration of the Twelve Steps within a professionally led treatment context. A brief overview is provided here. Before proceeding, it is important to note that the process of "working the steps" is not meant to be entirely finished or completed. While generally worked in order, particularly in early recovery, steps are reapplied each day and reworked as needed during the course of an individual's recovery. Steps 1–5 are generally associated with the initial phase of recovery, while Steps 6–12 further solidify the lessons learned during the first five steps. As such, professionally led treatment will typically focus on the first five steps. Not all individuals will work on all five steps while in treatment—some may focus on only the first two; others may work through all five before discharge. Because one of the tenets of the Minnesota/Hazelden model is an individualized treatment plan, progress along the Twelve Steps is likewise individually determined.

The first therapeutic task faced by patients who enter treatment within this model is to recognize and accept their problem with substances. In accordance with the first step of AA, "We admitted we were powerless over alcohol—that our lives had become unmanageable" (AA World Services, 1976, p. 59), patients tell their story of substance dependence to a peer group. The story includes a timeline of major events including the first use of substances; the progression of substance use disorders; the impact of use on interpersonal relationships, employment, and legal matters; and psychological, spiritual, and medical functioning. Additional assignments and therapy are designed to facilitate the patient's understanding of the unmanageability of their illness and develop self-awareness of the extent and severity of their using behavior. At this point in treatment, it is critical that an individual understand that he or she is incapable of addressing his or her addiction through sheer willpower alone.

Step 2 tasks are designed to facilitate hope for change. While an individual is not responsible for having the disease of substance dependence, the patient *is* responsible for his or her care and ongoing program of recovery. Patients surrender prior, maladaptive attempts at controlling their use and accept the

reality of living a new life in sobriety. The individual's capacity to cope with challenges and lead a life of recovery is emphasized. The concept of a higher power is introduced at this stage as a highly personal construct of spirituality that provides meaning and guidance in everyday life.

When a patient understands the extent and nature of their illness and has developed hope for ongoing recovery, the next therapeutic process is to develop trust. Self-disclosure and risk-taking behavior are encouraged as a means to practice and develop social skills necessary to appropriately cope with stressors, ask for help and support, and develop healthy relationships in recovery. During Step 3, spirituality evolves to the extent that the individual is ready to relinquish maladaptive thoughts and behaviors while being open to new ways of living.

Armed with newly developing skills, attitudes, and realizations, patients are ready to turn to Step 4 and conduct a realistic self-appraisal of their own strengths and limitations—otherwise known in AA as a "fearless moral inventory" (AA World Services, 1979, p. 59). Patients obtain input from family members, significant others, therapists, and others to understand their problematic traits and how their behavior has impacted their lives. In order to balance the negative feelings that may result from such an inventory, patients are guided to identify personal strengths as well. Counselors often work to help the individual understand the difference between guilt and shame, and cognitive restructuring is frequently applied to help the patient maintain perspective.

Following completion of the moral inventory, Step 5 facilitates honest disclosure of the results of the individual's assessment. This process facilitates self-acceptance and responsibility for one's behavior and for the ongoing recovery process. Step 5 work is prescribed to create greater awareness of maladaptive patterns of thought and behavior and to foster the reconciliation of one's spiritual beliefs.

As discussed, the steps are applied in a flexible yet standardized manner that attends to the individual patient's needs and progress. Several published materials are available to treatment providers including a handbook (Nowinski & Baker, 2003) and an accompanying curriculum (Nowinski, 2006) that provide session-by-session guidance and materials.

3. Effectiveness of Twelve-Step-Based Professional Care

Evaluation of Twelve Step-based professional treatment has a long history dating back to the Willmar State Hospital where the model first began to take shape (Rossi, Stach, & Bradley, 1963). From early evaluations, to quasi-experimental designs, to later randomized controlled trials, studies demonstrate the effectiveness of Twelve-Step-based professional treatment in reducing use, increasing abstinence, and improving the quality of lives for those with substance use disorders.

At first, early studies consisted of unpublished outcome data obtained from Hazelden alumni. Later evaluations were released publicly via books or journal articles. One of the first published studies evaluated outcomes among 3,638 patients discharged in the mid-1970s (Laundergan, 1982). Response rates were low, with 52% of the original sample reached at 12-month follow-up. Among respondents, 50% reported having maintained continuous abstinence in the year following discharge from treatment with an additional 17.6% reporting "improved" status. A later study of 1,531 patients treated in the late 1970s and early 1980s, with better response rates, found 89% reported either abstinence or reduced alcohol use 1 year after treatment (Gilmore, 1985). Yet another evaluation by Higgins et al. (1991) of 1,655 patients discharged from Hazelden in the mid-1980s found 66% abstinent at both the 6-month and 1-year follow-ups.

While helpful, early evaluations were impacted by methodological and sampling problems that limited the conclusions that could be drawn. Nonetheless, they set the stage for more advanced study that came later. Stinchfield and Owen (1998), for example, prospectively followed a group of 1,083 Hazelden patients at 1, 6, and 12 months following treatment. To corroborate self-report, collaterals were contacted as well. At 1 year following treatment, 53% of the sample reported continuous abstinence since discharge from treatment with an additional 35% reporting substantially reduced alcohol and drug use. Collaterals corroborated patient self-report, with 78% of the collateral/patient pairs in complete agreement. The remainder was divided between those collaterals who reported more use than patients (12%) and collaterals who reported less use than patients did (10%).

As the model of Twelve Step-based professional treatment spread throughout the country, evaluation data from other samples became available. Hoffman and Harrison (1991), for example, examined the data of over 3,000 patients entering Minnesota Model programs across the country in the mid-1980s. Approximately two-thirds reported abstinence in the year following treatment. However, response rates were low, leading the authors to estimate corrected 1-year abstinence rates at 40%.

A later study by McLellan et al. (1993) obtained high response rates (94%) and included urine and breath tests to verify self-report. The sample was comprised of 198 alcohol and/or cocaine-dependent men from two inpatient and two outpatient programs in the Philadelphia area that emphasized AA and the Twelve Steps. At the 6-month follow-up, 59% were abstinent from alcohol and 84% were abstinent from drugs. Psychosocial functioning was also improved from pre- to post-testing.

Over time, additional models of care have developed, sparking interest in how Twelve Step-based professional care may compare to other methods. Ouimette et al. (1997), for example, compared outcomes among 3,018 patients in Twelve Step, cognitive-behavioral, or mixed treatment programs. Patients

in Twelve Step-based programming were more likely to be abstinent at 1 year (25%) than patients from the mixed (20%) or cognitive-behavioral groups (18%).

Similar findings were reported by Humphreys and Moos (2001) who examined outcomes of 1,774 veterans admitted to either Twelve Step-based or cognitive-behavioral residential programs. Groups did not differ at intake in terms of demographic or clinical characteristics, self-help group meeting attendance, or frequency of contact with an AA or other Twelve Step mutual-help group sponsor. At 1 year, patients treated in Twelve Step programs had significantly higher abstinence rates (45.7%) in the 3 months prior to follow-up compared to those treated in cognitive-behavioral programs (36.2%). These patterns of findings persisted at the 2-year follow-up, with 49.5% abstinence rate in the 3 months prior to assessment among Twelve Step program participants compared to 37% of those in cognitive-behavioral programming (Humphreys & Moos, 2007).

Randomized clinical trials have also demonstrated the effectiveness of Twelve Step-based programming compared to other models of care. Keso and Salaspuro (1990) randomized 141 alcohol dependent patients into either a 28-day Minnesota/Hazelden Model program or a 6-week traditional psychiatric facility. Biological measures of alcohol consumption augmented self-report. Significantly more Minnesota/Hazelden Model patients were abstinent during the 8- to 12-month follow-up period (26.3%) than those treated in the psychiatric facility (9.8%). Overall, significantly more of Minnesota/Hazelden Model patients maintained continuous abstinence during the entire follow-up year (14.0%) compared to the psychiatric facility patients (1.9%).

No discussion of the effectiveness of Twelve Step-based programming is complete without reference to Project MATCH, the first large-scale randomized and multi-site study to examine whether patients could be "matched" to one of three treatment approaches: Twelve Step Facilitation (TSF), Cognitive Behavioral Therapy (CBT), and Motivational Enhancement Therapy (MET; Project MATCH Research Group, 1993). As with any multi-site trial, treatment conditions were manualized to ensure fidelity and standardization across sites. TSF was the result of manualizing the main components of the Minnesota/Hazelden Model. Several Hazelden employees, including Dan Anderson himself, provided their expertise, suggestions, and feedback during the development of the TSF manual (Nowinski & Baker, 2003).

The sample was comprised of 952 outpatients and 774 aftercare patients who were randomized to conditions and assessed over several years. At the 1-year follow-up, patients in all three groups reported significant reductions in drinking with similar abstinence rates (Project MATCH Research Group, 1997). At the 3-year follow-up, however, a significantly higher abstinence rate was found for TSF participants compared to the other two conditions (Project MATCH Research Group, 1998). Specifically, 36% of the TSF participants were abstinent at 3 years compared to 24% and 27% of CBT and MET participants, respectively. Furthermore, alcohol dependent patients who had a high

percentage of family members and friends who were drinkers and less supportive of abstinence fared significantly better in the TSF condition than those in the MET condition at 3 years (Longabaugh, Wirtz, Zweben, & Stout, 1998).

The studies reviewed thus far have focused on adult populations. Twelve Step-based treatment is also effective with youth. Several evaluation and quasi-experimental studies have found improved substance use and psychosocial outcomes (Alford, Koehler, & Leonard, 1991; Brown, Vik, & Creamer, 1989; Harrison & Hoffmann, 1989; Knapp, Templer, Cannon, & Dobson, 1991; Richter, Brown, & Mott, 1991; Winters, Stinchfield, Opland, Weller, & Latimer, 2000; Winters, Stinchfield, Latimer, & Lee, 2007) for this population.

In summary, early descriptive reports of Twelve Step-based programs provided valuable information and set the stage for more rigorous evaluations of the model. Later studies, including empirically sound randomized and quasi-experimental designs, demonstrate the effectiveness of Twelve Step-based professional treatment in improving both substance use and psychosocial outcomes among substance dependent individuals.

4. AA's Role Following Treatment

Whatever a treatment center's philosophy, be it cognitive-behavioral, motivational enhancement, or Twelve Step based, most routinely refer patients to AA meetings during or following professional care, and for good reason. Research has consistently demonstrated the positive impact of AA attendance on treatment outcomes (e.g., McKellar, Stewart, & Humphreys, 2003; Moos & Moos, 2004).

A meta-analysis of 107 studies found a positive correlation between AA involvement and substance use outcomes when professional treatment and AA were combined (Emrick, Tonigan, Montgomery, & Little, 1993). In addition, formal treatment combined with AA participation results in better initial outcomes than formal professional treatment alone. For example, a study by Timko et al. (2000) found those attending formal treatment plus AA had significantly higher rates of abstinence at 1- and 3-year follow-ups (42.4% and 50.9%, respectively) than those who attended formal treatment alone (20.6% and 25.9%, respectively).

Several studies suggest that treatment participation itself facilitates subsequent AA attendance (e.g., Fiorentine & Hillhouse, 2000; Morgenstern, Labouvie, McCrady, Kahler, & Frey, 1997). Not surprisingly, Twelve Step-based professional treatment may be more influential in facilitating post-treatment attendance than other approaches (Finney, Noyes, Coutts, & Moos, 1998; Humphreys, 1999; Humphreys et al., 1999). The Project MATCH Research Group (1997) found greater AA attendance among participants assigned to Twelve Step Facilitation compared to those in the cognitive-behavioral or motivational enhancement conditions. In a separate study, Humphreys and Moos (2001) followed 1,774 male participants of either Twelve Step-based or cognitive-behavioral inpatient treatment programs and found a significant

difference. Specifically, 59.4% of those treated in the Twelve Step-based programs attended AA in the months prior to the 1-year follow-up compared to 48.0% of those treated in cognitive-behavioral programs. While attendance over time dropped, similar patterns were found at the 2-year follow-up (Humphreys & Moos, 2007). In addition, longer participation in treatment is associated with longer post-treatment involvement in AA (Moos & Moos, 2004).

Regardless of the initial treatment approach, the positive impact of subsequent AA attendance has led many professional organizations to recommend during or post-treatment referral to AA. The American Society of Addiction Medicine (ASAM, 2001), American Psychiatric Association (American Psychiatric Association, 2006), and Substance Abuse and Mental Health Services Administration (U.S. Department of Health and Human Services, 1993, 1994a, 1994b, 1994c, 1998, 1999), for example, recommend the inclusion of self-help groups as an adjunct to professional treatment. The Department of Veterans Affairs, perhaps one of the largest providers of substance abuse treatment in the United States, not only recommends referral to self-help groups in their clinical practice guidelines but provides clinicians with specific strategies for promoting meeting attendance (Veterans Health Administration Office of Quality & Performance, 2001).

The importance of including AA as part of a comprehensive professionally delivered treatment program is also recognized by addiction treatment scientists. A group at the George Washington University Medical Center works to promote public knowledge of alcohol abuse and alcoholism by publishing a series of primers summarizing research findings. In *Primer 4, The Active Ingredients of Effective Treatment for Alcohol Problems* (Ensuring Solutions to Alcohol Problems, 2003), participation in AA is identified as an important component of positive treatment outcome. Similarly, an expert consensus statement (Humphreys et al., 2004) recommends participation in self-help groups, such as AA, as an adjunct to professional care and further recommends the use of evidence-based methods for facilitating group attendance.

5. Summary

Several forces combined in the 1950s to profoundly change the way alcoholism was treated in the United States. Anderson, Bradley, and Hazelden staff combined strategies to revolutionize alcoholism treatment across the spectrum of social rehabilitation services and hospital-based care.

Prevailing psychiatric services, heavily influenced by psychoanalytic practices, were abandoned in favor of an emphasis on patient education, therapeutic group process, peer interaction, and the development of life-long support systems through AA. The addition of the alcoholism counselors, many of whom were recovering AA members, was a key ingredient in aligning a closely identified professional with the alcoholic to foster integration of Twelve Step principles and practices in everyday life. Dignity, respect, and hope for recovery became the cornerstone of the Minnesota/Hazelden Model.

The resulting treatment model is recognized as an effective, evidence-based approach for alcohol and drug dependence. One of the strongest commendatory statements has come from the staff of the National Institute on Alcohol Abuse and Alcoholism who, in a report to the U.S. Congress, identified Twelve Step-based professional treatment as effective as other approaches and a model that "...may actually achieve more sustained abstinence" (2000, p. 448).

Clearly, AA's impact on professional treatment cannot be underestimated. Perhaps Dan Anderson summarized it best: "Without the initial and sustaining impetus of [AA], none of our treatment efforts could have been realized" (Anderson, 1981, p. 3).

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The Impact of Alcoholics Anonymous on Other Substance Abuse-Related Twelve-Step Programs

Alexandre B. Laudet

Abstract: This chapter explores the influence of the AA model on self-help fellowships addressing problems of drug dependence. Fellowships that have adapted the twelve-step recovery model to other substances of abuse are reviewed; next similarities and differences between AA and drug-recovery twelve-step organizations are examined; finally, we present empirical findings on patterns of attendance and perceptions of AA and Narcotics Anonymous (NA) among polydrug-dependent populations, many of whom are cross-addicted to alcohol. Future directions in twelve-step research are noted in closing.

Key words: twelve steps; self-help; mutual aid; recovery; addiction

1. Introduction

Since its inception in the United States in 1935, Alcoholics Anonymous has grown to become the largest and most well-known self-help organization for alcohol problems not only in the United States but worldwide. *The Big Book of Alcoholics Anonymous*, AA's Basic Text laying out the twelve-step program of recovery (Alcoholics Anonymous World Services Inc., 1939–2001), has been translated in 28 languages, spreading worldwide the message of this "design for living that works." The AA recovery program has also been widely adapted

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to other behaviors (e.g., drug use, gambling, overeating. eating, sex), cultures (Humphreys, 2004; Makela et al., 1996) and belief systems (e.g., Christianity); 258 fellowships use the twelve steps or the name "Anonymous" (Kurtz, 1997) and there are 94 "verified" twelve-step fellowships (White & Madara, 1996). In this chapter, we explore the influence of the AA model to self-help fellowships addressing problems of drug dependence; first, we review the fellowships that have adapted the twelve-step recovery model to other substances of abuse; next similarities and differences between AA and drug-recovery twelve-step organizations are examined; finally, we present empirical findings on patterns of attendance and perceptions of AA and Narcotics Anonymous (NA) among polydrug-dependent populations, many of whom are cross-addicted to alcohol.

2. Twelve-Step Fellowships Focusing on Recovery from Drug Dependence

Following the increasing popularity of AA after the publication of the first edition of the Big Book (Alcoholics Anonymous World Services, Inc., 1939–2001) and the Twelve-Step and Twelve Traditions (Alcoholics Anonymous World Services. Inc., 1952), the twelve-step recovery program became increasingly recognized as a useful recovery resource for persons wishing to overcome substance dependence. AA meetings, however, may not have been suited for those dependent on substances other than alcohol, and the twelve-step recovery program started to be adapted to provide support for persons wishing to address dependence on substances other than alcohol. The advent of these specialized fellowships is likely multi-determined. First, one of the key principles of AA is "singleness of purpose," most evidently expressed by a statement frequently made at the opening of AA meetings: "in keeping with AA's singleness of purpose, please limit your sharing to alcohol." While many drug users may also have used alcohol, those who do not identify alcohol as their primary problem substance may not be able to maximally benefit from support groups where alcohol is the primary topic of conversation. Moreover, a second key aspect of the twelve-step program that necessitated specialized fellowships for dependence on substances other than alcohol is the importance of identification with peers who seek a solution to a shared problem. Individuals dependent on drugs, particularly illicit drugs, are often forced into a lifestyle that differs significantly from alcohol-dependent persons because of the criminalized aspect of drug use (acquiring, possessing and using drugs). While alcohol users need only a few dollars to buy a bottle legally at the corner store, drug-dependent persons by definition are engaging in illegal activities in the process of obtaining the substance of dependence. The following section briefly describes the major drugrecovery twelve-step fellowships based on available information from each of these organizations.

2.1. Narcotics Anonymous (NA)

Narcotics Anonymous (NA) is the largest and best known of the twelve-step fellowships addressing recovery from drug addiction. Officially founded in 1953, NA started in the Los Angeles area in the late 1940s. The idea of creating a twelve-step program specifically to help drug addicts had emerged several times. In early 1947, a group of drug addicts began to meet as part of a treatment center in Lexington Federal Prison in Lexington, Kentucky. This group, based on the twelve steps of AA, called itself NARCO or Addicts Anonymous and continued to meet weekly for over 20 years. In 1948, one of the graduates from the NARCO program moved to New York City and started a similar group in the New York Prison System. This was the first group to be called "Narcotics Anonymous"; the group dissolved soon after it was founded, but similar, independent groups sprang simultaneously in other parts of the United States, suggesting that there was a need for such an organized program.

Narcotics Anonymous was founded (as AANA) in California in 1953; most founding members had recovered in AA. This group differed from its predecessors in that it specifically attempted to form a mutual support group. The first documented meeting was on August 17, 1953. In September of that year, AA granted the group permission to use the AA steps and traditions, but not the AA name. The organization then officially changed its name to Narcotics Anonymous. This first NA publication, called the "Little Yellow Booklet," containing the twelve steps and early drafts of several pieces that would later be included in subsequent literature was issued in 1954. The initial group had difficulty finding places that would allow them to meet and often had to meet in people's homes. One of the most difficult places for NA to become established was in New York state where the Rockefeller drug laws had made it a crime for drug addicts to congregate for any reason, making NA in effect illegal. Addicts would have to cruise around meeting places and check for surveillance to make sure meetings would not be busted by police; meetings became known as "bunny meetings" as they "hopped" from place to place to avert being located (Garth P., personal communication, September 5, 2002, Montreal, Canada). Following a somewhat unstable period including several months in 1959 when there were no meetings held at all, the founding members dedicated themselves to restarting NA. In the early 1960s, meetings began to form again and grow. The NA White Booklet was written in 1962 and became the heart of NA meetings and the basis for all subsequent NA literature. NA was called a "hip pocket program" because the entire literature could fit into a person's hip pocket. This booklet was republished in 1966 as the NA White Book and included the personal stories of many addicts (a format similar to that of the AA Big Book). The first NA phone line started in 1960, and the first "H&I" group was formed in 1963; H&I, Hospitals and Institutions, is an NA sub-committee that carries the recovery message into institutions where people cannot get to an outside meeting such as hospitals and prisons (AA operates a similar service). That year a "Parent Service Board" (later renamed the World

Service Board) was formed to ensure that NA stayed healthy and followed the twelve traditions. The NA program grew slowly in the 1960s, learning what was effective and what was not as relapse rates and friction between NA groups began to decrease. The 1970s heralded a period of rapid growth for NA, perhaps coinciding with a social context in the United States where drug use was becoming if not more socially acceptable at least more popular and celebrated in the pop culture of the times. In 1970, there were only 20 regular, weekly meetings nationwide. Within 2 years, the movement spread to Europe and Australia; it has continued to grow since, becoming what is today a worldwide organization. In 2007, there are over 25,065 groups holding over 43,900 weekly meetings in 127 countries including western and, more recently, eastern Europe, South America, Asia, Australia and New Zealand, Africa and the Middle East. The first NA World Conference was held in 1971, and others have followed every 2 years. A World Service Office was officially opened in 1977. The first edition of the NA Basic Text was published in 1983 which contributed to tremendous growth; the sixth edition of the NA Basic Text is being released in 2008; NA literature is now available in 55 different languages with 115 newly translated items.

2.2. Other Drug-Related Twelve-Step Recovery Fellowships

Unlike AA which is substance specific, Narcotics Anonymous is open to all drug addicts, regardless of the particular drug or combination of drugs used. Following the growth of the NA fellowship, other twelve-step organizations developed around a single problem substance. Note however that in keeping with twelve-step principles, these fellowships promote abstinence from all mindaltering substances including alcohol, not solely from the specific substance that is their primary focus. The development and chronology of these organizations somewhat reflect specific substance use patterns in the United States. Each of these organizations is independent according to a structure described in a later section. Table 1 summarizes available knowledge about the estimated size of each fellowship discussed below.

Table 1. Estimated Size of Membership of AA and of Drug-Related
Twelve-Step Recovery Fellowships in the United States ¹

	Membership
Alcoholics Anonymous	1,190,637
Narcotics Anonymous	185,000
Cocaine Anonymous	15,000
Marijuana Anonymous	10,000
Heroin Anonymous	Not known
Double Trouble in Recovery	3,000

 $^{^1}$ Data are drawn from White and Madara (1996), Humphreys (2004) and the individual organizations' websites listed in resources in Appendix

Cocaine Anonymous (CA) was founded in 1982 in Hollywood, California, and currently holds meetings in most US states as well as in Canada and Mexico, New Zealand, many western European countries, Indonesia and Hong Kong, in addition to ongoing online meetings.

Marijuana Anonymous started in a number of states almost simultaneously around 1986–1987 by "addicts [who] didn't feel comfortable sharing about their problems in the other programs aimed at chemical dependencies, and in some meetings, they were actually told that they couldn't share. The early members of MA found that, for the most part, marijuana is a 'high bottom' drug and they had a hard time identifying with some of the heavier substance abusers who had lost everything they had" (Marijuana Anonymous, 1992). Marijuana Anonymous meetings are held is almost all US states as well as in Canada, Australia, New Zealand, Denmark, Great Britain, the Netherlands and Scotland; online meetings are also available.

Crystal Meth Anonymous (CMA) started in September 1992 in Los Angeles, California, and currently holds meetings in most US states as well as in Canada, Australia and New Zealand (Crystal Meth Anonymous, 2007). Similar to the other recovery programs discussed here, the CMA program is adapted with permission from the twelve steps and twelve traditions of Alcoholics Anonymous.

Most recently, *Heroin Anonymous* (HA) started in Phoenix, Arizona, on August 12, 2004; currently, 24 meetings are held throughout Arizona, Texas, Michigan, California and Illinois (Heroin Anonymous, 2004).

In addition to these substance-specific groups, we are also aware of a handful of Christian twelve-step-based recovery organizations (e.g., Free-N-One Recovery) although they appear to be quite localized (mostly in California) and little information is available. These organizations encourage members to look to Jesus Christ as their higher power. Overcomers Outreach (OO) describes itself as a bridge between traditional twelve-step recovery groups and the church and has adapted the AA's twelve steps to incorporate religious scriptures.

2.3. Twelve-Step Addiction Recovery Fellowships for Special Populations

The twelve-step recovery program promotes abstinence from all mindaltering substances, and although the World Services of each fellowship does not pronounce itself on the use of prescribed medications, individuals who need pharmacotherapy to manage psychiatric symptoms or to opiate dependence often do not feel welcomed at traditional twelve-step meetings where other members often misinterpret the use of medications as not being "clean." This is unfortunate as it deprives individuals in need of ongoing recovery support from the many demonstrated benefits of twelve-step participation. As a result, twelve-step organizations have developed specifically to offer recovery support to persons who are dually diagnosed with substance use disorders and mental illness, as well as for individuals who are maintained on methadone to treat opiate dependence.

2.3.1. Twelve-Step Group for Dually Diagnosed Persons

Lifetime comorbidity of psychiatric illness and chemical dependency is high—it has been estimated at 59% (Kessler, 1997). Individuals dually diagnosed with both these issues face more recovery challenges than those with a "single" disorder (Laudet, Magura, Vogel, & Knight, 2000a). The American Psychiatric Association advised that individuals who are on psychoactive medications for a comorbid psychiatric disorder be referred to groups where pharmacotherapy is recognized and supported as useful treatment, rather than regarded as another form of substance abuse (American Psychiatric Association, 1995). Yet the benefits of twelve-step participation are not always available to them; some dually diagnosed members report receiving misguided advice about psychiatric illness and the use of medication, that are seen as "drugs" (Hazelden, 1993), although this is not the official view of AA or NA (Alcoholics Anonymous World Services, 1984). Identifying and bonding with other members may be difficult for dually diagnosed individuals if they feel different from other group members and acceptance, a cornerstone or twelve-step fellowship, may be lacking. Dually diagnosed persons who are newcomers to twelve-step meetings often find them alienating and unempathetic and twelve-step groups are generally underutilized by persons with a comorbid mental health disorder (Drake, McLaughlin, Pepper, & Minkoff, 1991). Noordsy and colleagues identified several themes emanating from dually diagnosed individuals' experience when attempting to use twelve steps as a recovery resource, including avoiding initial attendance, dropping out or finding it hard to make a regular commitment, and difficulties identifying with other members. The authors concluded that not many dually diagnosed individuals use self-help consistently over time (Noordsy, Schwab, Fox, & Drake, 1996). However, other studies have reported high levels of regular AA attendance among the dually diagnosed, generally comparable to those found among "single" disorder clients (Bogenschutz & Akin, 2000; Kurtz et al., 1995; Pristach & Smith, 1999). There is a prevalent belief among clinicians that dually diagnosed individuals cannot benefit from participating in traditional self-help groups and as a result, dually diagnosed persons are less likely to be referred to twelve steps than are "single disorder" substance users (Humphreys, 1997). This belief results in missed opportunity to give clients an effective recovery resource. However, a growing body of research suggests that such individuals can and do benefit from participation in self-help (Jerrell & Ridgely, 1995; Moos, Finney, Ouimette, & Suchinsky, 1999; Ouimette, Finney, & Moos, 1997; Project MATCH Research Group, 1997; Satel, Becker, & Dan, 1993). The recognition of the limitations of single-focus twelve-step groups for dually diagnosed individuals has led to the development of several "dualrecovery" self-help groups.

AA holds special meetings for alcohol-dependent individuals who have a co-occurring mental disorder. In addition, fellowships have emerged specifically to address dual-recovery needs, most notably Dual Recovery Anonymous—DRA, Hazelden, 1993, and Double Trouble in Recovery—DTR. These groups provide members with an opportunity to discuss both substance use and mental health issues, including the use of medications, in an accepting and psychologically safe forum.

Double Trouble in Recovery (DTR) started in New York state in 1989 and currently has over 200 groups meeting in 14 US states, with the largest number in New York state and growing memberships in Georgia, Colorado, New Mexico and New Jersey. New DTR groups start at the initiative of consumers and that of professionals who believe that mutual help fellowships are a useful addition to formal treatment. DTR developed as a grassroots initiative and functions today with minimal involvement from the professional community. Groups meet in psychosocial clubs, supported residences for mental health clients, day treatment programs for mental health, substance abuse and dual diagnosis, hospital inpatient units and community-based organizations. All DTR groups are led by recovering individuals (Vogel, Knight, Laudet, & Magura, 1998). At this writing, this relatively new fellowship is in the process of formalizing its own twelve-step dual-diagnosis recovery program, including efforts to encourage sponsorship and step work among its members. DTR members' primary problem substances are cocaine and alcohol, and the most prevalent psychiatric diagnoses schizophrenia (43%), bipolar disorder (25%) and unipolar (major) depression (26%) (Laudet, Magura, Vogel, & Knight, 2000b).

Dual Recovery Anonymous (DRA) started in 1989 in Kansas City. DRA's educational recovery materials began to be distributed by the Hazelden Foundation in 1993 which greatly contributed to the growth of the organization that currently holds meetings in most US states as well as in Canada, Australia, New Zealand, India and Iceland. Information about membership characteristics does not seem to be available at this writing.

2.3.2. Twelve-Step Recovery Groups for Individuals Receiving Methadone Maintenance

Methadone is a synthetic narcotic that relieves the craving for heroin. Methadone enables the former heroin addict to feel well and unimpaired by side effects and to be free of heroin hunger. Methadone maintenance (MM), a form of substitution therapy, is an abstinence-based treatment for opiate addiction. Individuals on methadone maintenance are typically not permitted to "share" (speak) at twelve-step meetings, especially in NA, where methadone may be viewed as a "drug" (McGonagle, 1994). *Methadone Anonymous* started in 1991 in Maryland for individuals on prescribed methadone who wish to pursue recovery through the twelve-step program; meetings are held in methadone maintenance treatment programs between one and three times weekly. A small survey of the Methadone Anonymous membership at one treatment program

in New York City indicated that members were evenly split in terms of gender; they averaged 40 years of age. Three-quarters were attending Methadone Anonymous voluntarily; the others were mandated by the program's staff. In addition to heroin, members had a history of alcohol and other drug use including cocaine, marijuana, prescription opiates and stimulants. Average (mean) length of participation in Methadone Anonymous was 16 months, ranging from 1 to 66 months (Glickman, Galanter, & Dermatis, 2001).

3. Similarities and Differences Between AA and Drug-Recovery Fellowships

All twelve-step fellowships regardless of the problem behavior they address are based on and adapted from the twelve-step recovery program of Alcoholics Anonymous set forth in the Big Book and the twelve steps and twelve traditions (Alcoholics Anonymous World Services, Inc., 1952; Alcoholics Anonymous World Services, Inc., 1939–2001). The only critical differences among these fellowships are the specific substance(s) members identify as their problem and a corresponding adaptation of Step 1 ("we admitted that we were powerless over [substance]—that our lives had become unmanageable") and Step 12 ("Having had a spiritual awakening as a result of these steps, we tried to carry this message to [substance] addicts, and to practice these principles in all of our affairs"). The Narcotics Anonymous recovery program encompasses all drugs of abuse rather than a specific one so that NA's Step 1 reads "powerless over our addiction" and Step 12, "we tried to carry this message to addicts."

In addition to similar steps, all twelve-step fellowships, be they for alcohol, drugs or other problem behaviors (sex, gambling, shopping, smoking, overeating), share the following: meeting format, recovery program and membership and organizational structure.

3.1. Meeting Format

Twelve-step meetings are held throughout the community and are available 7 days a week, virtually 24 hours a day in large metropolitan areas. Meetings are typically held in public venues including libraries, places of worship and YMCAs, where the fellowship typically pays a token contribution to use the room weekly or more often for meetings. Meetings range in size from two or three individuals in small communities to several hundreds in metropolitan areas. Similar to AA, the larger fellowships (e.g., NA and CA) hold different types and formats of meetings including open and closed meetings, discussion meetings (often "round robin" where every member present can "share" for a few minutes), speaker meetings (one or two people share their stories from a podium), Step meetings and Big Book meetings. There are also meetings with a special focus such as for Latinos, women, gay and lesbians, newcomers, old-timers and veterans. Meetings typically adhere to a prescribed format including twelve-step readings

(the Preamble, How and Why, the twelve steps) at the start of the meeting and a reciting of the serenity prayer at the end for members who wish to do so.

3.2. Recovery Program

The twelve-step recovery program is predicated on abstinence from the problem substance of abuse and to a lesser extent from all substances of abuse. The program encourages members to look outside themselves for strength (a higher power) and to embrace spiritual values and practices that are outlined in the twelve steps themselves. The suggested recovery program includes meeting attendance and participation in "recovery work" often referred to in the scientific literature as twelve-step "involvement" or "affiliation." This includes reading twelve-step recovery literature, having between-meeting contact with other twelve-step members, working the steps, having a sponsor, sponsoring other members and doing service (12th-step activities that range from making coffee and setting up chairs at meeting sites to serving as secretary, chair or treasurer of a meeting, "bringing" meetings to hospitals and jails, carrying the message to others). The twelve-step program of recovery is sometimes described as "a simple program for complicated people." Its suggested prescription for sobriety, mental and spiritual well-being, referred to as "the AA six pack," is deceptively simple: do not use no matter what, go to meetings, ask for help, get a sponsor, join a group and get active. Thus, while relying on a higher power, twelve-step group members are also encouraged to take responsibility for their recovery by working the program and "doing the footwork."

The essential keys to recovery, symbolized by the acronym HOW, are honesty (with self and others), open-mindedness (to explore new ways of thinking and behaving) and willingness (to acquire new behaviors and thought patterns). Honesty about one's addiction is most evident at twelve-step meetings where members introduce themselves before speaking by saying "My name is ______, I'm an addict." This is to counter denial, the hallmark of addiction, "the disease that tells you you don't have it." The twelve-step program has a strong spiritual component that encourages members to rely on a power (an outside entity) greater than themselves, be it the twelve-step group meeting they attend, their sponsor, the God of an organized religion or simply an external force. Mindful of the willful nature of the alcoholic, the AA founders presented the twelve-step program of recovery as a set of tools and suggestions that they had used to recover, rather than as a prescription to sobriety. The subtitle of the Big Book is "How Many Thousands of Men and Women Have Recovered from Alcoholism" (Alcoholics Anonymous World Services.Inc., 1939–2001).

3.3. Membership and Organizational Structure

Twelve-step membership is informal. The only requirement is a desire to stop using the addictive substance(s); a member becomes a member simply by expressing this desire (as set forth by the third tradition). Membership records

are not kept. A key principle for twelve-step group is *anonymity*, according to the 12th tradition. Thus, members can attend meetings without fear that their addiction or what they discuss ("share") will be revealed to anyone outside the group ("what is said in this room stays in this room"). There are no costs associated with twelve-step membership although groups do accept voluntary contributions to meet their expenses ("passing the basket").

As individual members are encouraged to seek recovery by working the twelve-step program, twelve-step fellowships are guided in their structure and affairs, by the twelve traditions originally developed by Bill W. and the early membership of AA to preserve the unique nature of AA while allowing for an independent and thriving recovery organization (Alcoholics Anonymous World Services. Inc., 1952). Twelve-step fellowships are true mutual aid societies; there is no "leader" running the organization or making decisions for the membership. This is consistent with the second tradition ("For our group purpose, there is but one ultimate authority—a loving God as He may express Himself in our group conscience. Our leaders are but trusted servants; they do not govern"). Moreover, twelve-step fellowships are non-professional (eighth tradition): each group is self-supporting and autonomous. However as membership grows, a structure develops based on that of AA World Services that includes local, regional and national service boards or committees "directly responsible to those they serve" (ninth tradition). The level of structure of each organization varies depending on the organization's size, with larger ones being more structured, NA being by far the largest and most structured twelve-step drug-recovery fellowship, holds bi-yearly world conventions held in different countries.

3.4. Characteristic of Membership in Twelve-Step Recovery Fellowships for Alcohol and Drug Dependence

No attendance records are kept at twelve-step meetings, so it is traditionally challenging to obtain specific information about twelve-step membership. Table 1 (see earlier) presents available information on the estimated size of US membership for AA and drug-related twelve-step fellowships. Some of the fellowships such as NA conduct membership surveys at their world conventions; results must be interpreted with caution as they reflect the characteristics of members who choose to complete the voluntary surveys and may not accurately describe membership as a whole. Nonetheless it is interesting to compare NA membership with that of AA. AA was founded by middle-aged professional Caucasian men and has traditionally been regarded as populated by Caucasian men; until drug use became more prevalent in the late 1960s, this was largely true. This is changing as the popularity of twelve steps has grown and is being disseminated in substance abuse treatment programs, most of which, in the United States, are based on twelve-step principles (McElrath, 1997). The proportion of women who are AA members rose from 22% in 1968 to 34% in 1998 (Alcoholics Anonymous World Services, 1998). Furthermore, alcohol and drug use disorders often co-occur (Kessler etal., 1997), and it is often heard in addiction professional circles that there are almost no more "pure" alcoholics. Interestingly, AA membership surveys showed an increase in AA members cross-addicted to drugs from 31% in 1983 to 42% in 1989; the question is no longer asked in AA surveys (Alcoholics Anonymous World Services, 1998), but this suggests that cross-addicted individuals may attend both alcohol- and drug twelve-step fellowships, a topic that is addressed in the next section. Results of the most recent AA and NA membership surveys are presented in Table 2 for comparison (Alcoholics Anonymous World Services, 2004; Narcotics Anonymous World Services, 2005). The NA membership is on average 10 years younger than the AA membership, with seven out of ten Caucasians compared to nine out of ten in AA, and three times as many African Americans in NA than in AA. Two-thirds of AA members are men compared to a little over half in NA. Surprisingly, the employment rate is higher in NA likely due to the greater

Table 2. Characteristics of Alcoholics and Narcotics Anonymous General Memberships

	AA^1	NA ²
Men	65%	55%
Age (mean years)	48	38.9
Under 21	1.5%	3%
21–31	7.9%	12%
31–40	18.2%	31%
41–50	33.0%	40%
Over 51	39.4	13%
No answer	_	1%
Race/ethnicity		
African American	3.3%	11%
Caucasian	89.1%	70%
Latino/Hispanic	4.4%	11%
Other	3.3%	8%
Profession		
Employed	71%	81%
Retired	14%	3%
Student	3%	5%
Homemaker	2%	3%
Unemployed/disable	12%	7%
No answer		1%
Length of continuous abstinence (in years)	8.0	7.4

 $^{^1\}prime\prime\prime$ More than 7,500 AA members from the U.S. and Canada participated in a random survey of the membership." AA 2004 membership survey, AA World Services, 2005

²From survey "returned by almost half of the 13,000 attendees at the 2003 NA World Convention held in San Diego, California" (NA World Services, 2005)

percentage of retired members in AA. Average length of continuous sobriety is comparable in the two fellowships.

Cocaine Anonymous also publishes some membership data on its website (Cocaine Anonymous, 2003). As of 2001, the most recently available data, CA's membership was two-thirds men, with over 40% of the members between the ages of 35 and 44 years and over 25% older; nearly two-thirds of members are of Caucasian ancestry and over a quarter are African Americans. Most CA members have also used drugs other than cocaine (or crack), 40% had injected cocaine; over 40% of CA members have been sober for a year or less, 25% for 1–5 years and a quarter for over 5 years.

4. Utilization of and Experiences with Drug Recovery Twelve-Step Fellowships Among Drug-Dependent Populations

In spite of the increasing popularity of twelve-step fellowships for drug dependence, AA remains the best known twelve-step recovery fellowship. Little is known of attendance patterns or experiences with twelve-step fellowships among drug-dependent populations in spite of the number of individuals involved. Best and colleagues surveyed clients in drug- and alcohol inpatient detoxification services about their experiences and views regarding AA and NA (Best et al., 2001); although there were no differences in history of AA/NA attendance, drug users, compared to alcohol users, reported significantly more positive attitudes toward AA/NA, more willingness to attend during their inpatient treatment and greater intention to attend following completion of their detoxification.

Because many drug abusers are cross-addicted to alcohol (Kessler et al., 1997), the issue of choice of fellowship (NA and/or AA) among drugdependent persons is interest. There is a growing body of research on the effectiveness of twelve-step participation among drug-dependent persons (Christo & Franey, 1995; Fiorentine, 1999), but little is known about whether or why they choose to participate in AA, NA or both. Information on clinicians' referral to twelve steps for substance abuse treatment patients obtained in a 1997 survey conducted in the Veterans' Administration system of care revealed that 79.4% of patients were referred to AA, 44.9% to NA and 24.3% to CA (Humphreys, 1997). There is considerable variation across AA meetings in terms of environment and social interactions (Montgomery, Miller, & Tonigan, 1993); while some strictly enforce the singleness of purpose (see earlier) and bar sharing on drugs, others may be more flexible and suit well the needs of cross-addicted persons. Moreover, it may be that the focus on one substance (or a class of substances such as in NA) that has been recommended by some (Washton, 1988) is not viewed by substance users as critical to the success of twelve-step participation. Rather, identification with other members may be based on similarities in individual characteristics (e.g., gender, race) or on past history. Twelve-step groups have been described as "social worlds" (Humphreys, Mankowski, Moos, & Finney, 1999); an important part of twelve-step fellowships is what happens among members outside of meetings—coffee after the meeting, regular telephone contacts. Over time, choice of fellowship may be determined by social affinity with the peer groups rather than by substance focus. Alternatively, some individuals may choose to attend both NA and AA to obtain different perspectives on their addictions and on recovery. Some have put forth that persons dependent on substances other than alcohol sometimes feel out of place in AA (McIntire, 2000). However, what little empirical evidence is available on AA attendance among drug-dependent populations suggests that this may not be the case. Weiss and colleagues examined participation in AA and NA in a sample of cocaine-dependent clients of outpatient treatment: 70% attended AA, 63% NA and 13% CA. Forty percent attended AA plus NA, 19% AA only and 15% NA (Weiss et al., 2000). Dual addiction to cocaine and alcohol was associated with greater likelihood to attend AA plus NA (41% vs. 28%) or AA only (22% vs. 12%). We have conducted several studies among polysubstance users whose primary problem substance is crack and/or heroin and examined their patterns of attendance in AA and NA. One study recruited 354 former drug users in remission from 1 month to over 10 years in New York City in 2003– 2004; participants are members of ethnic minorities, 56% men with an average age of 43, with chronic and severe dependence and long addiction and treatment "careers." At intake, 90% reported having attended twelve-step meetings, 87% had attended NA, 72% had attended AA (Laudet, Morgen, & White, 2006). A second study recruited 205 participants within a week after admission in outpatient treatment at two publicly funded substance abuse treatment programs in New York City between 2003 and 2004: 79.4% had a history of twelve-step participation: 35.6% had attended NA only, 5.4% had attended AA only and 37.7 had attended both AA and NA (Laudet, Stanick, Carway, & Sands, 2004). Greater dependence severity as assessed by the Lifetime Non-alcohol Psychoactive Substance Use Disorders subscale of the Mini International Neuropsychiatric Interview (MINI) (Sheehan et al., 1998) was associated with attending both AA and NA in this drug-dependent sample, and there was a significant association between citing alcohol as a problem substance and attending both AA and NA (relative to not citing alcohol as a problem substance—Table 3).

In spite of these high rates of twelve-step participation, we have documented high rates of attrition from both AA and NA among drug-dependent samples (Laudet, Stanick, & Sands, 2007). For example, in the outpatient sample, among clients who had attended twelve steps at intake, 85% reported having attended NA and dropped out for a month or longer, and 91% reported a similar patterns for AA; mean number of interrupted attendance for a month or longer since attendance began was 6 (6.1 in NA, 5.4 in AA) (Laudet et al., 2004). These findings suggest that patterns of attendance in twelve steps among drug users are similar to the "revolving door" treatment careers reported by Dennis and colleagues (Dennis, Scott, Funk, & Foss, 2005) and probably

	Dependence			
	Ever	Ever Severity Mean		nong Problem ances ¹
	%		No (%)	Yes (%)
Neither NA or NA	21.6	5.5	25.9	12.3*
NA only	35.3	7.8*	43.2	18.5***
AA only	5.4	8.2	1.4	13.8***
Both AA and NA	37.7	8.6*	29.5	55.4
Helpfulness NA	_	_	3.5	3.3 n.s.
Helpfulness AA	_	_	3.4	3.9 n.s.

Table 3. Utilization of AA and NA Among Drug Users as a Function of Dependence Severity and Alcohol Problem

coincide with treatment episodes. In light of this intermittent pattern of twelve-step attendance among drug-dependent persons, we used qualitative methods to elucidate participants' experiences with AA and NA. With respect to reasons for attending AA or NA among "ever attenders," a greater percentage of NA participants cited "promotes recovery/sobriety" than did AA members; the most often cited reason for attending AA among drug-dependent AA attenders was that it provides support, acceptance and fellowship (58%), an answer also provided by one-third of NA attenders (Table 4). We also asked participants who had attended both AA and NA (N = 78) whether and how the two fellowships differ (Table 5). One-third said there is no difference between the two fellowships; one out of five reported better identification with members in NA than in AA, which is expected, and one out of five said that there is more recovery (longer recovery, more experienced members) in AA than in NA. NA was also perceived as more inclusive than AA by twice as many participants. Finally, we asked participants what they disliked about AA and about NA

Table 4. Reasons for Attending Narcotics and Alcoholics Anonymous Among Drug-Dependent Persons¹

	Narcotics Anonymous (N=150) (%)	Alcoholics Anonymous (N=88) (%)
Promotes recovery/sobriety	59	41
Support/acceptance/fellowship	33	58
None (did not get anything out of it)	18	10
Mandated/pressured	11	6
To make friends, to check it out	4	4
Step work, spirituality	3	8

¹May add up to over 100% because up to three answers were coded

 $^{^{1}}$ Chi Square; *p < .05; ***p < .001

Table 5. Perceived Differences Between Narcotics and Alcoholics Anonymous Among Drug Users¹

	Narcotics Anonymous (%)	Alcoholics Anonymous (%)
No difference	29	31
Better identification with members	21	14
More inclusive, empathic, accepting	14	7
More recovery, spirituality, experienced	0	22
members		
More honest, less phony	0	11
Different meeting format	5	0
More helpful	7	0
Prefer other fellowship	7	1
Prefers this group (non-specific)	0	3
Insufficient experience with other	7	1
fellowships to tell		
Does not know/not sure	0	10

 $^{^{1}}$ Among participants who have attended both AA and NA (N = 78)

(participants with AA or NA exposure only were asked only about the fellowship they had attended; participants with exposure to both were asked about each). One-third (35%) of those who had attended NA disliked nothing about it, and one-half (52%) of ever AA attenders disliked nothing about AA. The most frequently cited disliked aspects of NA was that fellow members are "phony" because they were involved in drug use or drug trade (28%); 13% found NA repetitious and boring, and 11% did not like the meeting format. Among AA attenders, disliked aspects of AA mentioned by 5% or more of those asked were other members (13%), meeting format (9%) and the limited focus on alcohol (6%). We note that the qualitative methodology records participants' spontaneous answers so that the findings presented here cannot be interpreted as true comparisons (that is, participants were not asked to rate AA and NA on the dimensions presented in Tables 4 and 5).

5. Conclusions and Future Directions

The twelve-step recovery model pioneered by Alcoholics Anonymous more than 70 years ago is alive and growing in its adaptations for drug-dependent populations. Perhaps because many drug users are addicted to more than one substance (or identify more than one substance as problematic), Narcotics Anonymous, that speaks to drug addiction overall, has, at this writing, attracted more members than have newer fellowships that address a single substance (e.g., Cocaine Anonymous). Also note that the more recent establishment of drug-specific fellowships along with lower availability of meetings may also explain their smaller membership. The twelve-step recovery model

was developed in the United States and has since permeated American culture and the service delivery system. Unlike other countries such as Australia and most of western Europe, the United States have adopted an abstinence-based response to drug dependence, making twelve-step recovery an ideal recovery resource and aftercare modality. We note however that even in countries that have adopted a harm minimization paradigm such as Australia, we have found that the majority of individuals with a chronic history of polysubstance use choose total abstinence from all mind-altering substance as their personal recovery goal and report twelve-step utilization patterns that do not significantly differ from that of their US counterparts (Laudet & Storey, 2006) although the NA fellowship is significantly smaller than that in the United States (Toumbourou, Hamilton, U'Ren, Stevens-Jones, & Storey, 2002).

To date, the growing literature on twelve-step participation among drugdependent persons has failed to examine separately participation in AA and in NA, typically speaking of "twelve-step" or "self-help" participation instead. Information is needed on the differential effectiveness of AA and NA among drug-dependent persons to inform clinicians' referral and service delivery. We have shown that the mere presence of a 12-sep group onsite in outpatient treatment, a cost-free strategy easily implemented through AA or NA's H&I for any treatment program that requests it, enhances nearly threefold the likelihood of twelve-step engagement during treatment as well as with nearly six times the likelihood of continuous abstinence from drug one year after treatment ends (Laudet et al., 2007). In our remitted sample of polysubstance users, continuous twelve-step attendance over the 3-year study duration was associated with odds two to five times greater of sustaining continuous drug abstinence over 3 years, compared to less than continuous participation (Laudet & White, 2007). However as discussed earlier, there is high attrition which critically affects the potential effectiveness of twelve steps as a recovery resource. While there are many reasons for twelve-step attrition, it is likely to be minimized if participation is experienced as useful. Thus, learning whether and how choice of fellowships (AA and/or NA) affects the effectiveness of twelve-step participation among drug-dependent persons is of high clinical significance.

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Appendix

Online resources for drug addiction recovery twelve-step fellowships

Cocaine Anonymous (CA) http://www.ca.org
Crystal Meth Anonymous (CMA) http://www.crystalmeth.org/
Double Trouble in Recovery (DTR) http://www.doubletroubleinrecovery.org/index.htm
Dual Recovery Anonymous (DRA) http://www.dualrecovery.org/
Heroin Anonymous (HA) http://www.heroin-anonymous.org/
Marijuana Anonymous (MA) http://www.marijuana-anonymous.org/

Overcomers outreach http://www.overcomersoutreach.org/ Recoveries Anonymous (RA) http://www.r-a.org/

Recoveries Anonymous (RA) http://www.r-a.org/

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The Impact of AA on Non-Professional Substance Abuse Recovery Programs and Sober Living Houses

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Abstract: In addition to being a widely used and effective approach for alcohol problems, AA has been central to the development of several types of non-professional recovery programs. Known as "social model recovery," these programs were staffed by individuals in recovery and they encouraged program participants to become involved in AA as a way to address their drinking problems. In addition, they relied on the traditions, beliefs, and recovery practices of AA as a guide for managing and operating programs (e.g., democratic group processes, shared and rotated leadership, and experiential knowledge). This chapter reviews the philosophy, history, and recent changes in several types of these programs, along with a depiction of AA's influence on them. Programs examined include neighborhood recovery centers, residential social model recovery programs, and two types of sober living houses: California Sober Living Houses and Oxford Houses. Recent outcome evaluations on both types of sober living houses are presented.

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1. Introduction

A social movement of non-professionalized substance abuse recovery programs and sober living houses (SLHs) known as the "social model recovery" approach evolved since the 1940s from the philosophy and practices of Alcoholics Anonymous through the efforts of its members and is explained in this chapter. The characteristics, forms, and philosophy of social model recovery approaches—a generic form of self-help organization—are briefly summarized. A review of the history of social model development includes descriptions of Neighborhood Recovery Centers (NRCs), residential social model recovery approaches—and SLHs. This chapter gives special emphasis to SLHs because they are currently the most prevalent and relatively pure type of social model recovery. Two variations in SLHs are noteworthy: California Sober Living Houses and Oxford Houses. The impact of AA on each type of SLH is described and research findings are summarized.

AA was the first generation of self-help/mutual aid that became the prototype for all twelve-step/twelve-tradition anonymous groups (Borkman, 1982, 1983). The principle of non-affiliation of AA with other groups or enterprises developed early in its history (White & Kurtz, this volume) but members committed to doing twelve-step service for fellow alcoholics created various social innovations to extend the assistance available to newcomers beyond AA meetings and the fellowship. These second-generation self-help organizations (Borkman, 1983) were twelve-step houses and social detoxes of the 1940s and 1950s. In these settings newcomers to recovery could sober up, live in an abstinent environment, attend AA meetings, and associate with recovering peers. However, social model detoxes and twelve-step houses were often run by charismatic leaders who did not involve or empower residents (Wittman, 1993). Thus, while they followed self-help/mutual aid ideas of personal recovery with the twelve steps, the twelve-step houses did not necessarily follow the organizational principles of AA which were not fully codified until the mid-1950s and were not quickly embraced even then.

The third generation might best be termed the social/community recovery model of the mid-1970s, 1980s, and later. These self-help organizations, more formalized than twelve-step groups, are usually 501(C)3 non-profit organizations with noticeable budgets that employ recovering staff to provide services to their peers and use the social technology of self-help and mutual aid (Borkman, 2007, p. 212). Free from the organizational constraints of AA's traditions (i.e., organizational principles), social model recovery expanded beyond individual recovery to embrace the community as a focus for intervention and prevention. Alcoholism became defined as a social disease that afflicts not just individuals but the community. "In the community, it is characterized by responses and practices creating social pressures to drink. The condition is also characterized by individual and community denial that alcohol is a drug" (Matthews & Weiss, 1990, p. 172).

Community-based social model recovery programs flourished in California during the 1970s and 1980s. At that time, publicly funded alcohol and drug programs in California were funded through counties. Borkman (1986, 1990) conducted a study to identify if social model alcohol programs in fact were being funded by county alcohol program administrators since many clinically oriented providers thought social model meant only non-medical, which also characterized their programs. Study results showed that social model programs, as they are defined here, were commonly funded. Many medium and large counties, including San Diego and Los Angeles, funded social model programs or an eclectic mix of clinical and social model programs exclusively. Borkman's (1990) categorization of the elements of social model program formed from that research comprised the basis for Kaskutas, Greenfield, Borkman, and Room's (1998) development of the Social Model Philosophy Scale (SMPS), which is described in detail below.

2. Social Model Recovery

"Social model recovery" is a philosophy and set of practices that was initially developed by recovering alcoholics from Alcoholics Anonymous to assist themselves and their peers in recovery from alcoholism. Although "social model recovery" programs have evolved in many geographic locations where members of Alcoholics Anonymous wanted to help their peers with additional formalized programs, the model has been more fully developed, articulated, and documented in California than anywhere (Borkman, Kaskutas, Room, Bryan, & Barrows, 1998). The Institute of Medicine identified California's social model approach as "the most prominent example of the use of sociocultural model in formal treatment" (Institute of Medicine, 1990). Because of AA's 6th tradition of non-affiliation (12 & 12, 1952, p. 11) recovery efforts and programs that are inspired by AA or developed by members of AA cannot be referred to as AA recovery programs. Consequently, the origins and influence of AA and its beliefs and practices are often implicit in social model recovery programs rather than explicit. Observers have to know enough in detail about the AA terminology, beliefs, and practices to identify the origins of a program as being AA or other twelve-step related or special steps have to be taken to obtain that information. In this case Borkman (1983) has researched social model programs for years and interviewed co-founder and current CEO of Oxford House, Inc., Paul Molloy, and co-founder and Program Director of Sober Living Network, Ken Schonlau, about what AA ideas and practices were initially borrowed for their model. Over the years, in addition to the recovering alcoholics and drug addicts committed to the social model approach, many sympathetic professionals, government officials, and other non-recovering persons have been attracted to and supportive of it.

Major aspects of the social model philosophy of individual recovery which are grounded in the principles of AA have been formulated in more generalized concepts (see Shaw & Borkman, 1990; Kaskutas & McLellan, 1998; Room, 1998):

- Alcoholism and drug addiction are lifelong persistent problems which cannot be cured but can be arrested through abstinence and a program of individual recovery and mutual help.
- In the alcohol and drug-oriented society of the United States, recovering alcoholics/addicts need a safe abstinent social environment in which to recover; "the description of the social model mission is to provide a sober environment and alter the larger environment, with the ultimate aim of creating a culture where it is OK not to drink" (Wright, 1990, p. 4).
- Social model philosophy focuses on the development of an abstinent safe environment within which an individual alcoholic/addict recovers at his/her own pace.
- Social model programs assume many forms: social detoxification, twelve-step houses, recovery homes, community recovery centers, or sober living houses.
- Social model programs may be non-profit 501(C)3 organizations but the experiential knowledge and authority of recovering alcoholics/addicts controls and directs the organization.
- In social model programs the staff members are recovering peers who manage the environment, not the recovering individual.
- Recovering individuals are "prosumers" (consumers and providers— Toffler, 1980), not clients, who recover by helping others and themselves.
- Individuals are assisted in taking self-responsibility for their own plan of recovery from alcohol/drugs in social model recovery programs; accordingly residents, not staff, develop their own personal recovery plans (Borkman, 1998b).
- The physical settings should be home-like and non-institutional with places for privacy and reflection as well as open areas for sociability and mutual help activities (Wittman, 1990).
- Governance of programs is provided by a rotating "resident's council" which uses democratic participation of residents as a vehicle for making program decisions.

The pioneers developing social model approaches, such as Martin Dodd and Ken Schonlau, are experts on self-help and mutual aid approaches. In their development of social model residential recovery homes and neighborhood community centers they relied on AA principles and traditions. However, the social model programs of the 1980s went beyond AA traditions. They included more of an emphasis on the community and its contribution to alcohol and drug abuse problems as well as the need for advocacy to change harmful substance

abuse policies. These issues were beyond AA's traditions of non-involvement with outside issues. Thus, these early social model programs were increasingly open to the community. They were invested in being good neighbors and involved in activities such as hosting alcohol and drug-free community activities, taking residents to community AA meetings, and inviting their alumni to mentor residents or volunteer for staff duties (Barrows, 1998; Matthews & Weiss, 1990).

2.1. Paucity of Published Literature

Social modelists are primarily recovering alcoholics/addicts who are practitioners, not researchers or academics and consequently write little. Much of the written material about social model recovery is unpublished fugitive or grey literature of conference reports or agency memos with very little peerreviewed research (Borkman et al., 1998; Room, Kaskutas, & Piroth, 1998). The earliest research in 1980 was an ethnographic description and comparison of two complex social model agencies in southern California directed by social model pioneers (Borkman, 1983). A later and substantial peer-reviewed research effort compared social model recovery programs to hospital day treatment which was reported in special issues of the Journal of Substance Abuse Treatment (Kaskutas & McLellan, 1998) and Contemporary Drug Problems (Room, 1998). This chapter reports on more recent social model studies describing outcomes in two types of SLHs: California Sober Living Houses (Polcin, Galloway, Taylor, & Benowitz-Fredericks, 2004; Polcin, 2006 October; Polcin & Henderson, 2008) and Oxford Houses (Jason, Davis, Ferrari, & Anderson, 2007; Jason, Olson, Ferrari, & Sasso, 2006).

3. Types of Social Model Recovery Programs

The social model recovery movement evolved into several different types of recovery programs: neighborhood recovery centers (NRCs), residential social model recovery programs and two types of SLHs, California Sober Living Houses and Oxford Houses. In the early years of the social model movement NRCs and social model recovery programs were prominent. However, over the past several decades there has been a rather dramatic decline in the number of these types of programs (Kaskutas, Keller, & Witbrodt, 1999). Details about these changes and potential causes are discussed below. At the same time that publicly funded social model programs were decreasing, SLHs, which were financially self-sustaining via resident fees, were substantially increasing in number. Today, SLHs represent the purest form of social model recovery and our review of them is therefore somewhat more extensive.

3.1. Neighborhood Recovery Centers

Neighborhood recovery centers (NRCs) are non-residential social model recovery centers located in communities (Wright, 1990). Typically, open AA

meetings are held at the center, so anyone in the community can attend. In addition, they frequently host or coordinate AA social events, such as alcohol and drug-free parties, dances, or other social outings. Additional activities may include guest speakers who conduct educational workshops on a variety of topics related to recovery. Frequently NRCs are a resource for other types of services individuals might need (medical, psychiatric, legal, and vocational).

Perhaps most importantly, the NRCs offer a safe, alcohol and drug-free environment in which individuals can seek social support for continued sobriety and a variety of life stresses. Although many individuals in recovery attend AA meetings for exactly this purpose, the NCR creates an environment where they can seek support outside the context of a formal AA meeting. They are used by a variety of individuals with alcohol and drug problems, including those who are ambivalent about sobriety and still actively using, those with some initial success at sobriety, and those who are seeking social support after completing residential programs.

Like AA they tended to be democratically managed, but unlike AA they were funded primarily by local and state governments. This made them vulnerable to the demands of funding agencies that they adopt more professionally based approaches and they were subject to budget cuts.

3.2. Residential Social Model Recovery Programs

Residential social model recovery programs offer an alcohol and drug-free living environment for individuals where they can learn how to develop and maintain an abstinence program of recovery. During the first several decades of their inception (1970s and 1980s), residents in social model residential programs stayed for 6 months to a year or longer. However, in response to funding requirements, most of these programs now have lengths of stay of 2–6 months. Historically, they have strived to practice all of the aforementioned social model recovery principles that grew out of AA. One of the unique strengths of learning recovery within a residential social model setting is the opportunity to practice recovery strategies on a daily basis with other recovering persons. Daily stresses and conflicts within the program offer excellent opportunities for residents to learn how to apply the twelve steps of AA to other similar stressful situations they will encounter outside the program. In this way, AA recovery is learned, practiced, and refined within a safe and supportive environment. Like NRCs, residential social model recovery programs typically offer groups and workshops on a variety of issues related to recovery (e.g., relapse prevention, women's issues, dual diagnosis, physical or sexual trauma, etc.) in addition to offering AA meetings.

One important difference between residential social model programs and AA is staffing. Although typically all staff members in social model programs are in recovery from alcohol or drug problems, they are nonetheless paid employees. In contrast, AA subsides completely on the volunteer efforts of its member. Borkman et al. (1998) pointed out that the requisite skill sets needed

to work as a staff member in a residential social model recovery program were different than involvement in AA activities. In addition to sharing experiential knowledge about recovery from alcoholism, staff members in social model recovery programs needed to have skills related to conducting groups and workshops. Recovering staff were also expected to be knowledgeable about how to advocate for residents and be familiar with community resources they might need (medical care, mental health treatment, vocational training, etc.). Residential social model programs have no formal "treatment plan," as in a medical model program, but staff members were expected to assist residents in developing a "recovery plan" that described activities they planned to undertake as part of their recovery.

Perhaps the most significant difference between residential social model recovery programs and AA has to do with financing. While AA has subsisted on contributions since its inception, residential social model programs have typically sought funding from public and private funding agencies. However, funding source requirements are often based on medical treatments and not consistent with social model recovery principles (Borkman et al., 1998). For example, funding sources frequently require that services be delivered by licensed or certified professionals. Such professionals are rare in social model programs. Funding sources usually require calculations of specific types of treatment services delivered and formal treatment plans, neither of which are characteristic of social model recovery. Core social model principles such as the "helper therapy" principle, social support for sobriety, experiential learning, and democratic process are not considered in the development of funding standards.

The expansion of managed care during the 1980s and 1990s did much to decrease the prevalence of social model recovery programs. Kaskutas et al. (1999) noted that managed care standards for funding included treatment and organizational characteristics that were not consistent with social model programs. Using a scale that assesses the extent to which programs use social model recovery principles (the Social Model Philosophy Scale [SMPS]), Kaskutas et al. (1999) reported a substantial decline in the number of programs that can accurately be described as social model. In addition to providing an overall score indicating the level of social model philosophy used, the instrument has subscale measures that assess the program's physical environment, staff roles, the authority base, the program's view of alcohol problems, governance of the facility, and level of orientation to the community. The study by Kaskutas et al. (1999) surveyed 311 programs in California using the SMPS and found that 60% (N=187) considered themselves social model programs. However, only 30% of these programs met the criteria on the SMPS that would characterized them as "true" social model programs. In a comparison of 14 social model programs between 1995 and 1998 the same research team found a significant reduction in the use of social model philosophy. A major reason for these changes was attributed to modifications that programs were making in response to mandates from funding sources, especially managed care models of financing. Finally, two randomized trials compared 6- and 12-month differences in alcohol and drug use and severity measures for clients seeking treatment in medical model versus social model programs. In general, substance use outcomes were similar for clients in the two treatment modalities in both studies (Kaskutas, Witbrodt, & French, 2004; Witbrodt et al., 2007), suggesting that clients do as well as when treated in non-medically oriented, social model programs.

Social model programs declined in number in spite of encouraging outcome findings in several studies and especially encouraging findings on cost. For example, Borkman et al. (1998) reviewed outcome studies on social model programs and noted that residents in these programs show significant improvement between program intake and 18-month follow-up (San Diego County Department of Health Services, 1983) and treatment completion and 15-month follow-up (Gerstein et al., 1994). Relative to other types of residential treatment, costs were significantly lower. In a more recent study, Kaskutas, Ammon and Weisner (2003–2004) conducted a naturalistic comparison of outcomes (N=722) between the social model and a variety of clinical and medical programs. At 1-year follow-up social model residents were more involved in AA activities than clients in other programs and they were less likely to report problems with alcohol or drugs. Among individuals across both types of programs, AA involvement and social support for sobriety predicted an absence of alcohol problems. Thus, individuals involved in AA tended to be either abstinent or drinking at levels that did not result in problems.

It is ironic that managed care emphasized cost reduction and documented outcomes, yet implemented funding standards that depleted a modality that appeared to have performed well on both counts. However, the benefits of the social model approach were noted by many alcohol treatment providers and some elements of social model recovery have been integrated into broad-based or hybrid treatment programs (e.g., encouraging involvement in twelve-step groups, hiring staff who are in recovery, advocating abstinence, facilitating peer support, and providing services outside a formal clinical office). These characteristics of social model recovery were found to be prominent in an evaluation of a broad-based treatment program (Polcin, Prindle, & Bostrom, 2002) despite an overall low rating on the SMPS. An outcome study that used repeated measures analysis of 48 study participants at baseline, 3 months post treatment, and 6 months post treatment revealed significant improvement on measures of alcohol use, heavy alcohol use, drug use, satisfaction with family relationships, arrests, overall health status, and self-esteem. Attendance at twelve-step meetings and having a sponsor were both associated with better alcohol and drug use outcomes.

4. Sober Living Houses

The place where traditional, non-professional, social model recovery is most prominent currently is in SLHs. Both California Sober Living Houses and Oxford Houses owe much of their grounding to AA ideas and practices. They

also have organizational differences with social model recovery programs that have allowed them to flourish.

Unlike residential recovery programs, SLHs are financially self-sustained by resident fees and generally not financed through insurance or public funding. In addition, because they do not offer formal treatment, they are not licensed or monitored by states. Their independence from funding sources and licensing bodies allows them to pursue a model of recovery on their own terms without external mandates. For example, instead of responding to rigid time lines of funding sources, SLHs allow residents to stay as long as they wish. While most SLHs require that residents engage in some type of recovery program, the recovery activities are generally developed by the residents and formal case management files are not kept. Because lengths of stay can be longer, most SLHs have some mechanism for substantive input into house management and operations. Involvement in management of the facility is especially important for residents who have been in the program for substantial periods of time and understand the program philosophy. Among other things, it is a way for them to "give back" to the community of residents.

Although the effects of AA on operations within SLHs are evident, policies about attendance at Alcoholics Anonymous meetings vary. Oxford Houses do not make involvement in AA or NA mandatory, although they do require some type of recovery plan. California SLHs vary, with some requiring attendance at meetings and others not having such a requirement. Either way, studies on twelve-step attendance in SLHs have shown high levels of twelve-step involvement. Nealon-Woods, Ferrari, and Jason (1995) found that 76% of a sample of 134 male residents in Oxford Houses attended meetings at least weekly. Polcin and Henderson (2008) reported on 16 California SLHs (*N*=300) that required attendance at five twelve-step meetings per week.

The discussion below provides a brief history of California and Oxford SLHs, along with a description of their structure, operations, and recent research documenting outcomes. It is to be noted that Oxford Houses are a more recent development and their residences are more homogenous. California SLHs vary more in terms of their structure and how they are managed.

4.1. History of California Sober Living Houses

The forerunners of contemporary SLHs in California were organizations in the 1800s that simply rented out rooms to individuals who were attempting to establish sobriety (Wittman, Biderman & Hughes, 1993). In a review of the history of SLHs Wittman et al. (1993) pointed out that Temperance Movement advocates in the 1830s influenced the development of different types of sober lodgings: rooming houses, single room occupancy hotels, religious missions, and service organizations such as the Salvation Army. Most of these residences were run privately by landlords with personal or religious convictions about supporting sobriety. Unlike many contemporary SLHs, these early sober houses did not practice principles of social model recovery, such as democratic participation, shared leadership, and experiential learning about how to develop a

sober lifestyle. Instead, these early facilities were largely managed by the land-lords or owners who developed and enforced house rules.

Another significant development in the history of SLHs occurred in the city of Los Angeles (Wittman et al., 1993). In the late 1940s the end of World War II created an influx of returning veterans, many of whom retuned to large urban areas such as Los Angeles. Thus, the population of Los Angeles expanded considerably and along with it the proliferation of alcohol problems. To address the increasing prevalence of alcoholism some individuals in recovery through AA opened "twelfth step" houses. These were clean and sober residences managed by recovering AA members. By the 1960s Los Angeles had several dozen "twelfth step" houses and they had begun to expand to other cities as well (Wittman, 1993). A key difference from the earlier types of housing was the emphasis on Alcoholics Anonymous recovery principles. Residents were encouraged or required to attend twelve-step recovery meetings and the house managers often were a type of role model for recovery.

Although twelfth step houses emphasized recovery through Alcoholics Anonymous, most of these houses did not emphasize an egalitarian, peer-oriented system of managing the houses. Instead, the houses operated in a more hierarchical manner, with the house manager or landlord making most house decisions and enforcing the rules. Thus, opportunities for taking on responsibility and experiential learning were limited.

SLHs continued to increase in popularity in the 1970s when affordable housing began to disappear in Los Angeles and other metropolitan areas and homelessness increased (Wittman et al., 1993). However, influenced by Alcoholics Anonymous, a new model of operating houses was emerging. Rather than a "strong manager" model, the new social model approach emphasized shared, democratic governance and rotating leadership on a residents' council (Borkman, 1983, 1998a). The social model approach to recovery emphasized recovery in Alcoholics Anonymous, and most residents were involved in a twelve-step recovery program. However, in keeping with the philosophy of Alcoholics Anonymous, attendance at Alcoholics Anonymous meetings was usually voluntary. Residents were challenged to take responsibility for their recovery as well as governance of the facility.

4.2. Contemporary California Sober Living Houses

The California model of SLHs continue to be the most prevalent in California but can now be found in many other states throughout the United States (K. Schonlau, Sober Living Network, personal communication, August 15, 2005). Because they are not treatment providers and therefore not licensed or required to report to any agency or local government, it is difficult to ascertain their exact number (Polcin, 2001). However, in California, Sober Living House Associations (SLHAs) such as the Sober Living Network (SLN) and California Association for Addiction and Recovery Resources (CAARR) report increasing membership. Ken Schonlau of SLN reports that over the past 5 years

their membership has increased from 136 to 260 houses (K. Schonlau, Sober Living Network, personal communication, July 9, 2007). Susan Blacksher of CAARR estimates their membership has doubled over the same time period (S. Blacksher, personal communication, July 11, 2007). They currently have 64 organizations that provide sober living house services to a variety of individuals. Some of the CAARR houses have affiliations with formal treatment centers (e.g., provide housing after an individual completes residential treatment) while others do not. SLHAs such as CAARR and SLN provide support, training, advocacy, referrals, and health and safety standards to SLHs that are members. They also have standards that promote a social model view of recovery.

A major reason for the expansion of SLHs in California and elsewhere has been the increasing difficulty in getting residential social model recovery programs funded. In response, pioneers of California social model programs such as Ken Schonlau, Martin Dodd, and others focused on expanding SLHs because they would not be vulnerable to external funding mandates (i.e., they were self-supporting whereas residential social model recovery programs were not). In addition, they could remain loyal to social model recovery principles that were threatened by the professionalization and medicalization of treatment (Borkman, Kaskutas, & Owens, 2007; Shaw & Borkman, 1990). To ensure health and safety standards of SLHs a number of recovering AA members and leaders of social model programs got together to coordinate an effort to identify and certify high-quality SLHs in order to distinguish them from weak houses with bad reputations. This effort was incorporated in 1995 as the Sober Living Network to be an umbrella organization for coalitions of high-quality SLHs (Borkman, April 30, 2007).

Unlike Oxford Houses, which are described below, California SLHs vary a great deal. Kaskutas (1999, April) noted that some are small apartments or houses, while others are large, comprising entire apartment complexes, single room occupancy hotels, or multiple smaller houses. Historically, SLHs tended to emphasize voluntary admissions. However, in recent years, residence in a sober living facility has become part of some criminal justice offenders' release plans (Polcin, 2006). Although SLHs continue to emphasize a peer-oriented model of recovery and do not offer treatment services as part of the residence, some have affiliations with outpatient treatment programs or serve as aftercare living sites for individuals completing residential treatment.

California model SLHs can be designed as for-profit or non-profit organizations. One of the criticisms of some for-profit houses is that they can be designed and operated more with an eye toward maximizing the owner's financial return rather than with fidelity to the principles of social model recovery. These types of SLHs tend to have a "manager-driven" style of running the house, where the owner or manager decides the rules and determines who gets admitted. The director of the SLN, Schonlau (2004, April), differentiates SLHs that are "supervised homes" from those that are "democratic homes." the former being more manager driven and the latter more consistent with the

principles of social model recovery. In recent years, SLHAs such as CAARR and SLN have established guidelines that require or strongly encouraged houses to implement a democratic style of management. For a more detailed description of California Sober Living Houses see the recent paper by Polcin and Henderson (2008).

4.3. Oxford Houses

While published histories describing the origins of Oxford House often leave out the influence of AA (e.g., O'Neill, 1990), Paul Molloy, co-founder and currently CEO of Oxford House, Inc., described such an influence in a recent interview (P. Malloy, personal communication, Oxford House, Inc. offices, Silver Spring, MD, 2007). According to him, the 13 co-founders who were in a halfway house in Silver Spring, MD, regularly attended AA meetings when they were told the county was closing their facility. Molloy and other co-founders complained about the threat of losing their sober housing to their seasoned AA sponsors and friends. Their elders responded, "Get off the pity pot! What can you do about it?" They discussed the huge price tag of operating a halfway house with professional staff to monitor them. They decided they did not need any staff but could manage on their own. Each resident would pay their share of rent and utilities with extra for staples. Another long-term AA member from the community loaned them the *750 security deposit. Molloy asked an old friend in Vermont whose sponsor was Bill W., the co-founder of AA, to help them apply AA principles in developing the house; he took the bus from Vermont, visiting them for several days to talk about how AA ideas and practices could be translated to the sober rental housing. Within 6 months their cash reserve had accumulated enough that when other alcoholics/addicts wanted a place to live, they considered "Should we buy a new TV or other material goods or help other alcoholics by opening a new house?" The AA's twelfth step of helping other suffering alcoholics/addicts was applied and a second house was opened. Three or four of the original residents including Molloy and O'Neill moved into the second house to provide experience and act as role models for how to run such houses O'Neill (1990). The practice of seasoned Oxford House members moving to a new house became an important organizational principle for how to promulgate the Oxford House culture as they opened many new houses.

While an exhaustive analysis of the influence AA initially had and subsequently NA and other twelve-step fellowships continue to have on Oxford House is beyond the scope of this paper, the organization and structure of Oxford House is significantly patterned on the AA traditions which are the principles of the organization. Similar to local AA groups which are autonomous (Traditions 4 and 6), self-run (Tradition 8), financially self-supporting by their members (Tradition 7) with democratic and rotating leadership (Traditions 2 and 8) (12 & 12, 1952), Oxford Houses have nine traditions adapted as appropriate from AA's twelve traditions. The Oxford House traditions stipulate in their *Oxford House Inc.* (2006) that an individual Oxford House

is to be autonomous (OH Tradition 5), run democratically by residents who elect new officers every 6 months (OH Tradition 2), without professional staff (OH Tradition 7), and to be financially supported by residents' rent (with the exception of an initial loan which has to be repaid) (OH Tradition 6). Interestingly, the OH Tradition 4 maintains that OH is not affiliated with AA organizationally or financially, "but Oxford House members realize that only active participation in Alcoholics Anonymous and/or Narcotics Anonymous offers assurance of continued sobriety" (OH Manual, 2006, p. 20). Finally, like AA, OH has but a single purpose: its Tradition 1 reads "Oxford House has as its primary goal the provision of housing and rehabilitative support for the alcoholic and drug addict who wants to stop drinking or using drugs and stay stopped" (OH Manual, 2006, p. 17).

Because of early popularity and success, Oxford Houses rapidly expanded. In addition, the federal government passed an anti-drug bill (Public Law 100–690) which provided money to states to loan to individuals wishing to set up sober living residences. This law made expansion more viable. Oxford House, Inc. is currently a large international organization with over 1,200 houses located throughout the United States, Canada, and Australia. Although Oxford Houses have proliferated in the United States and in other countries as well, there is only one in California. The California SLH model of SLHs had taken root in the state earlier and continues to be the predominant model in the state (Polcin, 2001).

Relative to California SLHs, Oxford Houses are far more homogenous. They are designed and structured in a way that ensures compliance with social model recovery principles. Oxford Houses have mandatory requirements for houses to use a democratic organizational structure, share and rotate leadership within the houses, rely on peer support for recovery, and finance housing costs using resident funds. In addition, member houses receive training workshops on how to facilitate a sense of community, mobilize commitment to the house, manage daily operations, and practice recovery skills from peers. A final difference with SLHs is that the Oxford model has regulations that require 6-10 members in each house. Although attendance at twelve-step meetings is not required, a majority are involved in twelve-step programs (Nealon-Woods et al., 1995). Similar to most SLHs, residents can stay as long as they like and they are free to decide whether to pursue professional treatment for substance abuse and other problems. There are no minimum requirements for sobriety before entering, although most enter after completing detoxification or residential treatment programs (Jason, Olson, et al., 2006). For a complete description of Oxford House philosophy, structure, operations, and resident characteristics see the recent book by Jason, Ferrari, Davis, and Olson (2006).

4.4. Outcome Studies on Sober Living Houses

Despite the expansion of both models of SLHs there has been limited systematic research. About 10 years ago Dr Leonard Jason and colleagues at

DePaul University began a program of research on Oxford Houses culminating in a recent book (i.e., Jason, Ferrari, et al., 2006) and publication of two longitudinal outcome studies (Jason, Davis, Ferrari, & Anderson, 2007; Jason, Olson et al., 2006). California model SLHs have been even less extensively studied. However, in 2003 Polcin and colleagues (Polcin et al., 2004) began a 5-year study of 20 California SLHs. While the investigation is ongoing, preliminary results on 6-month outcomes have been reported (Polcin, 2006, October). Reviewed below are the major findings to date from both of these investigations, beginning with the studies on Oxford Houses.

4.4.1. Outcome Research on Oxford Houses

Although there has been a plethora of publications on Oxford Houses by Jason and colleagues, two papers present their major longitudinal outcome findings (i.e., Jason et al., 2007; Jason, Olson, et al., 2006). In the study by Jason, Olson et al. (2006), 150 individuals completing residential treatment programs were randomly assigned to aftercare as usual or residency in an Oxford House. At 24-month follow-up individuals assigned to the Oxford House condition had significantly better outcome on measures of substance use, income, and incarceration. Among those assigned to aftercare as usual, 64.8% reported some alcohol or drug use over the previous 6 months versus 31.3% for the individuals assigned to the Oxford House condition. Monthly income for residents in the Oxford House condition was *989 versus *440 in the usual aftercare condition. Among individuals assigned to the Oxford House condition 3% reported that they had been incarcerated. Among individuals in the usual aftercare group the incarceration rate was three times as high (9%). Thus, residence in Oxford Houses appears to benefit the individuals who reside there and they have economic benefits for the society as well.

One of the limitations of the study by Jason, Olson, et al. (2006) was the limited geographical area from which the sample was drawn (i.e., the state of Illinois). A second limitation was that the sample only included individuals completing residential treatment. The second study of Oxford Houses (i.e., Jason et al., 2007) addressed both of these limitations. The study consisted of a US national sample of Oxford House residents (N=897), a majority of whom had a history of receiving some type of substance abuse treatment. However, unlike the first study, completion of a residential treatment program was not required for inclusion. Study participants were recruited into the study and interviewed at three subsequent 4-month intervals. During the final interview, only 13.5% of the respondents reported using alcohol or drugs during the previous 90 days and social support for sobriety was associated with abstinence. The average number of days participants used substances was low—3.7 days for drugs and 5.6 for alcohol. This suggests that many individuals either relapsed recently or were able to readily re-establish their recovery after their relapses. When study participants reported having social networks that supported abstinence and discouraged substance use, they were more likely to be abstinent. The

proportion of residents reporting employment throughout the study was high, ranging from 79% to 86%. The authors identify several limitations, including self-selection bias and a modest follow-up rate of 68% for the final interview.

4.4.2. An Evaluation of California Sober Living Houses

"An Evaluation of Sober Living Houses" is a study funded by the National Institute on Alcohol Abuse and Alcoholism that is designed to track longitudinal outcomes of 300 individuals residing in 20 different SLHs in northern California over an 18-month period (Polcin et al., 2004). The houses are operated by two different organizations. One operates four houses that are associated with an outpatient treatment program. Residents who live in the houses are required to attend the outpatient treatment program and can continue their residence after completing treatment. The other organization operates 16 more typical SLHs in that they are not affiliated with any formal treatment. These houses have characteristics more commonly associated with social model recovery (e.g., contains a resident's council and has no requirement for formal treatment). Therefore, the findings reported here will be limited to these 16 houses.

While data collection for the study is ongoing, preliminary 6-month outcomes on 130 residents (24% female, 28% non-white, and mean age of 36.5) have been encouraging (Polcin, 2006, October). The research team has been able to locate and interview about 77% of the study participants at the 6-month time point. At 6 months 44% were still residing in the SLHs. Approximately 40% indicated no use of alcohol or drugs during the 6-month assessment period. An additional 24% indicated they had been abstinent 5 of the last 6 months. A comparison of residents' alcohol and drug use during the 6 months before entering the SLHs with the 6 months after revealed a significant decrease in the number of months they use substances. Before entering the houses residents use 3 of the last 6 months and that declined to 1.5 during the subsequent 6 months. Those who did relapse had less severe patterns of use. Among those who relapsed, maximum monthly use before entering the SLHs was about 23 days per month and after it declined to 16 days. Other areas of improvement were noted as well. They included significant improvement on measures of employment, arrests, and psychiatric symptoms. As expected, one of the factors that correlated with improved outcome was higher involvement in twelve-step recovery groups (Polcin, 2006, October).

An interesting finding was that a quarter of the residents were referred from the criminal justice system. Historically, social model and AA recovery have emphasized that recovery should be voluntary rather than coerced. However, outcomes at 6 months indicated that residents referred from the criminal justice system had improvements that were similar to voluntary residents (Polcin, 2006). The author pointed out that SLHs might be useful in playing a more prominent role in helping to reduce very serious overcrowding problems in state prisons, especially in California, where recidivism rates result in two-thirds of state prison parolees being reincarcerated within 3 years.

5. Conclusion

AA's influence on recovery from alcoholism has gone beyond impacting individuals who attend AA meetings. It has also evolved into a social movement of recovering persons who developed a "social model" approach to recovery. Social model recovery programs constitute a variety of communitybased recovery programs, including neighborhood recovery centers, residential recovery programs, and SLHs. Developing a program of recovery through involvement of AA is central in each of these modalities. However, AA has also influenced the organization, operations, and recovery philosophy of these programs. This chapter has described how social model programs integrated key AA concepts into their recovery philosophy and organizational operations. AA characteristics that influence social model recovery programs include (1) empowerment of members in decision making and management; (2) experiential learning; (3) developing a peer community offering social support for sobriety; (4) latitude in residents developing their own recovery activities; (5) an emphasis on the twelfth step or "helper therapy" principle, where residents benefit when they help other residents or contribute to the program in some manner; and (6) residents taking responsibility for their recovery.

While social model residential recovery centers have declined in recent years due to funding and licensing requirements, some broad-based or hybrid models have integrated some characteristics of the social model approach (e.g., an emphasis on involvement in AA, hiring staff in recovery, and a goal of abstinence) but not others (e.g., a resident's council). While additional studies on these types of programs are needed, one recent study (i.e., Polcin et al., 2002) indicated that some social model recovery principles can be integrated into broad-based programs with positive outcomes. However, California SLHs and Oxford Houses currently offer the best examples of unencumbered social model recovery and both appear to be expanding in numbers. This chapter has reviewed recent outcome research that documents resident improvements in a variety of areas in both types of residences.

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Spiritually Oriented Recovery

Sarah E. Zemore, Section Editor

An Overview of Spirituality in AA (and Recovery)

Sarah E. Zemore

1. Spirituality and AA

AA has attracted harsh criticism and strong praise in equal measure. Criticisms of AA have had much to do with AA's spiritual content, and they hold lineage in a long history of academic discomfort with religion. Albert Ellis and Sigmund Freud were early critics of religion, proposing that a religious orientation indicates a neurotic and childish response to the world. A more recent critique has come from the evolutionary biologist Richard Dawkins in his book *The God Delusion* (2006), which argues that religions foment war; promote bigotry; terrorize children; lead to sexual repression and perversions; promote falsehoods about the nature of reality; and encourage irrationality and anti-intellectuality. Dawkins' critique comes amidst a spate of similar attacks; for example, see *God Is Not Great* (2007) by Christopher Hitchens; *The End of Faith* (2004) and *Letter to a Christian Nation* (2006) by Sam Harris; *Breaking the Spell* by Daniel Dennett (2007); and *Atheist Universe* by David Mills (2006).

It is curious that this outpouring of anti-religious sentiment comes at a time when the public health field is accumulating a substantial body of evidence relating higher spirituality to better mental health (Pearce et al., this volume). Addictions researchers have also generated substantial evidence for the efficacy of AA (Tonigan et al., this volume), considered by some a religious and by others a spiritual program. Still, critics of religion tend to be unwilling to acknowledge the evidence for psychological and health benefits of religion/spirituality, just as advocates of AA and other spiritually oriented interventions can be

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reluctant to acknowledge any danger in blending secular and religious spheres. This is unfortunate, as it seems important to achieve a balanced view of the curative potential and risks that spiritual interventions offer.

The current section discusses AA's approach to spirituality and reviews evidence surrounding a role for spirituality in mental health, AA's efficacy, and recovery from the addictions. This section also considers the impact of the spiritually inspired, but secular, mindfulness meditation, along with evidence that helping others may promote recovery (helping being a secular behavior that may likewise be inspired or instigated by religions). Chapters on meditation and helping are especially appropriate since these practices are encouraged in AA. This section is highly relevant to addictions researchers. It is also relevant to the wider cultural debate on the societal impact of religion. I use this introduction to summarize the chapters and to explore some possible pitfalls of spiritual interventions that they do not address.

2. The Chapters, in Brief

The chapters in this part of the volume express an exceptional diversity of perspectives on what spirituality is and how it might function in recovery and AA. To begin, a chapter by Robinson and Johnson provides an overview of the complexities involved in defining and measuring spirituality. These complexities arise, as is described, from a certain lack of consensus on what the core dimensions of spirituality/religiosity are and how they relate to each other. The authors note that 20 or more conceptually distinct factors have been proposed. Part of this debate surrounds whether and how spirituality should be distinguished from religiosity, some investigators preferring to define spirituality (conceived of as a private, internal experience) against religion (conceived of as a public, institutionalized experience) and others framing involvement in a religious tradition as one expression of spirituality (meaning the search for the sacred or transcendent). Subsequently, the chapter discusses specific measures used in alcohol research. The chapter does not argue for any single definition of these constructs, but suggests that researchers think carefully about their definitions in relation to their study hypotheses and results, considering (and making explicit) assumptions inherent in the measures.

In the second chapter of this section, Pearce, Rivinoja, and Koenig provide a comprehensive treatment of the relationships between spirituality and mental health outcomes. Conclusions point to some positive effects for religious involvement on depression, anxiety, suicidal thoughts and attempts, and positive emotions. However, the picture is not entirely rosy, as the reviewed evidence shows negative effects for some forms of religiosity. This chapter also examines potential causal pathways for spirituality's influence on mental health and argues that the spiritual components of AA may operate to affect recovery outcomes in analogous ways.

Connors, Walitzer, and Tonigan then follow with a chapter presenting a more detailed discussion of spirituality as it is understood and practiced in AA. Additional sections of the chapter review the evidence for associations between spiritual change and recovery from alcoholism, which is meager in quantity but promising. A highlight is the chapter's description of AA's idiosyncratic conceptualization of alcoholism as a "spiritual disease," a framing that emphasizes AA's appreciation for biological, psychological, and spiritual forces in the onset and maintenance of drinking. There is admittedly a tension in the AA literature around these superficially oppositional frameworks and specifically around the disease model's troubling implications for notions of control and responsibility. AA assumes some biological causation in the onset of alcoholism (see "The Doctor's Opinion," Alcoholics Anonymous, 2001), but this raises a problem: If alcoholics have a disease that makes them powerless over alcohol, how can they learn to control their drinking? AA's ingenious solution is to accept that individuals cannot control their drinking and that abstinence is thus the only option. Moreover, AA accepts that alcoholics cannot maintain even abstinence on their own; rather, they must solicit the help of a power greater than themselves, such as God or AA, to avoid drinking again. This solution retains compelling aspects of the disease model while avoiding the negative implications of such a mechanistic approach; that is, it retains the model's destigmatizing implications while jettisoning the implication that biology makes alcoholics helpless. Hence, AA members may find themselves able to support both a positive, nonblaming self-view and hope. It will be interesting to see how issues around control and hope are handled outside of AA as the academic mainstream moves to embrace a largely biological, "disease model" view of the addictions.

Chapters headed by Hsu and Zemore then expand the scope of the section to explore relationships between AA, mindfulness meditation, peer helping, and recovery. These chapters recognize that spiritual development in AA is understood to be an ongoing practice rather than a fixed belief system or end state; spiritual development must be achieved and maintained by *doing things* for oneself and others. The chapters also recognize that spiritual engagement in AA can take many forms. Despite AA's emphasis on developing a relationship with God or another "higher power," many AA members aim at forms of spirituality that do not entail embracing theism. Thus, meditation practices and helping others may represent the heart of spiritual growth for some members, and not simply a pathway to or product of that growth.¹

Hsu, Grow, and Marlatt introduce the practice of mindfulness meditation and describe evidence for its efficacy in treating addictions. Hsu et al. also compare AA to both pure Buddhist meditation and secular mindfulness meditation. Importantly, the chapter argues that attachment to self (or

Readers interested in the vast heterogeneity in interpretations of AA's literature and practice might refer to AA's publication *The Grapevine* (http://www.aagrapevine.org, 2007), which demonstrates a limitless variety of approaches to spirituality and the Twelve Steps.

"self-centeredness") occupies a central position in both AA's approach and pure Buddhism. Both approaches recognize self-seeking as a source of suffering and addiction, although they address this problem differently—Buddhism encouraging a more or less intellectual approach and AA emphasizing reparations and actively helping others. Likewise, despite some differences, the chapter finds convergences between twelve-step approaches and secular mindfulness meditation, including the encouragement of an attitude of acceptance (exemplified in AA's serenity prayer), focus on the present, and awareness or monitoring of negative thoughts and behavior without extreme judgment. The chapter also notes that meditation is explicitly encouraged in AA (see Step 11; further, Connors' chapter confirms that almost half of AA members seem to practice meditation). Hsu's chapter emphasizes that AA and mindfulness meditation can be compatible and even synergistic, perhaps again partly because of the enormous latitude in possible interpretations of both.

Zemore and Pagano then discuss the role of peer helping in recovery. This chapter examines whether the evidence supports AA's claims that helping others benefits helpers. Recall that, in AA, helping other alcoholics is considered an antidote to unhealthy self-focus and a good reminder of the devastating effects that alcohol can have. The chapter tentatively concludes in favor of helper therapy principles, based on research exploring effects for altruism in the general population, recovery in diverse mutual help groups, and recovery from chemical dependency within and outside of AA. That is, helping can contribute to recovery from alcoholism and may be one of the ways that AA achieves its positive outcomes. However, the chapter concludes that helping not only does not always help helpers, but can sometimes be harmful—as is true of spiritual involvement. Research on this topic is also quite scant, so more studies are needed.

Last, Galanter closes with a chapter providing a broader conceptualization of spirituality. For example, the chapter discusses spirituality from a utilitarian perspective, arguing that spirituality may (a) help people to reduce uncertainty and (b) increase the survival value of the organism. Thus, the prominence of spirituality may be a result of its contributions to (i) psychological needs and (ii) evolutionary fitness. Additional space is devoted to the historic and ongoing controversy in psychiatry and psychology over whether and how to study spirituality. The final paragraphs illustrate that AA is actually only one of

A similar argument has been made by Karen Armstrong (2005), who suggests that mythology satisfies universal human needs for transcendence, meaning, and coping with problematic aspects of existence, such as the fear of death. Strong forms of this argument are difficult to reconcile with the substantial cultural and historical variation in religious and spiritual behavior: If religion is evolutionarily adaptive, why are only 5% of Swedes religious, as Galanter points out? However, a good case can be made for a nature–nurture interaction; that is, individuals are influenced by their genetics but also do what works in a given cultural context. Along these lines, Armstrong frames the historical decline of mythology in much of the Western world as a consequence of changing life conditions overriding natural proclivities toward mythologizing.

several useful treatments inspired by or embodying spiritual traditions: Other examples include meaning-focused therapy and mindfulness meditation. Favorable results for integrating twelve-step approaches into formal treatment (as in the Minnesota model approach) are presented, and seem to argue for integrating twelve-step groups into addictions treatment. An emphasis is the need for empirically supported treatments; Galanter suggests that spiritually based interventions should be subjected to the same kind of scientific scrutiny as are other interventions.

3. Common Themes

A crucial theme in these chapters surrounds the importance—and difficulty—of nailing down just what is meant by "spirituality." Robinson and Johnson offer a taste of the fundamental discord that exists even around basic definitional issues (such as the distinction between religiosity and spirituality) and the diversity of approaches to measuring the many facets of spirituality. Chapters by Connors, Pearce, and Galanter echo such difficulties, adopting working definitions characterized by a certain vague all-inclusiveness. Cook's (2004) definition, cited by Connors et al., provides a good example. Cook proposes that spirituality is a universal experience that can arise at a multitude of levels (individual, group, and culture) and in relation to a multitude of objects (self, others, and that which "transcends" self and other). This definition, which (as is common) includes religious experience as a form of spirituality, is so far so broad as to be almost meaningless. Cook then adds that spirituality "is experienced as being of fundamental or ultimate importance and is thus concerned with matters of meaning and purpose in life, truth and values" (p. 549). This seems like an improvement, but even so Cook's spirituality could include many experiences engendered by exposure to philosophy, science, and art. Yet, greater precision could mean excluding certain religious traditions or forms of spiritual experience. To his credit, Cook explicitly recognizes limitations in his definition, suggesting, "This proposed definition is offered in recognition of its provisionality, vagueness, and inherent limitations.... It is hoped that the relationships fostered by academic debate will one day be creative of a more complete and satisfactory definition" (p. 548).

Clearly, it would be a great challenge to develop a measure of spirituality encompassing all forms of spiritual experience without conflating that experience with obviously secular experiences or mental health itself. Indeed, rather than attempt this, many researchers have developed and used measures addressing one or a small set of constructs that are theoretically related to spirituality, including such traditionally religious constructs as religious self-identification, church attendance, and prayer, but also more subjective and tenuously related constructs such as beliefs and values, purpose in life, and forgiveness. Empirically, some of these measures are correlated with each other and some are not (or at least, not very well).

The question is, is thinking about all of these constructs as expressions of spirituality useful? Is the category of spirituality useful? This is, at least in part, an empirical question and relates to the question of whether diverse forms of what we think of as spirituality function equivalently. Importantly, the data suggest that they do not—or not always. Chapters in this section have emphasized that different, and even oppositional, effects are found as a function of the choice of spirituality measures. Pearce and colleagues make this point explicitly in relation to the work on depression: "It is important to note that not all studies have reported a protective role for religion in depression, however. The relationship is dependent upon what aspect of religion/spirituality one measures.... For example, some types of interpersonal religious experiences have been associated with greater depressive symptoms among adolescents" (p. X). They also describe associations between increased guilt and dogmatism and "certain types" of religious beliefs and between lower well-being and both negative religious coping and higher frequency of prayer. This point is also made implicitly in the Connors et al. chapter, which describes mixed results from two key studies on spirituality and recovery. Specifically, better substance use outcomes at follow-up are described as being associated with (1) only 2 of 8 spirituality measures (i.e., daily spiritual experiences and purpose in life) in Robinson et al. (2007, in Connors et al., this section), and (2) only 5 of 13 spirituality measures (i.e., forgiveness of others, purpose in life, serenity, existential well-being, and religious practices) in Connors et al. (2003, in Connors et al., this section). Notice that the large majority of these measures fail to map onto traditional forms of religious involvement; rather, they seem to reflect a combination of (potentially secular) sense of purpose and general healthy functioning. Robinson and Johnson likewise describe results from two studies factor-analyzing spirituality scales and finding quite different results for the different factors (Kendler et al., 2003, and Johnson et al., in press, in Robinson and Johnson, this section). Robinson and Johnson also describe disparate results for religious support and religious coping in relation to alcohol use and well-being and for meaning and meaning seeking in relation to recovery from alcoholism. Galanter makes the point that despite evidence associating spirituality with health benefits, spiritual indoctrination sometimes has negative effects. He also discusses Kendler et al.'s (2003, in Galanter, this section) finding that religious devotion—but not institutional religious conservatism—buffers the impact of stressful life events.4

Findings for prayer, however, should be balanced by evidence that church attendance is actually one of the stronger and more consistent predictors of lower mortality and other positive mental and physical health outcomes (see Gartner, Larson, & Allen, 1991; Hummer, Ellison, Rogers, Moulton, & Romero, 2004; Powell, Shahabi, & Thoresen, 2003). Thus, it seems likely that prayer per se (rather than religious behavior generally), if anything, is linked to worse outcomes.

Interestingly, Galanter (this section) further argues that the nature of spirituality is culturebound. One would imagine that spirituality's effects are similarly culture- and contextdependent.

It is not news that "spirituality" can have very different effects depending on what exactly is measured. Gorsuch (1995) distinguished between a nurturing, supportive religiousness (which is protective against substance abuse) and a restrictive, negativistic, and ritualistic religiousness (which is not protective). Similar distinctions have been made between "intrinsic" (functionally positive) and "extrinsic" (functionally negative) religiosity (Allport, 1979; Donahue, 1985; see also Robinson and Johnson, this section.) The work described above suggests further functional distinctions (e.g., between types of religious behaviors). Although the tendency remains for spirituality researchers to speak in generalities, this section's evidence is, I think, a call for specificity in measurement and interpretation. Mixed effects such as we see here suggest that investigators target specific aspects of spirituality rather than spirituality generally; clearly articulate what they have measured; and approach generalizations with caution. Readers should likewise attend to measurement issues in interpreting and summarizing prior work. Investigators should be particularly clear and particularly careful to avoid over-generalizing when investigating aspects of spirituality that are only distally related to lay conceptions of spirituality/religiosity, such as purpose in life, since such findings could be easily misinterpreted and misapplied. So, it is better to describe the effects of forgiving others (if that is what is measured) on recovery than the effects of spirituality on recovery (which could imply associations between, for example, religious involvement and recovery). Absence of such clarity could lead to confusion and seriously stalled progress. In short, for many cases the category of spirituality may not be functional. Particular dimensions of spirituality might be better targets for research attention.

Related to this first theme is a second, which, briefly, concerns an interest in the mechanisms of action behind spirituality's effects. Several chapters offer proposals on how spirituality might work. Pearce and colleagues devote substantial attention to this issue, arguing that spiritual involvement may affect both general mental health and recovery outcomes by influencing social support processes; meaning making; the acceptance of uncontrollable life events; hopefulness; and altruistic behavior. The issue is addressed more obliquely in the chapter by Connors, which does not discuss mechanisms specifically but does describe spiritual experiences in AA that are presumably linked to recovery, including humility, serenity, gratitude, hope, and forgiveness. Connors and colleagues also highlight potential roles for helping others in AA and for the development of mutually beneficial social relationships. Galanter suggests that spirituality relieves dysphoria by helping people attach meaning to experiences they cannot fully understand (and particularly, negative experiences) and by affecting people's expectations that they will be helped (analogous to the placebo effect). Galanter further suggests that psychotherapy works via these same mechanisms, also capitalizing on the development of a supportive relationship. Hsu and colleagues argue that AA and mindfulness meditation share some mechanisms of action, including self-efficacy, thought suppression, and social support. Finally, Zemore and Pagano encourage causal modeling to determine potential roles for variables including social status, self-esteem, social bonding, and sense of purpose in helping's effects on outcomes. Despite some differences, these chapters collectively stress individual's core needs for mutually beneficial social relationships ("mattering" to others), a positive self-view, meaning, and hope. (Needs for a positive self-view and hope were discussed already in connection with AA's "spiritual disease" concept.) An important step for further research will be to formally test causal models relating aspects of spiritual involvement to both mediators of this kind and outcomes. Theoretical development and testing should be informed by, and inform, research addressing which aspects of spirituality are beneficial, for what outcomes, and when. Theoretical development will thus impel and respond to solutions to the measurement problems described earlier. Causal testing should also help to confirm causal (vs. spurious) associations for aspects of spiritual involvement, and perhaps most important, inform nonspiritual interventions targeting key psychosocial mediators.

4. Applications: Cautions

In closing, I address the potential for applications of the current research. Galanter points out the potential benefits of integrating spiritually grounded techniques into general and addictions-focused psychiatric practice. Indeed, evidence for the efficacy not only of AA but also of other spiritually inspired techniques (such as mindfulness meditation) in recovery suggests a value for doing so.

Many providers are a step ahead of these recommendations and have already integrated twelve-step principles and practices into both private and publicly funded treatment programs. Some programs, such as a subset of the VA system (Moos, Finney, Ouimette, & Suchinsky, 1999) and all Minnesota model (McElrath, 1997) and California social model (Borkman, Kaskutas, Room, & Barrows, 1998) programs, are inherently twelve-step oriented. These programs host AA and NA meetings on-site; take clients to off-site twelve-step meetings; and include twelve-step activities in their curricula, such as weekly groups on AA's steps. Most of such programs have homework and discussions on readings from key AA texts, including AA's basic manual, the Big Book (Alcoholics Anonymous, 2001); the Twelve by Twelve (Alcoholics Anonymous World Services, 1991), which explains AA's twelve steps and twelve traditions; and Living Sober (Alcoholics Anonymous World Services, 1975), covering practical tips for discarding drinking-related habits. At social model programs, alumni involved in AA and NA also offer to sponsor new clients (Barrows, 1998). Typically (but not always), treatment groups are led by recovering staff, many of whom are AA and/or NA members. However, integration of the twelve-step model with the treatment industry extends far beyond these specific programs: In 1997, 93% of treatment facilities in the United States reported utilizing the twelve-step approach and 83% held twelve-step meetings on-site (Roman & Blum, 1997, p. 24). It is not clear how many of these programs offer/ed secular alternatives. This is particularly significant because clients are often coerced, to a greater or lesser degree, to attend treatment: The large majority (around 70%) of treatment clients rate the courts and Employee Assistance Programs (EAPs) as significant influences on their decisions to enter treatment (Roman & Blum, 1997, p. 16).

There are several problems that seem to attach to integrating spiritually oriented interventions, such as AA, into addictions treatment. I explore some of them here. This exploration is not meant to deter programs and individuals from using AA or other spiritually based programs, since both offer substantial promise. The hope is to generate awareness and discussion around potential limitations.

- Spiritually focused interventions have the potential to alienate nonbelievers, who may consequently be deprived of treatment. It is important to recognize that addictions treatment incorporating explicitly spiritual or religious ideology may be avoided by individuals who are not spiritually inclined or who do not wish to have their spiritual beliefs questioned. We know that AA, while impressively effective for those who stay involved, has a very poor record of attracting and retaining members (Kaskutas, Turk, Bond, & Weisner, 2003; Kelly & Moos, 2003; Tonigan, Bogenschutz, & Miller, 2006) and that this problem has something to do with AA's spiritual/religious focus: Agnostics and atheists show *much* lower involvement in AA than the religious and spiritual (Kaskutas et al., 2003; Tonigan, Miller, & Schermer, 2002). We also know that addictions treatment programs in the United States show similar problems in attraction and retention (Carroll, 1997; Pekarik & Zimmer, 1992; Weisner, Greenfield, & Room, 1995). It may be that the former helps explain the latter, as we have already shown that the majority of treatment programs in the United States are closely intertwined with AA. This possibility needs to be addressed empirically. Until then, treatment providers and researchers should be aware of potential effects for the use of spiritually oriented programs on a program's attractiveness to clients. Still, it may likewise be argued that nonspiritual interventions are alienating to spiritually oriented clients. If so (and again this is an empirical question), this needs to be evaluated as an important factor in decisions surrounding program curricula.
- 2. Spiritually focused interventions may bring risks when, rather than targeting thoughts and behaviors directly related to an addiction, they aim for wide-ranging changes in core belief systems and behaviors—some of which may be harmless or even better left intact. Some spiritual interventions, including AA, attempt to change members' drinking and drug use by way of changing core elements of their belief systems and behavior

patterns. The AA member is expected to complete the Twelve Steps having had a "spiritual awakening," which is typically understood as a dramatic, even miraculous, change in attitude (that is, conception of self and reality) stemming from "completing" all Twelve Steps (acknowledging powerless, developing a relationship with a "higher power," confessing, praying or meditating regularly, and so on; see Alcoholics Anonymous, 2001, p. 25). Further, sobriety in AA is sometimes understood to be maintained only by indefinitely maintaining certain behavior patterns, including "carrying the message to other alcoholics" (that is, helping others), communicating with "God," and lifelong meeting attendance. These are significant life changes. Is this kind of dramatic reworking really necessary for sobriety? Probably not for everyone with a substance abuse problem. Yet, calling for such fundamental changes may bring costs. One cost might be a high potential for general noncompliance; if the treatment is difficult and threatens one's basic mode of living, people may be inclined to avoid it. Another cost could be the loss, with compliance, of some coping strategies, patterns, and relationships that were previously adaptive. For example, an individual who attends AA seven days a week might lose time for other activities and friends that once contributed to his/her sense of well-being. Certainly there are cases where fundamental changes are necessary to address an addiction, and certainly some fundamental changes are basically good. The point is simply that, for each individual, the *need* for intrusive interventions should be carefully evaluated, given their potential costs. Treatments should take care to respect the integrity of individuals and the successful strategies that they have developed for living. Further, specific components of an eclectic and intrusive program should, insofar as possible, be evaluated for efficacy in relation to the cessation of addictive behavior. If individual components are not evaluated in this way, there is potential for corruption (e.g., the development of "addiction" programs with a secondary aim of conversion). Of course, these concerns also apply to secular interventions that aim at changing core beliefs and behaviors, particularly when those beliefs and behaviors are not obviously or empirically linked with addictive behaviors. It should also be said that some spiritually based interventions may provide a religious or spiritual *context* for change in behavior without viewing the individual's core beliefs about the world as targets for change; those programs do not face the same risks as articulated above.

3. Coercing people to participate in religiously oriented programs violates their First Amendment rights. Use of public funds for the promotion of religion is unconstitutional, and for good reason: Individuals of all faiths and none must be equally served by public institutions, and no religious faith must be given precedence over another. Further, theism of any kind has always qualified as religion under the First Amendment; courts also consider religious any practices that most people would view as

religiously significant, such as prayer (Honeymar, 1997). By this definition, AA's emphasis on the higher power concept and on prayer makes it a religious—and not a spiritual—organization. Accordingly, at least nine state and federal courts have now heard cases on mandated AA, and the unanimous conclusion has been that coercion to attend AA and other twelve-step groups is unconstitutional because of these groups' religious nature. This means that criminal justice officers (and theoretically any agents of the government) can be sued for damages within the applicable districts. Other spiritually based interventions should, and likely will, be evaluated against the same standards. These decisions recognize that attempts to involve a person in any intervention that could be *felt to be* religiously coercive should be carefully evaluated. Earlier I suggested that AA members can approach spirituality in AA from extremely different angles and may not accept theism at all. While this is true, again, other people may feel AA to be religiously coercive, and their experiences are also valid. Still, it is helpful to remember that it is not AA—but the absence of secular alternatives to AA—that has been deemed unconstitutional: Court rulings on mandated AA have emphasized that coerced attendance is permissible as long as individuals are offered viable secular alternatives (see also Honeymar, 1997, on the constitutional imperative to offer alternatives). This is an important point. It implies that, to remain consistent with the First Amendment and the principles it represents, public programs need to incorporate alternatives to AA and twelve-step-oriented treatment, since otherwise they are effectively coercing their clients (who may not be able to attend other programs) to attend "religious" programming.

The current section suggests that spiritually focused interventions, of which AA is a good example, offer potential as effective treatments for addiction. Researchers need to think carefully about what the implementation of such interventions means, however, in the context of public treatment and in relation to treatment access and delivery; the individual's autonomy and overall welfare; the individual's constitutional rights; and societal welfare. The issues are complex, and the promises and pitfalls of any treatment will vary as a function of the specific treatment and its target population; hence, decisions regarding treatment options may be difficult.

One conclusion emerging clearly from this introduction is that public programs offering spiritual programming should offer clients viable secular alternatives as well. Offering clients secular alternatives would help minimize many of the risks I discussed above, since those clients who would not be well served by programming with explicitly spiritual/religious content could receive services appropriate to their needs and desires. Offering clients alternatives would also be a firm statement of respect for clients' First Amendment rights and general autonomy. So, any program emphasizing twelve-step principles

in its groups and encouraging twelve-step meeting attendance should offer attractive, secular alternatives to these activities, including provisions to attend secular mutual help groups such as Life Ring. Unfortunately, it is not yet clear whether AA has any parallel for efficacy among the secular mutual help groups. Whereas research indicates very positive results for individuals who become involved in AA in the context of formal treatment (see Tonigan et al., this volume), research on the efficacy of AA's secular alternatives is virtually nonexistent (cf. Brooks & Penn, 2003). Research on alternatives to AA is an important research priority.

Programs committed to spiritually oriented programs might also consider facilitating involvement in those interventions in such a way that individuals feel they are not being coerced, religiously or otherwise, to accept beliefs and practices unrelated to their addiction. A twelve-step facilitation program developed by Kaskutas and colleagues called Making AA Easy (Kaskutas & Oberste, 2002) is a useful resource here, since it emphasizes (for example) a liberal interpretation of the higher power concept, finding a meeting that fits rather than trying to adapt to the meeting, and within reason, taking what works and discarding the rest. People can be taught to carefully evaluate AA's material and practices just as they might evaluate what they learn in a university setting, some of which may be informative and some of which may fail to suit the needs of a given person at a given time.

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The Concept of Spirituality in Relation to Addiction Recovery and General Psychiatry

Marc Galanter

Abstract: This chapter is directed at defining the nature of spirituality and its relationship to empirical research and clinical practice. A preliminary understanding of the spiritual experience can be achieved on the basis of diverse theoretical and empirically grounded sources, which will be delineated: namely, physiology, psychology, and cross-cultural sources. Furthermore, the impact of spirituality on mental health and addiction in different cultural and clinical settings is explicated regarding both beneficial and compromising outcomes. Illustrations of its application in addiction and general psychiatry are given: in meditative practices, Alcoholics Anonymous, and treatment programs for addiction singly and comorbid with major mental illness.

Given its prominence in Alcoholics Anonymous and related Twelve-Step groups, spirituality plays an important role in the rehabilitation of many substance-dependent people. The issue of spirituality, however, is prominent within contemporary culture as well in the form of theistic orientation, as evidenced in a probability sampling of American adults, among whom 95% of respondents reply positively when asked if they believe in "God or a universal spirit." Responses to a follow-up on this question suggest that this belief affects the daily lives of the majority (51%) of those sampled, as they indicated that they had talked to someone about God or some aspect of their faith or spirituality within the previous 24 h (Gallup, 2002).

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1. The Concept of Spirituality

Spirituality can be classified among latent constructs like personality, culture, and cognition. These are not observed directly but inferred from observations of their component dimensions (Miller & Thoresen, 2003). Latent constructs are typically multidimensional: understood from the vantage point of more than one discipline. As such, spirituality should be examined from perspectives as diverse as physiology, psychology, and cross-cultural studies. This approach is put forth in this chapter.

Kendler et al. (2003) evaluated religiosity on the basis of selected measures and found no distinction between variables associated with religion and those associated with spirituality. Others, however, have drawn definitional distinctions between the two concepts. In one study, respondents identifying themselves as more spiritual saw God as more loving and forgiving, while those who assessed themselves as more religious saw Him as more judgmental (McCrady & Miller, 1983). The fellowship of Alcoholics Anonymous is often described as "a spiritual program for living" (Miller & Kurtz, 1994), but one in which "there is no dogma, theology, or creed to be learned" (Chappel, 1993). In this respect, the presence of formal doctrine may be considered associated more with religion than with spirituality.

When considered from the perspective of its role in organized religion, the nature of spirituality in a given society is culture-bound, even among Western post-industrial societies. In Sweden, for example, where religious practice had once been an important aspect of the national culture, only 10% of a population probability sample indicated that religion is important to them, and less than 5% went to church each week (DeMarinis, 2003). This stands in clear contrast to the United States, where these figures are many times higher (87% and 41%, respectively) (Gallup, 2002).

A spiritual orientation may be protective of mental stability. Long before the quasi-religious phenomenon of spirituality gained currency, Durkheim (1897) recognized religion per se (i.e., spirituality grounded in doctrine) as vital in assuring social stability and psychological well-being. He observed that disruption of the social fabric resulted in an increased incidence of suicidality. Kendler, Gardner, & Prescott (1997) found that religious devotion (but not institutional religious conservatism) buffered against the depressing impact of stressful life events. Furthermore, they assessed lifetime prevalence of certain mental disorders and found inverse correlations between their prevalence and dimensions of religiosity/spirituality, but pointed out that causality could not be inferred from these correlational findings (Kendler et al., 2003). We found that the experience of engagement into a spiritually oriented cultic group relieved recruits' anxiety and depression (Galanter, 1978). With regard to substance abuse, an analysis based on the findings of Project MATCH (1998), a large-scale study on the outcome of alcoholism treatment, revealed that measures of involvement in the spiritual fellowship of Alcoholics Anonymous

during outpatient treatment accounted for a significant portion of the variance (28%) in positive drinking outcome, and that AA involvement during treatment was more highly correlated with positive drinking outcomes than clients' motivation for recovery prior to exposure to treatment (Tonigan, Miller, & Connors, 2000).

Spiritual commitment, however, is not necessarily associated with a positive outcome. Reports on the impact of intercessory prayer on illness, such as one on its ameliorating effect on patients with compromised cardiac status (Byrd, 1988), have been found to be wanting in terms of valid methodology (Sloan, Bagiella, & Powell, 1999). Additionally, because of the non-specific nature of the latent construct of spirituality, engagement into some movements espousing it may be compromising: Witness the harmful effect of many cultic groups on their members.

2. Some Physiologic Issues

Spirituality offers people a way to avoid uncertainty, and some physiologic mechanisms can shed light on the way this takes place. Schachter and Singer (1962) administered epinephrine to subjects to produce a state of arousal. They found that the nature of the social stimuli they presented at that time determined the subjective experience elicited: a dysphoric context yielded malaise, while a pleasant one produced euphoria. Rather than experiencing a state of uncertainty in response to a non-specific physiologic state, subjects had drawn on their environment to frame their affective response. Gazzaniga and associates (1970) studied patients with severed corpus callosums. When these patients were asked to explain different visual cues presented simultaneously to each respective hemisphere, they gave responses that integrated the nature of the two stimuli, thereby avoiding the uncertainty of producing two conflicting separate responses. In this case, the brain dealt with ambiguity in a way not known to the subject on a conscious level, but nonetheless produced a consciously perceived confabulated conclusion rather than a sustained state of uncertainty.

The nature of cerebral interpretive processes which take place to deal with disparate input is further illustrated by the production of dream imagery. Hobson, Pace-Schott, & Stickgold (2000) developed a model of dreaming that involves activation of specific centers in the pons for hallucinosis and in the amygdala and other limbic structures for intense affect. Simultaneously, other centers in the dorsolateral prefrontal cortices associated with self-awareness and insight are deactivated. Here again, a possible state of uncertainty is avoided through production of an integrated response, however unlikely it may be by everyday rational standards.

Evidence is emerging for localization of spiritually related experiences in specific brain sites. A neurosurgical team attempted to localize the site of one patient's partial seizures. Stimulation of a specific site on her right angular gyrus resulted in somatosensory experiences comparable to the kinesthetic and perceptual ones of bodily distortion associated with out-of-body spiritually related practices (Blanke, Ortigue, Landis, & Seeck, 2002). Other investigators have observed a unique relationship between 5-HT_{1a} receptor density in the forebrain on PET scans and the trait of spiritual acceptance, as measured by a standardized personality inventory (Borg, Bengt, Soderstrom, & Farde, 2003). These findings are compatible with the models of physiologically grounded character traits, such as self-transcendence, developed by Cloninger and associates (Cloninger, Svrakie, & Svrakie, 1997).

3. Sociobiology

In order to extrapolate from the biology of individuals to that of the species as a whole, it is necessary to look to sociobiology, which employs models drawn from population genetics to explain how a trait can be sustained over evolutionary time. The trait of altruism, for example, may compromise the survival of a given individual, and thereby decrease the likelihood of it passing its genes on to progeny. The viability of such a trait over generations, however, is explained by its grounding in inclusive fitness—natural selection based on all related individuals carrying that trait (Hamilton, 1975). Wilson (1978) employed a sociobiologic perspective to explain the adaptive advantage conferred by religious behavior on the basis of the inclusive fitness it confers. Such behavior promotes collaborative acts within a given group of related kin that carry this trait, thereby enhancing their chance for survival.

The socially grounded affiliation observed in members of a religious group has its counterpart in analogous behavior among lower primates. Monkeys experience behavioral and physiologic consequences (like withdrawal and stress reactions) similar to human depressive states when subjected to prolonged separation from their agelings (Suomi, 1999). The affected monkeys were found to be rehabilitated either by social interaction with appropriate members of their species or by treatment with a tricyclic antidepressant (Suomi, Harlow, & McKinney, 1972; Suomi, Seaman, Lewis, DeLizio, & McKinney, 1978). This equivalency in the reparative effect of both social and pharmacologic interventions in reversing the physiologically grounded consequences of social withdrawal suggests the biologic underpinnings of such affiliative behavior. Inferences from genetic studies also support a biologic basis for such sociality, wherein, for example, 43–75% of the variance in responses to measures of social support in identical twins was found to be attributable to genetic loading (Kendler, 1997). Altogether, research drawn from a variety of different sources suggests that the subjective experiences associated with spiritual or religious phenomena could potentially be studied in terms of related biological mechanisms.

4. The Culture of Psychiatry and Psychology

The paradigms on which contemporary psychiatry is based do not readily lend themselves to the consideration of spirituality as an empirically valid component of mental function. The Comtean perspective of positivism (Comte, 1907) has been highly influential as a paradigm for psychological research: namely, if something cannot be directly observed and measured, it ceases to merit scientific attention. Kraeplin (1902) was influenced by this model drawn from the physical sciences in promoting a nosology of mental illnesses based on observable phenomena, and his legacy is seen in the approach applied in the DSM III and IV. Spiritual experiences that are not readily amenable to direct observation or measurement were not readily studied from this perspective.

Freud's thinking, also oriented toward empiricism, emerged within a cultural context influenced by European philosophers like Hegel and Schopenhauer, who questioned the underpinnings of religious thinking. His inclination to view religion as a mass delusion also left little place for a spiritual approach to psychology (1961). Outside the mainstream of the psychoanalytic movement, however, religion did have its proponents. Oskar Pfister, a Lutheran pastor and psychoanalyst, published a rejoinder to Freud's viewpoint on religion in the *International Journal of Psychoanalysis* (1993). The psychological model put forth by Jung, the son of a parson in the Swiss Reformed Church, was associated with spirituality, evident in his postulating a collective unconscious containing archetypes acquired by humanity through shared experience over the centuries (1978). This latter concept, albeit Lamarckian in orientation, bears a certain similarity to a sociobiologic conception of persistence of such behaviors over generations on the basis of its inclusive fitness.

Another psychological tradition, quite different from the positivist approach, is premised on the validity of spiritual experience. It was articulated by William James (1929), who derided "medical materialism" as falling short in explaining the nature of religious experiences. His writings, which had influenced Jung, were echoed by others years later. Abraham Maslow, for example, drew on the lives of historical figures and interviewees whom he felt had attained an exceptional degree of self-actualization (1964); he observed that all of them had a spiritual orientation to life, often characterized meaningful "peak experiences" not necessarily associated with organized religion. Both James' and Jung's perspectives on psychology were influential in legitimating the role of spirituality in recovery from alcoholism, as embodied in Alcoholics Anonymous. Bill W, AA's co-founder, had read James and corresponded with Jung; both had emphasized that alcoholics were seekers, usually of God or serenity, in attempting to relieve emotional distress (Kurtz & Ketcham, 1992).

In elaborating on the psychology of object relations, Winnicott (1953) posited that as it matures, the infant experiences a metapsychological space between it and its mother, and that this space evolves into the transitional divide between reality and subjectivity, yielding a domain for creative play and

imagination. It later provides the adult with the illusionary realm in which aesthetic and spiritual experiences develop. More recently, Rizzuto elaborated on how people's conception of God and spirituality may be lodged in this transitional realm, but she emphasized that acceptance of this perspective implies neither the existence nor the non-existence of an actual deity (1979).

Behaviorism provides little opportunity for elaborating on the subjectivity inherent in spiritual thinking. It was countered by Allport (1961), however, who was respectful of both positivist empiricism and the Jamesian perspective on introspection and approached spirituality with empirically grounded research. Allport distinguished between intrinsically and extrinsically oriented religious orientations, that is to say, between those that draw on internalized beliefs and those oriented toward more practical ends, such as social acceptance. This was further elaborated in empirical research on the nature of clinical practice by Bergin (1991), who emphasized the inevitable role of personal and spiritual values in framing the psychotherapeutic process and pointed out that all psychotherapies carry with them a certain values orientation, thereby originating in subjectivity, whether spiritually oriented or not.

Attribution theory (Kelley, 1967) draws on a large number of studies on the way people assign meaning to experiences they cannot fully understand, like the onset of an illness or an event fraught with unanticipated emotional intensity. Such attribution was reflected in the aforementioned findings of Schachter and Singer (1962) in relation to physiologically generated experience. More broadly, however, this theory can be adapted to the way a particularly spiritually oriented perspective can come to be accepted during a period of uncertainty. In such a case, the meaning of experiences or events may be attributed to the perspective that is presented in a person's social context. This is effected by means of the control of communication (Lifton, 1961) maintained by some spiritually oriented cultic movements, whereby recruitment techniques can result in the adoption of the group's spiritual worldview (Proudfoot & Shaver, 1975). The consolidation of the belief system acquired in this manner is then reinforced by the associated improvement in psychological well-being that the person experiences. I termed this pattern of reinforcement of acceptance of spiritually oriented belief a "relief effect" (Galanter, 1978), that is to say, characterized by a diminution in distress symptoms that accompany the acceptance of a group's implicit beliefs, thereby reinforcing the maintenance of those beliefs.

4.1. The Placebo Response

The placebo response sheds light on the role of spirituality in relieving dysphoria since, like spiritual experiences, it derives from belief rather than the physiologic effect of an empirically validated treatment. A meta-analysis of results of placebo-controlled studies between 1980 and 2000 on antidepressants for major depressive disorder revealed that the mean number of patients responding to placebo was 60% of the number who responded to the active

drug (Walsh, Seidman, Sysko, & Gould, 2002). The durability of this response was illustrated in one study (Montgomery, Reimitz, & Zivko, 1998) in which 72% of depressed patients responded to a placebo (vs. 91% of those on an active drug) and did not experience relapse to depression over a 2-year follow-up period. One quantitative electroencephalographic study (Leuchter, Cook, Witte, Morgan, & Abrams, 2002) revealed that concordance in the prefrontal cortex manifest in placebo antidepressant responders increased, while it decreased for those who received the active drug, suggesting that there may be a characteristic physiologic mechanism underlying this placebo effect. Some mainstream medical procedures have been found to be supported entirely by the placebo effect: A sham procedure for arthroscopic surgery of the knee was found to yield the same symptomatic relief as the commonly practiced surgical procedure, which had been long thought to be efficacious (Moseley et al., 2002).

Phenomena analogous to this placebo effect can be observed in the impact of social stimuli on affective states in cross-cultural examples. Fox (1964) described a Navajo woman with major depression whose symptoms were relieved by a tribal ceremony in which she was symbolically reborn and readopted into the tribe. Her remission was maintained over a 7-year period of follow-up. Similarly, people successfully inducted into the Unification Church over the course of a 3-week workshop sequence experienced a clinically significant decrease in anxiety and depression following induction (Galanter, 1983a). Additionally, the positive response to psychotherapy has been said to be mediated by "non-specific" factors: a supportive relationship, the expectation of help, and the provision of meaning to symptoms. These are often more relevant to treatment outcome than particulars of the procedures employed (Frank, 1971). Taken together, these phenomena are not unlike the ones reported in shamanic rituals, which can be conceived as a spiritually oriented antecedent of psychotherapy.

4.2. Current Practice

Psychiatry continues to espouse the empiricism inherent in a Kraeplinian approach to mental syndromes, defining itself relative to clusters of observable symptoms, a model promoted by Robins and Guze (1960) who, with colleagues, laid out explicit diagnostic categories (Feighner et al., 1972) in an attempt to achieve reliability in diagnosis. These were institutionalized in the multi-axial format adopted in the DSM III (Williams, 1985). Disorders included in Axes I and II were defined by cognitive and behavioral symptoms observable by the clinician, much like the medical ones in Axis III. Similarly, Axis IV enumerates observable psychosocial and environmental problems but, as noted by Frances and Cooper (1981), avoids defining their subjective meaning to the patient being diagnosed.

The decline of subjectively and spiritually oriented aspects of psychiatric practice was further promoted by the advent of managed care, which over the course of the 1990s led to a decline in the dollar limit on third party coverage for

mental health care by 52% and for substance abuse by 75%, both much greater than the 12% figure for general medicine (Galanter, Keller, Dermatis, & Egelko, 2002). General and addiction psychiatry are increasingly applying new pharmacologic and psychosocial technologies, but may thereby become less oriented toward applying an approach to rehabilitation that is spiritually oriented.

5. Problems with Spirituality

Spirituality is non-specific in terms of its cognitive content, as it only reflects the values inherent in the social context in which it is framed. For example, highly compromising distress can take place in encounter groups, experiential settings oriented toward personal growth (a secular analog of spiritual enlightenment). Psychological casualties in such settings were determined by objective measures (Yalom & Lieberman, 1971). This took place in vulnerable individuals when they felt themselves to be in a pariah status, as promoted by interactions during these intense group experiences.

Given their spiritually grounded beliefs, cultic movements can produce deviant behaviors that compromise the well-being of their members who are driven to comply with the behavioral expectations of a leader. Non-compliance with the cult's norms is aversive due to the conditioned relationship between members' positive affective status and the maintenance of spiritually grounded affiliation within the group. This was evident among Unification Church members (Galanter, 1983), in whom measures of compliance with the group behavioral norms (as opposed to its beliefs) was associated with a decline in their psychological well-being.

Alternative and complementary medical practices can be compromising as well. One recent probability study of the American population revealed that the majority (68%) of respondents had employed some type of alternative medical approach in the previous year (Kessler et al., 2001a). Of those who turned to both alternative and mainstream treatment, the majority of respondents in one study (63–72%) did not tell their physician of the alternative care they had undertaken (Eisenberg et al., 2001). In another sample, the majority (54%) of respondents who self-reported severe depression indicated that they had used complementary and alternative therapies in the previous 12 months (Kessler et al., 2001).

The issue of people turning to alternative medicine rather than biomedically based treatment pertains to the addiction field as well. Forty-five percent of intravenous heroin addicts who had turned to a needle exchange program rather than active rehabilitation were found to have employed complementary and alternative medicine techniques such as religious healing. The currency of acupuncture as a treatment of addictive disorders illustrates how folk medicine can achieve acceptance in the absence of research-based validation. Over 400 drug abuse treatment facilities in the United States were employing acupuncture (SAMHSA, 1998) before it was sufficiently studied under controlled

conditions and found to be of uncertain value in the treatment of addictive disorders (Margolin et al., 2002).

6. Treatment Issues

A variety of useful treatment approaches either have been inspired by spiritual traditions or actually embody them in practice. Two examples of these are given here to illustrate the potential value of spiritually grounded techniques in general and addiction psychiatric practice.

6.1. Personal Meaning in Therapy

A secular equivalent of spiritually grounded recovery can be applied in traditional psychiatric settings. These are not oriented toward a belief system per se, but instead reflect the instillation of hope in the clinical encounter. This characteristic was posited by Frank and Frank (1961) as being held in common by all psychotherapies, as well as by AA and religious revivalism. This view was compatible with the perspective of Murray, who contrasted a psychological approach he termed personology (1938), which emphasized that the trajectory of a person's life could be studied in its entirety as a narrative, rather than as a series of events and behaviors. Frankl (1984) underlined the importance of personal meaning as central to the relief of psychiatric symptoms in the context of psychotherapy, in contrast, as he wrote, to an interpretation of the mind as "merely a mechanism" and the physician's role as that of a "technician." Fromm (1950) associated spirituality with the concept of humanism, emphasizing the positive character of people's innate potential in a benign form of religious experience, ultimately linked to Zen Buddhist beliefs (Suzuki, Fromm, & De Martino, 1960). Also related is Bergin's view that all therapies draw on the inherent values of the therapist, leaving them subject to his/her implicit orientation; from this perspective, a spiritual orientation is therefore a valid aspect of treatment (Bergin, 1991). When considered as a group, these views provide a basis for understanding how a secular equivalent of spirituality can be infused into the process of treatment.

Other recovery movements rely on strongly held beliefs not associated with a spiritual orientation per se, but instead with secularly grounded beliefs that members accept without question. The drug-free therapeutic communities adhere to the assumption that addiction can be resolved by characterologic readaptation (De Leon, 1997). Soteria House, an experimental residence established to study the treatment of acute schizophrenics, was premised on the "belief," as stated by its founder, that psychosis can arise as an adaptation to a compromised family life and general society and can be employed in rehabilitation as a potentially transformative experience (Laing, 1967; Mosher & Menn, 1978). Even psychoanalysis is premised on belief in metapsychological models not readily subjected to validation.

6.2. Meditation

The popularity of Eastern spiritual traditions has led to the appeal of meditation in settings as diverse as cultic movements and clinical settings where evidence-based medicine is practiced. Meditation has been central to some cultic groups like the Divine Light Mission, where it afforded members a sense of transcendence that enhanced the credibility of the movement's philosophy. In our study of this cultic group, the overwhelming majority of its members endorsed statements such as that during meditation, they "heard something special no one else could hear" (92%) and that it offered them a "special new meaning in life" (96%). There was also a considerable decrease in self-reported moderate to severe anxiety and substance use (e.g., from 7% to 1% for heroin) over the course of recruits' engagement into the group, with time spent in meditation a significant predictor of this decrease (Galanter, Buckley, Deutsch, & Rabkin, 1980).

Meditation has been employed in the medical mainstream as well. The "relaxation response" (Benson, 1975), involving concentration on a word that is repeated mentally, is such an approach divested of spiritual content; it has been demonstrated to produce a decrease in psychological stress and hypertension (Patel et al., 1985; Schneider et al., 1995). Mindfulness meditation has been associated with a spiritual orientation in Buddhist thinking (Epstein, 1995). It was found to provide relief for anxiety and depression (Ma & Teasdale, 2004), as well as for physiologically grounded pain (Kabat-Zinn, Lipworth, & Burney, 1985). Immunologic changes produced by mindfulness meditation have been reported as well (Davidson et al., 2003). Its potential for use in the treatment of alcohol abuse is supported by the results of a study carried out on an intervention for young adult drinkers (Marlatt & Marques, 1977).

Attempts to distinguish between meditation's physiologically grounded benefit in relatively naïve practitioners and its placebo effect are difficult to accomplish because of problems in producing a valid control condition. The potential evidence of physiologic changes during meditation practices, however, does suggest a biologic basis for its role in symptom relief. Meditative techniques may be useful as components of an eclectic application of complementary medical practices in conventional medical and psychiatric settings, rather than as singular treatment devices.

7. Alcoholics Anonymous

Members of the lay public may conclude that certain healthcare issues are inadequately addressed by the medical community, particularly when doctors are not sufficiently attentive to the emotional burden that an illness produces. When mutually supportive groups of laymen coalesce to implement a response to this perceived deficit, they may form a spiritual recovery movement (Galanter, 1997), one premised on achieving remission based on beliefs independent of evidence-based medicine. Such movements may ascribe their

effectiveness to higher metaphysical or non-material forces and claim to offer relief from illness.

Alcoholics Anonymous is an example of this phenomenon, as its Twelve-Step approach was derived from spiritually oriented steps toward moral redemption that were developed by a quasi-religious movement, the Oxford Group (Kurtz, 1979). AA illustrates how such movements can be employed to complement evidence-based medical practice. In one of its own surveys, AA reported that 60% of members have received professional counseling before joining (Alcoholics Anonymous, 1999). A meta-analysis of outcome studies on patients treated in medical settings has shown that those who attend AA during or after professional treatment are more likely to show improvement than those who do not (Emrick, Tonigan, Montgomery, & Little, 1993). In a study of untreated alcoholics in the general community, after a 1-year follow-up, those who attended AA showed greater improvement than those who did not, and the number of AA visits made in the first 3 years was a significant predictor of improved status at 8 years (Humphreys, Moos, & Cohen, 1997).

These studies, however, like most evaluations of AA outcome, show a correlational rather than a necessarily causal relationship between AA and improvement in drinking problems, since people who attend AA may be more inclined to give up their abusive drinking than those who do not. On the other hand, evidence of the efficacy of the AA approach under controlled conditions emerged from a multi-site study that employed randomization prior to treatment. The manualized therapy of Twelve-Step Facilitation, framed to promote alcoholics' affiliation with AA, was found to yield a positive outcome comparable to that of established empirically grounded modalities like cognitive behavioral therapy and motivation enhancement (Project MATCH, 1998).

7.1. AA in the Professional Context

The spiritually oriented Twelve-Step approach has been integrated into professional treatment in some settings where it serves as the overriding philosophy of an entire program or in others, where it is one aspect of a multi-modal eclectic approach. The Minnesota Model for treatment, typically located in an isolated institutional setting, is characterized by an intensive inpatient stay during which a primary goal of treatment is to acculturate patients to acceptance of the philosophy of AA and to continue with AA attendance after discharge (Cook, 1988a). Although a variety of exercises are included during the stay, this approach has been criticized as dogmatic (Cook, 1988b, Part 2) because of its sole reliance on the Twelve-Step approach. The outcome of this model, however, has been shown to yield positive results in a survey of patients discharged from one such setting (Hazelden, in Center City, MN; Stinchfield & Owen, 1998), but randomization of patients treated in Minnesota Model facilities with those treated by means of an alternative approach is needed.

A more eclectic option is illustrated in the integration of Twelve-Step groups into a general psychiatric facility for the treatment of patients dually diagnosed for major mental illness and substance abuse. The importance of spirituality in such a highly compromised population was evidenced in studies (Goldfarb, McDowell, Galanter, Lifshutz, & Dermatis, 1996; McDowell, Galanter, Goldfarb, & Lifshutz, 1996) in which such patients ranked spiritual issues like belief in God and inner peace higher than tangible benefits like social service support and outpatient treatment. One inherent advantage of this format is that it benefits from the introduction of an inspirational approach to patients who, as Goffman has pointed out (1963), have become "degraded" by stigmatization due to their psychiatric disorders.

We found that this integrated approach, with prior randomization, yielded greater improvement than when the biomedical and spiritual options were provided in separate settings (Silberstein, Metzger, & Galanter, 1996) and could be adapted into a system of multiple levels of inpatient and ambulatory care (Galanter, 1981). We were also able to introduce a program based on the Twelve-Step model into a methadone maintenance clinic to allow patients to benefit from its spiritually oriented approach (Gilman, Galanter, & Dermatis, 2001).

The interface between spirituality and addiction treatment has yet to be fully explored, and further research will clarify its relative value in specific applications. Spiritually grounded approaches have, however, come to be an accepted domain of addiction in the form of Twelve-Step recovery programs, which are now increasingly defined by evidence-based techniques.

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Kickbacks from Helping Others: Health and Recovery

Sarah E. Zemore and Maria E. Pagano

Abstract: AA is often viewed as a spiritual organization, but it is less commonly recognized that helping others is a fundamental part of AA's conception of spirituality. Helping others by bringing AA's program to other alcoholics (articulated in Step 12) is understood as the culmination of AA's program and the behavioral manifestation of a spiritual awakening (Step 11). Also, members are encouraged to help in all stages of their involvement in AA's, and it is this helping that is thought to keep them sober. Accordingly, the current chapter addresses the question of whether helping benefits the helper from an empirical standpoint—and specifically, whether helping might contribute to recovery in the context of AA involvement. In addition to describing AA's approach to helping, we review research on associations between helping and (a) health outcomes in the general population, (b) recovery in diverse mutual help groups, and (c) recovery from chemical dependency within and outside of AA. We find evidence supporting benefits for helpers in each of these domains and tentatively conclude in favor of helper therapy principles. However, the work is limited by the lack of experimental studies and by problems in defining helping. Other concerns are that "over-helping" can be worse than not helping at all and that helping may sometimes harm the intended recipients. Recommendations for further research are to address these limitations. Particularly useful would be research designing and testing interventions aiming to increase helping, perhaps informed by social model programs and principles.

Key words: helping; altruism; mutual help; AA; spirituality; alcohol

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1. Introduction

Traditionally, Alcoholics Anonymous (AA) has been known as a "self-help" group, emphasizing reliance on "one's self" for help in opposition to professionals. Yet such phrasing can be misleading. The American Psychological Association (APA) defines a "self-help group" as "a group composed of individuals who meet on a regular basis to help one another cope with a common life problem (italics added)" (VandenBos, 2007). Furthermore, among the "many benefits [of self-help groups] that professionals cannot provide," the APA includes "friendship, emotional support, experiential knowledge, identity, meaningful roles, and a sense of belonging." This definition paradoxically highlights the important role that the other members play, both as helpers and as recipients of help, in self-help groups. Accordingly, many researchers now prefer (as we do) the term "mutual help" or "mutual support" as a substitute for "self-help," since these terms draw attention to the mutual, interdependent nature of self-help group processes.

Although researchers have come late to recognizing the importance of mutual aid in mutual help groups, helping others has long been emphasized in AA. In fact, helping, spirituality, and recovery form inextricably intertwined strands in AA lore and practice. AA frames helping other alcoholics as a direct manifestation and ongoing source of spiritual growth and recovery. Helping others by carrying the message to other alcoholics (articulated in Step 12) is understood as the culmination of AA's program and the expression of members' spiritual awakening (Step 11). Helping other alcoholics is, thus, the explicit endpoint of the program. Yet helping others is viewed as a cause as well as an effect of personal recovery and spiritual transformation (which are considered almost equivalents; see Connors et al., Chapter 12); in order to keep their sobriety, helpers must "give it away." Hence, helping is a focus throughout the program, and service work (i.e., any actions benefiting fellow alcoholics) is considered fundamental to success.

What work does the encouragement of helping actually do in AA? That is the question this chapter poses. Clearly, service work and sponsoring contribute to the ongoing functionality of the organization. AA has proliferated expansively across the globe (Mäkelä et al., 1996) and generally continues to operate as a self-sustaining entity, without outside contributions, largely because many of its members and elected officials *volunteer* to help set up and run meetings, organize annual conferences, participate in decisions that affect the group as a whole, and donate to support salaried administrative positions. Receiving help from other alcoholics may also help the recipients of aid: Research suggests that the social bonds that individuals form in AA contribute to their ability to abstain from alcohol and drugs (Bond, Kaskutas, & Weisner, 2003; Kaskutas, Bond, & Humphreys, 2002; Longabaugh, Wirtz, Zweben, & Stout, 1998). Yet there may be even more reason to recommend peer helping as a therapeutic agent. This chapter suggests that helping may serve a third function in mutual help groups,

and in AA specifically: That is, we argue (as does AA) that helping directly contributes to the helper's recovery. Thus, the encouragement of helping may contribute to AA's continued proliferation not only by sustaining its functionality but by keeping both recipients and helpers sober. Just as an evolutionarily adaptive gene may promote the replication and survival of a particular species (Dawkins, 1989), AA's emphasis on helping may have promoted the group's survival as a network and institution over the long passage of time since its inception.

Toward better understanding the role of helping in AA and in recovery, the current chapter examines AA's philosophy and practice surrounding helping and reviews evidence for linkages between helping and better health and recovery outcomes. We aim at a balanced view of helping's benefits and potential drawbacks (such as overcommitment) and, in view of the state of evidence in this emerging field, urge that our conclusions be viewed with some caution.

We believe our chapter is appropriate for inclusion in the current volume, which addresses the role of spirituality in AA, because spirituality and helping are so tightly interwoven in AA. We hope that our examination will be useful not only in terms of understanding AA but also for formulating and evaluating substance abuse interventions conducted in treatment facilities and other community settings. Because of the paucity of research on the benefits of helping in any twelve-step program, let alone AA specifically, we draw on research involving a range of mutual help groups along with work on AA. Much of what we say should, in fact, be applicable to twelve-step groups generally, since such groups have typically adapted AA's steps, traditions, and literature to suit the problems they address.

2. AA's Approach to Helping

Helping has been defined in a variety of ways, depending on the scientific discipline. Within the context of twelve-step programs, helping others in recovery is most commonly referred to as "service." For our purposes here, synonyms for helping include service, pro-social behaviors, other-oriented behaviors, unselfish caring for others, good will, and altruism. Behaviors that are service-oriented or altruistic in nature are those that reflect kindness toward, and consideration of, others (Burnstein, Crandall, & Kitayama, 1994). A review of altruism definitions across interdisciplinary research has found five common elements: (1) the activity the individual is taking part in must benefit another person; (2) the act must be performed voluntarily; (3) the individual must perform the activity intentionally; (4) the benefit to another is the primary goal; and (5) the individual must not expect any external rewards or any type of reciprocation for service rendered. These elements are exemplified in moral psychology as "good will" (Kant, 1993).

Alcoholics Anonymous has put this idea of service into action: AA's primary aims are to keep members sober and to help alcoholics who still suffer

(AA World Services, 2001). Originating in Akron, Ohio, AA traces its roots to the Oxford Group, a Christian fellowship movement started in 1921. At the core of the Oxford program were the "four Absolutes": absolute honesty, absolute purity, absolute unselfishness, and absolute love (AA World Services, 1957). Unselfishness was highlighted as the spiritual cornerstone for right living, the exact opposite of life during the alcoholic's drinking days. This absolute suggested that "you ask yourself over and over again in judging what you are about to do, say, think, or decide: how will this affect the other fellow?" (AA World Services, 1957). Being unselfish is a focal point and is understood to follow self-care in the hierarchy of adjusted attitudes for right living. Selfcenteredness has long been thought by AA to be the root of substance use disorders; AA's antidote to egocentricism has been for the individual with a substance use disorder to help others. Newcomers and old-timers alike still face the challenge of absolute unselfishness and encounter reminders to consider "How will this affect the other fellow?" in signs on the walls of Akron/Cleveland AA meetings today.

The co-founders of AA, Dr. Bob and Bill Wilson, affiliated with the Oxford Group prior to meeting each other: Bill in New York City for 5 months and Dr. Bob in Akron, Ohio, for two and a half years. However, only Bill had achieved sobriety. The difference in their programs lay in service. As Dr. Bob later recounted, "Bill had acquired [the Oxford group's] idea of service; I had not" (AA World Services, 1980, p. 70). This was the missing link to which Dr. Bob attributed his subsequent sobriety. When they met in May 1935, they applied the Oxford Group's fundamental belief in helping others, specifically to helping other alcoholics to stay sober. Bill said, "We had to [help other alcoholics]. We were under awful compulsion. We found that we had to do something for somebody or actually perish ourselves" (AA World Services, 1980, p. 72).

Helping can also be found in AA's steps and notion of service. AA originally consisted of six steps, based on the Oxford framework, with the fifth step calling members to a mission of "helping other alcoholics" (AA World Services, 2001). AA's first non-alcoholic trustee, Mr. Amos, described this step in his report to Mr. Rockefeller in 1938: "He must be willing to help other alcoholics get straightened out. This throws up a protective barrier and strengthens his own willpower and convictions" (AA World Services, 1980, p. 130). In 1939, Bill Wilson further developed these steps into the twelve steps that are known and practiced today. The Twelfth Step evolved to "Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs."

The symbol for AA, emblazoned on the symbolic coin currently given to members for advancing periods of sobriety, is a triangle within a circle. The triangle represents the three dimensions of AA: service, unity, and recovery. One-third of the triangle represents service, which in the context of AA is defined as "anything whatever that legitimately helps us to reach fellow sufferers" (AA

World Services, 1957). Forms of AA service, the majority of which do not require any length of sobriety, include making coffee, greeting members at the door, putting away chairs, visiting detoxification centers, volunteering at local AA Service Centers, welcoming newcomers at meetings, and sharing experiences in sobriety to help a fellow sufferer.

Another form of service in AA is being a sponsor to other alcoholics. Sponsorship was very different historically from today's current practice. Historically, alcoholics could not walk into an AA meeting as they do today. Being "sponsored" was a prerequisite to membership and meant that the newcomer had undergone an indoctrination procedure formulated by early members. AA members would be notified, usually by a family member of the alcoholic, of someone who was in the end stages of alcoholism. Following detoxification, usually in the hospital, several AA members would approach the newcomer and visit this prospect every day. Members shared their experiences in the hope that the newcomer would identify with them. Alcoholics were encouraged to admit that they were powerless over alcohol and then to surrender their will to God—in the presence of one or more AA members. Following this surrendering experience, the alcoholic was allowed to join fellow members at AA meetings. This early practice evolved into the practice known today as sponsoring, which involves ongoing partnership between a novice and a more experienced alcoholic. A sponsor, uniquely positioned based on common suffering, helps another alcoholic solve one problem and one problem only: how to stay sober. This includes assisting the other alcoholic through the suggested twelve steps of recovery. While there are no explicit rules, a good sponsor should preferably be a year or more away from the last drink/drug and should seem to be enjoying sobriety (AA World Services, 1957).

Helping others, then, has constituted a core part of AA from its founding. One might say that helping others and surrendering to a higher power were seen to be the active ingredients of the program from the start. In the following sections, we address the health and mental health benefits of helping generally, as well as recovery benefits to helpers in mutual help groups.

3. Research on Helping in the General Population

By now, a moderately persuasive evidence base suggests health benefits for helpers in the general population. Jane Allyn Piliavin (2003), reviewing the literature to determine whether there are payoffs to performing community service in terms of self-esteem, depression, and longer life, concludes, "essentially [the answer is] yes: One does well by doing good" (p. 227). Likewise Post (2005), in a similar review of altruism research, concludes that "a strong correlation exists between well-being, happiness, health, and longevity of people who are behaviorally compassionate, so long as they are not overwhelmed by helping tasks" (p. 66; we address this latter point in Section 5). Indeed, voluntary participation in community service has been related to better outcomes among a range

of samples, including youth, college students, adults, and the elderly, and for a range of outcomes. Still, there are some limitations associated with this work. Few if any randomized trials have been conducted on adults and the elderly, so evidence for the helper therapy principle in those populations is largely limited to observational research. Furthermore, the available data show some variation in effects across interventions and outcome variables. This suggests that not all forms of giving positively affect all outcomes, though there is no real consensus on what kinds of volunteering are most effective, and which psychological, behavioral, and physical outcomes we can expect to be affected. Part of this confusion may be attributable to the lack of theoretical development in this area.

Some evidence for the conclusions of Piliavin (2003) and Post (2005) comes from experimental studies of volunteering among youth. For example, in an experimental study, Calabrese and Schumer (1986) assigned ninth-grade students, all of whom wanted to do community service, into a volunteer group (who designed their own community service project; n = 25) and a control group (who were simply followed; n = 25). Results showed that volunteers had lower levels of discipline problems and alienation at follow-ups than controls. Moreover, alienation increased among volunteers terminating their participation at 10 weeks in a post-termination follow-up. Observational studies on youth and college students have likewise found suppressed delinquency, better civic values, and increased educational attainment among students engaging in volunteer work of various kinds (e.g., Astin & Sax, 1998; Johnson, Beebe, Mortimer, & Snyder, 1998; Uggen & Janikula, 1999). Observational studies have also associated greater amounts of service with better achievement and delinquency outcomes, a dose-response relationship that further supports a causal interpretation. Based on such results, reviews have concluded that volunteer programs for adolescents, including peer tutoring and community service programs, can be related to improvements in both academic and social arenas (Elbaum, Vaughn, Hughes, & Moody, 1999; Moore & Allen, 1996; Osguthorpe & Scruggs, 1986; Scruggs, Mastropieri, & Richter, 1985). However, the effects for volunteering do not seem to be as consistent for social and psychological outcomes as they are for academic outcomes (Astin & Sax, 1998; Conrad & Hedin, 1982; Johnson et al., 1998; Osguthorpe & Scruggs, 1986; Scruggs et al., 1985). It is also true that results from youth studies can be hard to interpret since many studies combine volunteering with other interventions, such as instructional lectures and discussions.

Observational studies with adult populations likewise tend to support conclusions that one does well by doing good. Voluntary association membership and altruistic behaviors among adults have been positively associated with greater happiness and life satisfaction (Ellison, 1991; Keyes, 1998), better social functioning (Keyes, 1998), and decreased depression and anxiety (Brown, Gary, Greene, & Milburn, 1992; Rietschlin, 1998; Schwartz, Meisenhelder, Ma, & Reed, 2003). For example, one study, randomly sampling 2,016 members of the Presbyterian Church in the United States, found that giving help was strongly

associated with better mental health; moreover, this association was stronger than the association between *receiving help* and mental health (Schwartz et al., 2003). Another study conducted on adults has suggested that helping actually mediates some or all of the effects for spirituality on health outcomes (Ironson, Solomon, & Bablin, 2002). This study compared the characteristics of long-term survivors of AIDS (n = 79) to a comparable (based on CD4 count) HIV-positive group that had been diagnosed for a relatively short time (N = 200). Survivors were more likely to be spiritual or religious than comparisons. However, the effect of spirituality/religiosity on survival was mediated at least partly by a greater tendency for spiritual/religious individuals to help others with HIV. Implications of this study are that future investigations of spirituality and health would be advised to control for helping.

Such studies are open, however, to the criticism that individuals who choose to help may already be more functional than individuals who do not. Fortunately, a rigorous, longitudinal study by Thoits and Hewitt (2001) helps address this critique. For this study, the authors used a cross-lagged panel design and two waves of data collected from a national probability sample of American adults (N = 2,681) to test two proposals: (a) individuals high on well-being self-select into volunteer work and (b) volunteer work enhances well-being. The data revealed some support for proposal (a), as higher wellbeing on five of the six measures (i.e., happiness, life satisfaction, self-esteem, physical health, and depression, but not mastery) at Time 1 predicted more volunteer work at Time 2, associations that were partially explained by higher social integration among those high on well-being. Most important, proposal (b) was supported, since volunteer work at Time 2 predicted higher well-being on all six measures at Time 2, even controlling for well-being assessed at Time 1. The latter model also controlled for a large set of demographic covariates and measures of social integration at Time 2. This evidence strongly supports a causal role for volunteer work in well-being, since it helps to establish direction of causality and rule out potential confounds.

Research on volunteering among elderly populations is perhaps most copious of work on any population and again suggests benefits for helping. Empirical work on helping and psychological health among the elderly was subjected to meta-analysis by Wheeler, Gorey, and Greenblatt (1998), who found that the average correlation between helping (or voluntary association membership) and measures of psychological well-being was 0.25 (p<0.001), ranging from 0 to 0.58. The authors also found that, in studies controlling for health and/or socioeconomic status, the average correlation was smaller, but still statistically and clinically significant. Furthermore, volunteers who engaged in direct forms of helping (rather than, for example, simply holding membership) derived greater rewards. Although most of the reviewed work was observational in design, the case for causality is strengthened by one small experimental study (N = 120) showing beneficial effects for volunteering among the elderly on positive affect, self-esteem, and social integration (Midlarsky & Kahana, 1994).

Strikingly, researchers have also found associations between more volunteerism among the elderly and lower mortality rates. For example, Moen, Dempster-McClain, & Williams (1989), studying 427 women in New York state originally interviewed in 1956, found that those who had participated in clubs and volunteer activities were less likely to have died by 1986. The authors report, "We find that social integration, defined by the number of roles occupied, promotes longevity, but that one form of integration—membership in voluntary organizations—is especially salutary" (p. 635). A more recent study examined the relative contributions of giving versus receiving support to longevity in a sample of 423 married couples (Brown, Nesse, Vinokur, & Smith, 2003). All males in the couple were at least 65. This 5-year study found that mortality was significantly reduced for individuals who reported providing instrumental support to friends, relatives, and neighbors, and for individuals providing emotional support to their spouses. Analyses incorporated an exceptionally comprehensive set of controls: demographic variables, personality variables, social contact, relationship quality, and mental and physical health (including interviewer-rated health). Receiving support tended to have weak effects on mortality, and receiving emotional support had no effect on mortality once giving support was taken into consideration. One factor counting against this study, however, is its limited operationalization of helping: Helping measures were unvalidated and incorporated as few as one or two items. For example, providing emotional support was measured as the average of two questions on whether participants "made their spouse feel loved and cared for" and "were willing to listen if their spouse needed to talk."

In sum, the available research tentatively suggests salutary effects for helping in the general population. The field needs more rigorous experimental studies, better theory, and more attention to defining and measuring helping. Still, the work is promising.

4. Research on Helping and Recovery

4.1. Helping in Group Therapy and Mutual Help Groups

Supplementing work on the general population is a separate stream of research examining member-to-member interactions in the course of therapy and in mutual help groups. This work more closely approaches our topic of interest: helping in AA.

It has been often suggested that peers in group therapy constitute a unique and powerful resource. For example, Ferencik (1992) proposed that the emotional support and persuasive power of a peer in therapy can be greater than that of a therapist. He writes, "While [group] leaders possess authority, compared to members they are at a disadvantage... A leader's supportive comments may be suspect as a perfunctory role requirement, something spoken as part of the job and not necessarily heartfelt" (p. 114).

Other advantages, argues Ferencik, are that peers can express a range of responses restricted among therapists by their professional position (such as disclosure of personal experiences and extreme emotional responses) and contribute to unified group action, which may help crystallize issues and mobilize members to act. Relatedly, Yalom (1970) has proposed that therapeutic gain comes primarily from potent therapeutic events combining *both* emotional experience and reflection on that experience—events that are, according to Yalom, typically facilitated by interaction with group members. All of this points up the potential power of mutual help groups like AA. An additional advantage of group therapy, or mutual help groups, may be that peer interactions offer clients an opportunity to *help others* facing a common problem.

The potential curative power of helping for the helper was actually recognized decades ago by Riessman (1965, 1976), who suggested that people who help others in the context of mutual help group involvement benefit from doing so. Riessman also thought that helping benefits the helper most when the helper and recipient share a common problem, since helpers can become committed to solving their problems (and to specific strategies for change) by offering advice and encouragement to others. Around the same time, Yalom (1970) identified "altruism" as one of his 12 curative factors in group therapy; altruism was defined as a sense of having helped other group members through the sharing and giving of oneself. Surprisingly, little empirical work has followed these early insights.

Nevertheless, a few key studies have examined benefits for helpers in mutual help groups. In one, Kenneth Maton (1988) examined giving and receiving help among 144 members of three self-help groups: Compassionate Friends (a group for the bereaved), Multiple Sclerosis, and Overeaters Anonymous. Results showed that providing social support and friendship (assessed using a 5-item self-report scale) was related to higher well-being and more positive group appraisal. Furthermore, individuals who were high on both giving and receiving support reported more favorable well-being and group appraisal than individuals who were high on only one or neither. This finding conflicts somewhat with findings from Brown et al. (2003), who found no additional benefits for receiving emotional support on mortality among the elderly when giving help was taken into account. Maton's findings suggest caution in concluding that there are no benefits to recipients of help.

Similar findings showing positive effects for helping have been reported by Schiff and Bargal (2000), studying 117 participants belonging to 11 mutual help groups in Israel: 87 participants belonged to seven different twelve-step groups (e.g., Overeaters Anonymous and Debtors Anonymous), and 30 participants belonged to four groups not based on twelve-step principles (i.e., groups for hearing and speech impairment, mentally ill individuals, and homosexual individuals). Scores on the study's 3-item helping scale were positively associated with both subjective well-being (r = 0.25, p < 0.05) and satisfaction with the group (r = 0.30, p < 0.01). Other important findings were

that twelve-step group members rated their groups more positively on four of six dimensions, and reported much higher group satisfaction, relative to members of non-twelve-step groups. (The authors do not report whether the groups differed on well-being.) Schiff and Bargal conclude that twelve-step groups may have advantages over groups that are not twelve-step based, including powerful ideologies that provide alternative explanations for participants' problems (that is, explanations that do not invoke notions of immorality or sin), and a step-based program offering hope for change—along with, one might add, a concrete plan of action. Still, they admit that methodological issues, such as demographic differences between members of twelve-step and non-twelve-step groups, may also explain the results.

A third study of note was conducted by Schwartz and Sendor (1999). This study was a secondary analysis of a randomized trial exploring the effects of peer counseling on sufferers of multiple sclerosis and examined the experience of those people who delivered the intervention: That is, five lay people with multiple sclerosis trained to listen actively and provide compassionate, unconditional positive regard to people sharing their disease. At 1- and 2-year follow-ups, the trained peer supporters showed higher well-being on several measures (e.g., global life satisfaction, autonomy, mastery, and self-acceptance) than either those they were counseling or individuals in the control group, who received a different intervention. However, results from this study are hard to interpret, given the very small sample of peer supporters. Furthermore, peer supporters also scored higher at year 1 on some measures suggesting poorer functioning (e.g., global fatigue and depression).

A criticism of the preceding studies is that self-report measures of helping cannot be trusted, since people are likely to exaggerate the extent of their helping. In fact, those people most likely to inflate their estimates of helping in the service of social approval may be most likely to inflate their estimates of health and well-being, which could lead to artifactual associations between helping and positive outcomes. Another concern is that the direction of causality cannot be established in the forgoing work: Helping may flow from higher well-being just as easily as higher well-being flows from helping. These concerns are mitigated somewhat by a rigorous study by Roberts et al. (1999), in their longitudinal study (N = 98) of a mutual help group for individuals with serious mental illness called GROW. This study used observer ratings to measure both helping behaviors and psychosocial adjustment (in addition to using a self-report measure of social adjustment). Helping was assessed during weekly group interactions; outcomes were assessed from 6 to 13 months post-baseline. Even when controlling for adjustment measures at Time 1 and other important covariates (i.e., age, gender, education, race, months in GROW, and time between interviews), more helping predicted higher adjustment scores on both interviewer-rated (B = 0.27, p < 0.01) and selfrated (B = 0.35, p < 0.001) instruments at follow-up. Receiving support was a marginally significant predictor of better outcomes in this study (B = 0.17,

p<0.10). Again, note that there is some indication of positive effects for receiving help.

One is impressed by the sheer size of effects for helping on adjustment in the forgoing study, given that adjustment at baseline was controlled. Such effects imply the possibility of similarly important effects for peer helping in recovery from substance abuse and dependency. Presently, we turn to research on that topic.

4.2. Helping and Recovery from Substance Abuse and Dependency

It is fascinating that, despite the explicit linkages that many recovering people make between helping, recovery, and spiritual growth, there is so little quantitative research on the interplay between growth in these areas. Below are quotes from a qualitative study interviewing five leaders of Pathways, a twelve-step group developed for methadone treatment clients (all quotes from Glickman, Galanter, Dermatis, & Dingle, 2006, p. 532).

I heard I could find a God of my understanding and gee, that opened all kinds of doors for me. Spirituality—I found out what spirituality was. People; I hadn't even realized how isolated I had become and this rejoining with people, the oneness, the unity. That's a wonderful thing....

...I've learned how to love myself again, care for myself, to care for others and the whole process of recovery, the whole program. Doing for others; I don't have the words for it any more. It is just a giving and taking that spirals back and forth, back and forth. You feel God working through other people and it's true; God works through other people and in working through them it works through me.

So as I stay clean and I involve myself in my network it['s] brought me into a higher role.... Helping people helps me. I like to do it; I really do. I love to do it.

Research on helping during recovery from substance abuse, although sparse, does indicate benefits for helpers. Early reviews of the AA literature have indicated that both sponsoring another member in AA and engaging in "Twelfth Step work" (broadly, service work) are reliable predictors of better outcomes in AA (Emrick, 1987; Emrick, Tonigan, Montgomery, & Little, 1993; Sheeren, 1988). Emrick et al.'s (1993) review documented an average correlation between drinking behavior outcomes and sponsorship of r = 0.17, and an analogous correlation of r = 0.20 for engaging in Twelfth Step work. More recent work confirms roles for these forms of service, including a striking study by Crape, Latkin, Laris, and Knowlton (2002). Following an inner-city community sample of former and current injection drug users, this study found that sponsoring another member in NA or AA was related to an almost sevenfold increase in odds of abstinence when first interviewed, and a threefold increase in odds of abstinence at the 1-year follow-up. These effects are much larger than those

indicated in Emrick's review of the available cross-sectional work, suggesting that sponsoring may be more or less powerful depending on sample characteristics and study design. Moreover, it seems unlikely that Crape's effects were attributable to higher NA/CA involvement or treatment attendance among sponsors, since analyses controlled for NA/AA meeting attendance and formal treatment (along with demographic variables, HIV status, and involvement in community organizations). Similarly, Pagano, Friend, Tonigan, & Stout (2004) recently assessed the effects of sponsorship and step work together using data from Project MATCH (Longabaugh & Wirtz, 2001), a very large clinical trial investigating the efficacies of three different treatment types in recovery from alcohol dependence. Individuals who reported sponsoring another AA member and/or completing the Twelfth Step in the 90-day treatment period were coded as helpers. In comparison to non-helpers, helpers were twice as likely to remain sober in the year following treatment. Again, it is important to recognize that this association held controlling for AA meetings attended, suggesting that greater attendance on the part of helpers cannot explain their superior outcomes.

Pagano and colleagues' work is particularly compelling because of its longitudinal design, but it merits attention that similar results were produced in a cross-sectional study by Zemore and Kaskutas (2004) involving a community sample of 198 recovering alcoholics. Based on factor analysis of an AA involvement scale, this study created two distinct measures of AA involvement: "AA Achievement" (a 2-item composite aggregating sponsorship and completion of the twelve steps) and "AA Involvement" (a 7-item composite reflecting other indices of involvement, such as reading the literature and meeting attendance). Hence, the study's measure of AA Achievement was a combined sponsorship-step-work measure very similar to Pagano et al.'s (2004) helping measure. Zemore and Kaskutas found that longer sobriety was strongly and positively associated with the combined sponsorship-step-work measure (standardized beta = 0.67, p<0.001), and surprisingly not associated with AA involvement along other dimensions (standardized beta = 0.12, ns). Additionally, longer sobriety was positively associated with more communityrelated helping (although interpersonal, recovery-related helping decreased with increasing length of sobriety) and higher theistic and non-theistic forms of spirituality. Similar results were also produced in a cross-sectional study by Pagano, Jaber, Kotz, Dean, & Zywiak (2007a). Pagano's study, a retrospective study of "old-timer" alcoholics with more than 20 years of sobriety, found that helping others in AA increased linearly over the first 20 years of sobriety. Interestingly, participants also reported that helping other alcoholics was more important to their sobriety than helping non-alcoholics. This study, however, included a very small sample (N = 11).

Studies conducted outside of AA have also found some support for the helper therapy principle among substance-abusing populations. For example, Simpson, Crandall, Savage, & Pavia-Krueger (1981) found results decades ago

supporting helper therapy principles among opiate addicts. Among Simpson's sample, volunteer work at the 6-year follow-up was associated with better scores on a simultaneously assessed, composite outcome that took account of opiate use, other drug use, drug treatment reentry, alcohol use, criminality, and lack of engagement in employment, homemaking, or school. Simpson also found that engagement in community volunteer work increased from pre- to post-treatment, suggesting that treatment may play some role in enhancing helping.

Also looking outside of AA, a more recent and rigorous study (Pagano, Phillips, Stout, Menard, & Piliavin, 2007b) investigated helping among 163 individuals suffering from body dysmorphic disorder over the course of 3 years, about half of whom also had a substance abuse disorder. Using cox proportional hazards regression, this study found that increases in self-reported helping behaviors predicted remission in both substance use and body dysmorphia disorders, although the latter effect was only marginally significant (p = 0.07). Medium to large effects were obtained for each (with hazard ratios at 2.59 and 1.51, respectively). A strength of this study is that, although both the sample and the operationalization of helping differed widely across this study and Pagano et al.'s (2004) Project MATCH study, results nevertheless support linkages between helping and recovery from substance abuse. This supports the generalizability of effects for helping on recovery among helpers.

Another important study followed 277 members of Double Trouble in Recovery, a twelve-step fellowship serving individuals with both mental and substance use disorders (Magura et al., 2003b). This study employed a "Helper Therapy Process scale," a 5-item scale measuring perceived helpfulness to others (particularly at meetings) and perceived personal benefits from helping. Impressively, and among nine predictor variables entered in the multivariate analysis, only the Helper Therapy Process scale and drug/alcohol abstinence at baseline were significant predictors of drug/alcohol abstinence at follow-up (for Helper Therapy, R = 0.12, p < 0.01). Other covariates included measures of involvement in the fellowship, motivation, social support, coping, self-efficacy, and stressful life events. An important caveat, however, is that the Helper Therapy Process scale measures beliefs about the impact of one's helping more than helping behaviors per se, so these results speak more to the therapeutic value of the former than the latter variable. AA stresses that the impact of one's helping on the recipient is quite irrelevant in terms of benefits to the helper from helping. If this were true, then one would expect stronger effects had Magura et al. measured helping behaviors rather than beliefs. On the other hand, the opposite argument also seems plausible: Helpers may benefit most if they feel that their help is having the intended, positive effects. If that were true, then Magura et al. would have found attenuated effects when measuring helping behaviors. Regardless, the distinction between beliefs about helping and helping behaviors should be kept in mind.

In short, there is some (but not a lot of) evidence pointing to beneficial effects for helpers in recovery and for helpers in AA specifically. More tentative, but also intriguing, are results suggesting another role for helping in recovery: Specifically, two studies now suggest roles for helping during treatment in promoting *AA affiliation* after treatment ends. Why should that be? It may be that individuals who help others as part of professional treatment gain experience with the kinds of relationships and interactions that they will be expected to have in AA and its variants. That is, practice with helping may make it easier for people to negotiate the social demands of twelve-step groups.

One study supporting a link between helping and AA involvement was conducted on a treatment population of 279 individuals in northern California (Zemore, Kaskutas, & Ammon, 2004). The sample included individuals dependent on alcohol, drugs, and both. Peer helping during treatment was measured using a 7-item self-report scale tapping the amount of time participants spent, on the day prior, sharing experiences, explaining how to get help, and giving advice on housing and employment. Spending more time helping during treatment was significantly associated with greater AA/NA involvement at the 6-month follow-up, even in multivariate analyses controlling for length of stay. Among those still drinking at follow-up, more helping during treatment also predicted a lower probability of binge (versus moderate) drinking. In other words, helping reduced the likelihood of problematic alcohol use among drinkers. Helping was not otherwise associated with treatment outcomes.

Similar results were found in a second study, which followed 733 treatment seekers at five day hospitals and seven residential treatment sites in northern and southern California (Zemore & Kaskutas, in press). Study participants likewise showed mixed diagnoses of alcohol, drug, and alcoholand drug-dependence. Spending more time helping during treatment was again significantly related to greater twelve-step involvement at 6 months post-treatment—and hence, indirectly to higher odds of abstinence at 6- and 12-month follow-ups. Results remained robust, as in the northern California study, even in multivariate analyses controlling for treatment duration and any demographic and baseline severity variables predicting outcomes. Diverging from the northern California study, helping activities (although measured using a similar scale) bore no relation to high-volume drinking, suggesting caution in interpreting the prior result.

Both these studies thus are consistent with arguments that peer helping during treatment may facilitate integration into AA post-treatment. However, we should be careful in interpreting these studies since, despite systematic attempts to control for variables that could account for the association between helping and AA involvement, there may yet be unmeasured variables that relate to both helping and AA involvement and that explain the association between these variables. The next section addresses general study limitations in more detail.

5. Helping Can Hurt (and Other Important Cautions)

The research on helping points to some benefits for helpers. However, it makes sense to be cautious about those results for several reasons.

One reason to be cautious concerns the quality of the evidence. Perhaps most important, almost all the work on helping has been observational. The lack of experimental work is particularly striking in research on peer therapy, mutual help groups, and AA, where we know of no experimental studies. Investigators have attacked issues surrounding correlational work (such as ruling out confounds and establishing direction of causality) with varying skill and rigor, and some studies, it must be said, have used a fairly comprehensive set of control variables and/or longitudinal designs (e.g., Roberts et al., 1999). The Thoits and Hewitt (2001) study is a standout here for its use of a cross-lagged panel design, which is probably the best non-experimental design available for establishing causality. Still, it remains that no work definitively establishes a causal role for peer helping in mutual help groups because that work has not completely addressed the problems of correlational designs. For example, studies do typically incorporate some measure of involvement in the group as a control variable, but group involvement is not the same as group satisfaction, and it may be that helping is just a proxy for group satisfaction (which is, rather than helping per se, the therapeutic mechanism). Reverse causality is also a threat: It seems possible that helping others could flow from feeling confident in one's recovery, which may be a stand-in for level of recovery—or may be influential in itself. However, studies have not addressed this possibility. It is hard to imagine a non-experimental study that could fully address these concerns, so experimental work testing helping interventions seems imperative.

Another reason for caution in interpreting helping research is that there is no real consensus on what peer helping is. Table 1 summarizes key studies on helping in AA and other mutual help groups. It is immediately apparent from this table that studies have adopted rather heterogeneous approaches to defining helping. Definitions have varied widely in terms of content, assessing (for example) behaviors related to emotional support, advice, and interpretation; behaviors related to instrumental support of various kinds; behaviors related to avoiding hurting others and violating rules/social norms; behaviors related to thoughts of other people; and thoughts that one's helping helps others. Definitions have also assessed helping in relation to a variety of targets and contexts: for example, interpersonal helping directed toward other mutual help group members, others sharing one's problem, and/or family and friends; participation in community organizations; and forms of helping that do not necessarily involve intimate contact, such as volunteering to pick up trash or avoiding gossiping. Finally, some studies have focused on time spent helping, while others have used Likert-type scales to measure extent of helping, or looked at singleoccasion episodes. Studies have also combined these assessments in various ways, with some using domain-specific subscales and others using single scales

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5-item self-report scale (alpha = 0.71) Observers used a comment-by-comment coding strategy to code instances of "Support" (kappa = 0.85), and "Guidance" (kappa = 0.73), and "Guidance" (kappa = 0.73), and "Guidance" (kappa = 0.70) "Interpretation" comments that interpret, analyze, evaluate, redefine, reconceptualize, challenge, summarize, or explain another group member's comments which give concrete, direct, and specific suggestion, or guidance suggestion sugge	Study Authors	Scale	Items/Content	Findings
5-item self-report scale (alpha = 0.71) Observers used a comment-by-comment coding strategy to code instances of "Support" (kappa = 0.85), and "Guidance" (kappa = 0.70) "Interpretation" (kappa = 0.70) "Interpret analyze, evaluate, redefine, reconceptualize, challenge, summarize, or explain another group member somments which give concrete, direct, and specific suggestion, or guidance concrete, or explain, or guidance concrete, direct, and specific suggestions, direction, or guidance	General self-help group	96		
Observers used a comment-by-comment coding strategy to code instances of "Support": behaviors that have the aim or effect of raising or enhancing strategy to code instances of "Support" (kappa = 0.85), and "Cuidance" (kappa = 0.73), and "Cuidance" (kappa = 0.70) and the proving of another group member's comments or behavior and specific suggestion, or guidance suggestion, or guidance	Maton (1988)	5-item self-report scale (alpha = 0.71)	Sample item: "I regularly provide emotional support to group members"	Scores related to higher subjective well-being and group appraisal
about possible courses of action	Roberts et al. (1999)	Observers used a comment-by-comment coding strategy to code instances of "Support" (kappa = 0.85), "Interpretation" (kappa = 0.73), and "Guidance" (kappa = 0.70)	 "Support": behaviors that have the aim or effect of raising or enhancing another group member's status or are nurturing, encouraging, or approving of another group member "Interpretation": comments that interpret, analyze, evaluate, redefine, reconceptualize, challenge, summarize, or explain another group member's comments or behavior "Guidance": comments which give concrete, direct, and specific suggestions, direction, or guidance about possible courses of action 	Scores related to higher psychosocial adjustment on both self-rated and interviewer-rated instruments

Schiff and Bargal (2000)	3-item self-report scale (alpha = 0.85)	 "I contribute my own knowledge and experience to the other members" 	Scores related to higher subjective well-being and satisfaction
		2. "I help the members of the group a lot through my own knowledge and experience" 3. "The knowledge and experience I acquired as a result of my situation contribute to the group at least the same as the knowledge of a professional"	with the group
s with subst	Populations with substance abuse problems		
Magura et al. (2003b) Pagano et al. (2004)	5-item self-report scale (alpha = 0.92) A categorical variable. Individuals were coded as helpers if they indicated sponsoring in AA and/or completing the Twelfth	 "Sharing in meetings gives me self-confidence" "I learn a lot about myself by helping others" "Helping others makes me feel good about myself" "My experiences give hope to other members" "Sharing in meetings helps me deal with my issues" "Have you been an AA sponsor in the last 90 days?" "In the last 90 days, which AA steps did you complete?" 	Scores predicted higher odds of alcohol/drug abstinence at follow-up Helpers were significantly less likely to relapse in the year following treatment
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think about the problems of others?"

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Study Authors	Scale	Items/Content	Findings
Pagano, Zeltner et al. (in press)	Twelve-item self-report scale (alpha = 0.85) measuring helping generally and in AA	 General helping behaviors: helping at home, work, and AA (nine items). Sample items: "Did vou sav something positive to 	Engagement in specific AA service activities was linearly related to length of sobriety:
		someone at [home/work/AA]?," "Did you	general helping was not
		reach out to someone having a hard time at	related to length of sobriety.
		[home/work/AA]?," "Did you bend	Participants rated helping in
		policies to get something you wanted at	AA as very important to
		[home/work/AA]?," and "Did you criticize	staying sober, whereas helping
		or gossip about someone at	at home or work was rated as
		[home/work/AA]?"	contributing little
		 Helping behaviors specific to twelve-step 	
		programs (three items). Items: "Did you	
		have a service commitment at a twelve-step	
		meeting?," "Did you guide someone	
		through any of the twelve steps?," and "Did	
		you sponsor someone in a twelve-step	
		program?"	
Pagano, Philips	3-item self-report scale	1. "During the past week, how often have you	Scores predicted remission from
et al. (2007)	(alphas = 0.84-0.87)	been patient with others when others were	substance use disorder and
		irritating in their actions or words?"	body dysmorphic disorder at
		2. "During the past week, how often have you	follow-up (though the latter
		met the needs of friends or relatives?"	effect was marginally
		3. "During the past week, how often did you	significant)

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Simpson (1988)	Single item	"Doing volunteer work" (wording not	Engagement in volunteer work
		specified)	was higher post- than
			pre-treatment and was
			associated with better
			outcomes on a composite
			measure
Zemore and	26-item self-report scale measuring	 Recovery Helping: helping other alcoholics 	Greater length of sobriety was
Kaskutas (2004)	helping in recovery (alpha = 0.78),	with their recovery (eight items). Sample	related to higher scores on
	life (alpha = 0.62), and the	items (all items begin, "In the past 7 days,	Community Helping and
	community (alpha = 0.60)	how much time did you spend"): "giving	lower scores on Recovery
		more support and encouragement?" and	Helping

program?"

• Life helping: helping others with issues not related to recovery (12 items). Sample items (all items begin, "In the past 7 days, how much time did you spend. ...): "helping someone get a job or find housing?" and "taking care of family members who are

"explaining how to get help in the

• Community Helping: involvement in community projects (six items). Sample items (all items begin, "In the past 7 days, how much time did you spend..."):
"helping out with kids' sports or other after-school activities?" and "volunteering on local, national, or international projects?"

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Study Authors	Scale	Items/Content	Findings
Zemore et al. (2004)	7-item self-report scale (alpha = 0.73)	Sample items (all items begin, "Yesterday, how much time did you spend"): "giving moral support or encouragement?," "sharing experiences about staying clean and sober?," and "sharing experiences about other problems?"	During-treatment scores predicted greater AA/NA involvement post-treatment and lower odds of binge drinking among drinkers
Zemore and Kaskutas (2007)	13-item self-report scale (alphas = 0.70-0.75)	Items included those from Zemore et al. (2004) and six additional items. Sample items (all items begin, "On the last day you attended treatment, how much time did you spend"): "explaining how to get help outside the program?" and "explaining program?"	During-treatment scores predicted greater AA/NA involvement post-treatment, and thus indirectly, higher odds of total abstinence

or items. All the studies we reviewed lack rigorous construct validation for helping measures and typically did not use informants or objective markers of helping. This leads us to question, What are we really measuring? What are we saying when we say that "helping others" helps the helper? Given the diversity of measures used here, the answer to that question is not clear.

It seems important to be more explicit and specific in our definitions and to recognize that not all forms of helping may be helpful to the helper. For example, helping that requires personal contact may especially be helpful, and helping directed toward peers sharing one's problem may be most helpful (as proposed by Riessman, 1965, 1970). Of course, we may not be able to tell what forms of helping are most helpful by simply guessing. Ideally, our definition of helping would be informed by a theoretical model linking helping to psychological mediators presumed to relate to recovery. To this point, we have no such model, although many and various proposals have been offered (e.g., that helping helps the helper by enhancing social status, role-related privileges, self-esteem, social bonding, and sense of purpose and/or by decreasing narcissistic self-focus). Some new empirical work tentatively suggests that helping is related to a decrease in depressive symptoms (Zemore and Pagano, 2007), perhaps because helping promotes integration over isolation. Regardless, it will be important for future investigations to develop theoretically based predictions about how helping affects outcomes, to use those predictions to tightly tailor measures of both predictors and outcomes, and to test theoretical models explicitly by including measures of the proposed mediators. In short, developments in theory and measurement are needed to make progress in research on helping. It would also help to have more studies using objective measures of helping, as items on self-report scales are open to self-presentational biases and can be hard to answer reliably (which may lead to large error terms for those items).

A last, but no less important, issue is that helping others can sometimes, it seems, hurt the helper. This merits some emphasis. Steven Post (2005), in his review of the altruism research, takes special pains (as does Piliavin, 2003) to emphasize that helpers can actually suffer if they are overwhelmed by obligations. This point is supported by the study on Presbyterians conducted by Schwartz et al. (2003) and described in this chapter. Results from that study showed that the relationship between feeling overwhelmed by others' demands and poorer mental health was actually stronger than the relationship between helping others generally and better mental health. Other investigations suggest similar conclusions. For example, recall the associations between helping and fatigue and depression among helpers in the Schwartz and Sendor (1999) multiple sclerosis study. Even more persuasive are data from Musick, Herzog, and House (1999), which suggest a curvilinear trend in the relationship between time spent volunteering and mortality among older adults: Protective effects emerged for moderate volunteering (i.e., volunteering for less than 40 hours per year or for only one organization), but volunteerism at higher levels was no better than not volunteering at all.

Poorer outcomes at higher levels of helping may result from role strain or the cultivation of negative coping styles (e.g., distraction instead of active confrontation and coping with one's own problems). Relatedly, psychologists Fritz and Helgeson (1998) draw an important distinction between communion (a positive, caring orientation toward others) and unmitigated communion (the subjugation of one's needs to the needs of others, involving helping at one's own expense). In four studies, they support conclusions that although these forms of communion are correlated, unmitigated communion is distinct from communion and uniquely correlated with negative views of oneself, reliance on others for self-evaluation, and psychological distress. It is not yet clear how much helping is too much or what the causal relations involving over-helping are, but it is certain that one can help too much. Reciprocally, of course, helping (if coming from an unskilled, ill-informed, or ill-intentioned helper) can also hurt the intended target, and this has been recognized in the psychotherapy literature for some time (e.g., Caplan & Caplan, 2001). All this means that helping is not an *unmitigated good*.

6. Implications

We do not ordinarily think of helping others as a way of solving our problems. We tend to think of "getting help," if we think of involving others at all. Despite some limitations, the research reviewed here suggests, nevertheless, that individuals may help themselves by helping others in AA and other mutual help groups, as long as they do not become superhelpers. Helping may even be an important mechanism of action for such groups. This work fits nicely with other work showing a role for peers in recovery, and specifically with research suggesting benefits for involvement in sober recreation during treatment (Moos, Finney, & Cronkite, 1990; Zemore & Kaskutas, in press), sober social networks (Bond et al., 2003; Kaskutas et al., 2002), and general peer support (Laudet, Cleland, Magura, Vogel & Knight, 2004; Laudet, Magura, Vogel, & Knight, 2000; Magura et al., 2003a).

Our conclusions imply that treatment programs may benefit from a stronger emphasis on peer helping. To their credit, interventions aiming to increase peer helping may be more palatable to treatment programs and more palatable on a general ethical basis than interventions targeting spirituality (the focus of other chapters in this section), since helping is something clients can do without committing to a spiritual orientation or practice. However, programs and researchers might want to keep in mind that newly christened, naïve, or ill-intentioned helpers might end up harming, rather than helping, their targets, so effects on targets should always be considered and assessed. Helpers who may be overwhelmed or overextended should also be closely monitored and redirected as necessary.

Research on how to facilitate helping is just emerging, so we are not well positioned to say how helping could be facilitated within treatment programs. We do know, from both qualitative and quantitative work, that peer helping is relatively more common among social model, residential programs than typical day hospital programs, probably as a result of philosophical differences (Borkman & Kaskutas, 2000; Zemore & Kaskutas, in press). So, observing how social model programs facilitate helping might be productive. Recent data from Project MATCH have also indicated that helping in AA may be related to higher abstinence self-efficacy and purpose in life (in addition to greater length of sobriety and higher religiosity/spirituality; Zemore and Pagano, 2007). This suggests that working to enhance self-efficacy and sense of purpose may help bring people to a place where they are capable of helping others. Good news from that same analysis was that helping was equally likely among men and women, and did not differ by race, age, or other demographic characteristics. This implies that no special demographic credentials are required to help. It may help to have greater confidence, conviction, and time sober, but (as AA itself suggests) all that is really necessary to help others in AA is survival from alcohol problems—and continued sobriety. One's experiences as an alcoholic may have been a burden of the worst kind to the sufferer, but in recovery they can become an invaluable gift to those still suffering. As a result, one's troubled past may become a limitless source of succor for the future.

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Issues in Measuring Spirituality and Religiousness in Alcohol Research

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Measuring spirituality and religiousness (SR) with any degree of psychometric rigor raises a number of critical issues. The most obvious is conceptual, given the range of definitions and dimensions of these concepts in popular and academic use. This chapter will review these issues including the definition and operationalization of spirituality and religion, dimensions, and related measurement issues. We will then briefly describe some measures used frequently in alcohol research as well as those for which norms are available. Throughout we will emphasize the necessity of clarifying one's assumptions and definitions and taking into account the perspectives on SR of the population of interest, recognizing that individuals interpret their life experiences within the context of their understandings of SR.

1. Definitions of Spirituality and Religiousness

There is at present no consensus in the field on definitions of spirituality and religiousness (SR). We will not attempt to present single, authoritative definitions of SR, but instead describe the implications of different conceptions

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for measuring SR. Below we provide examples of historical and current definitions of SR from the academic literature. The examples are not exhaustive, but cover the main themes present in most such definitions. As the list indicates, both spirituality and religiousness are concerned with life's existential meaning, sacred or divine matters, non-material realities, and efforts to connect to these phenomena and to be a better person. Note that many definitions equate spirituality with individual experiences, values, or behaviors, whereas religion is often defined by the beliefs and practices of a specific group (Spilka, Hood, Hunsberger, & Gorsuch, 2003; Zinnbauer & Pargament, 2005).

1.1. Some Definitions of Spirituality and Religion/Religiousness

Spirituality:

- The search for existential meaning (Doyle, 1992, cited in Zinnbauer & Pargament, 2005, p. 23)
- A focus on the transcendent that may or may not be rooted in an organized church or formal creed (Plante & Sherman, 2001, p. 6)
- Caring for others, seeking goodness and truth, transcendence, and forgiveness/cooperation/peacefulness (Rayburn, 2004, p. 53)
- A personal or group search for the sacred (Zinnbauer & Pargament, 2005, p. 35)
- An individual's feelings, thoughts, experiences, and behaviors that
 arise from a search for the sacred, that is for a divine being, ultimate
 reality, transcendent truth, or existential meaning, and for a connection to those phenomena (Robinson, Cranford, Webb, & Brower,
 2007a, p. 282)

Religion/Religiousness:

- The feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine (James, 1902, cited in Zinnbauer & Pargament, 2005, p. 23).
- A system of beliefs in a divine or superhuman power and practices of worship or other rituals directed toward such a power (Argyle & Beit-Hallahmi, 1975, p. 1).
- A personal or group search for the sacred that unfolds within a traditional sacred context (Zinnbauer & Pargament, 2005, p. 35).
- The person's involvement with a religious tradition and institution (Spilka et al., 2003, p. 9).
- Religion...is the social context of that [spiritual] search and connection, that is to social institutions, rituals, and prescribed behaviors, tied to a particular cultural context. Religiousness then would

encompass an individual's feelings, thoughts, experiences, and behaviors that reflect a particular religious tradition (Robinson et al., 2007, p. 282).

1.2. Distinguishing Between Spirituality and Religiousness

Historically, SR have been examined at both the individual and the group levels. In fact, they can both be approached from many levels of analysis (e.g., biological, intrapersonal, interpersonal), but most definitions of SR focus on only one level, such as individual experience or group beliefs (Zinnbauer & Pargament, 2005). Several authors have argued that equating spirituality with the personal and religion with the group is part of an unfortunate tendency to polarize the constructs, casting spirituality as healthy, liberating, and dynamic, against religion, which is painted as restricting, static, and unhealthy (Spilka et al., 2003; Zinnbauer & Pargament, 2005). Not only is such a caricature inaccurate, but it can obscure the fact that SR can be associated with toxic as well as positive outcomes (Pargament, 2002).

Nevertheless, both in common usage and in research contexts, the terms "religion," "religiosity," and "religiousness" have usually included involvement and/or beliefs in a specific faith tradition, even when the user includes in his/her definition broader concepts that others may include in the term "spiritual." The opposite usage appears rarely; for example, few include church attendance in their definition of spirituality, although they might include public or private prayer. At minimum, SR are probably best seen as related and potentially overlapping constructs, rather than as independent and opposite. Both typically involve relationships with the sacred (i.e., something considered holy or worthy of veneration) or transcendent (i.e., meanings, truths, goals, or values that are larger and more important and enduring than the individual).

Several authors have cited the growing number of Americans who identify themselves as "spiritual" (e.g., Fuller, 2001; Roof, 1993), often attributing this trend to baby-boomers and the New Age movement (e.g., Lesser, 1999). A 2003 poll by Newsweek and Beliefnet (http://www.beliefnet.com/story/173/story_17353_1.html) indicated that 79% of US adults describe themselves as spiritual, but only 64% describe themselves as religious.

Among samples of alcoholics, the distinction between SR appears to be even sharper than in national samples. For example, Robinson and colleagues (Robinson, Brower, & Kurtz, 2003b; Robinson et al., 2007a) found that alcoholics are less likely than the general population to have a religious preference. Among alcoholics entering treatment, 32% had no religious preference vs. 14% in a national sample (Robinson et al., 2003b). When asked if spirituality and religion were the same thing, 75% reported that they were different. Only about a third (35%) were involved in a religious congregation. Forty-three percent rated themselves as very or moderately religious, whereas 76% rated themselves as very or moderately spiritual. In addition, a larger proportion of

alcoholics (19%) reported not believing in God or did not know if they believe in God than in national samples, where the proportion is typically 5% (Gallup & Lindsay, 1999). These data reinforce the conclusions of Gorsuch (1995) and others (Forliti & Benson, 1986; Fowler, 1993) that alcoholics are more likely to be religiously alienated than the general population. There is some evidence, however, that alcoholics in recovery perceive themselves as more spiritual than does a national sample (Robinson et al., 2003b). Thus, while recovering alcoholics are not necessarily spiritually alienated, they may be alienated from religious institutions. Given these trends in national data and in samples of alcoholics of a distinction between spirituality and religiousness, it would make sense for researchers to distinguish between them. Ignoring the distinction will bias results toward an underestimate of involvement in spirituality in non-religious respondents.

1.3. Dimensions of Spirituality and Religiousness

Given that hundreds of measures of SR exist, various attempts have been made to rationally or empirically group measures into basic dimensions of SR. Conceptually identified dimensions include religious affiliation, history, participation, private practices, positive and negative SR social support, positive and negative SR coping, beliefs and values, commitment, well-being, development/maturity, experiences, meaning, quest/search, forgiveness, subjective SR, and mysticism (Fetzer/NIA, 1999; Hill, 2005; Koenig, McCollough, & Larson, 2001). A commonly used measure, the Brief Multidimensional Measure of Religiousness and Spirituality (BMMRS, Fetzer/NIA, 1999) includes scales representing twelve such dimensions. The BMMRS items were included in the 1998 General Social Survey (GSS), and item and scale means from this national sample are available (Fetzer/NIA, 1999; Idler et al., 2003).

With proposals of 20 or more conceptually based SR dimensions, additional means of organizing measures would be helpful. Following Gorsuch (1984), Tsang and McCullough (2003) proposed that SR can be hierarchically represented as having a general or "dispositional" (p. 349) level and more specific operational or functional levels. The general level refers to trait-like overall levels of SR, while the functional subdomains reflect more specific ways that an individual can be religious and/or spiritual.

In addition to attempts to conceptually group measures, researchers have employed factor analytic procedures to identify dimensions of SR. Most of the early work found 2–4 factors (Meadow & Kahoe, 1984). More recent studies including measures from the BMMRS have identified 5–7 factors (Johnson, Sheets, & Kristeller, in press a; Kendler et al., 2003; Neff, 2006; Stewart & Koeske, 2006). While the factors that emerge are obviously dependent on the measures included, these studies suggest which dimensions are represented in current measures. Three studies identified a general factor that included both public and private religiousness (Johnson et al., in press; MacDonald, 2000; Stewart & Koeske, 2006), while in Kendler etal. (2003) and Neff (2006), public and private

religiousness were separate factors. Other constructs represented in two or more of these studies include SR struggle, SR well-being (including meaning in life), and forgiveness.

Two studies also provided information on how the empirical dimensions were related to alcohol use or problems. Among participants from a national twin registry, Kendler et al. (2003) found that five of their seven factors (general religiosity, social religiosity, belief that God is involved in people's lives, belief that God judges people for wrong behavior, and thankfulness) were associated with lower odds of having an alcohol-dependence diagnosis, even after controlling for age, gender, and years of education. Johnson et al. (in press) found a 5-factor solution using 29 measures of SR in large college student samples. In simultaneous regressions controlling for gender and personality, SR involvement (i.e., general SR) was inversely related to alcohol consumption. In addition, SR struggle was positively related, and search for meaning inversely related to frequency of past year alcohol problems.

2. Other Measurement Issues

2.1. Measuring Single vs. Multiple Dimensions

Prior to the past decade, much research on SR and alcohol use utilized single item measures (e.g., frequency of religious service attendance, importance of SR). As noted above, several authors have suggested that SR, at least in the predominantly Christian US populations on which most SR measures have been developed, can often be represented as a global trait-like construct (i.e., general religiousness; Gorsuch, 1984; Hill, 2005), which may adequately represent general religiousness in some contexts and for some research questions. However, as indicated above, SR can also be represented by multiple sub-factors or dimensions (Tsang & McCullough, 2003; Hill, 2005) which may provide more accurate information with non-normative populations (e.g., alcoholics or other groups whose SR are not represented by the dominant culture).

These functional domains will be inter-correlated to different degrees in different populations. For example, BMMRS public religiousness (e.g., religious service attendance, other activities at a place of worship) and private religious practices (e.g., praying or meditating outside a place of worship, reading religious texts) are highly inter-correlated (from 0.62 in Idler et al., 2003 to 0.74 in Johnson et al., in press). Other BMMRS scales, especially daily spiritual experiences and positive religious coping, showed even higher inter-correlations. Not surprisingly, in factor analyses of the BMMRS in the GSS sample, public and private practices loaded on one factor (Idler et al., 2003). However, Idler et al. (2003) maintained public and private SR as separate scales, given that they may show differential change at various life transitions (e.g., entering college, retired elderly who develop mobility impairments). In studying samples of alcoholics in recovery who eschew formal religious activities but are likely to use private

prayer and meditation, it would be wise to distinguish between public and private SR.

Given such high inter-correlations across dimensions of SR, Koenig et al. (2001) cautioned against using multiple measures of SR in the same regression due to potential problems with multicollinearity. However, some research questions may make separate predictions for different dimensions (e.g., public religiousness and private religiousness might be predicted to have different correlates). In addition, if religiousness can be meaningfully represented as a general dimension and since some conceptually separate dimensions are highly inter-correlated, researchers who only measure one dimension of SR will be unable to ascertain if any observed effects are due to the dimension they intended to measure or to a third variable (either general religiousness or some other dimension that is correlated with the dimension measured). In such situations, researchers should (1) carefully formulate their research questions and hypotheses to specify what dimension or dimensions of SR they are interested in (e.g., general religiousness or spirituality vs. specific functional dimensions); (2) examine the inter-relationships among measures by computing inter-correlations and perhaps using factor analytic techniques; (3) create composite scores or latent variables when measures are highly inter-related; and (4) examine and report multicollinearity statistics if using multiple SR dimensions in the same analysis.

2.2. Reliance on Self-Report

Virtually all commonly used measures of SR are based on verbal self-report. With regard to beliefs or private experiences, self-report may be our only possible source of information on the phenomena of interest. However, correlations with other constructs could be due in part to shared method variance. Self-report measures are vulnerable to biases due to social desirability, participant expectations, and/or general affect/satisfaction with life. Such biases could even affect the strength of the observed relationships between SR and health outcomes (e.g., if the respondent feels that both frequent church attendance and infrequent alcohol use are socially desirable or if high levels of well-being inflate ratings of how positive one's SR experiences are).

Hill (2005) noted that attempts are underway to develop measures of SR using picture stimuli or based on reaction time or physiological measures, but at the time of this writing published information regarding them is not available. Several methodologies used to assess alcohol use patterns could easily be modified to assess different aspects of SR, including retrospective calendar-based approaches such as the Time-Line Follow-Back (Sobell & Sobell 1995) and prospective diary or momentary assessment procedures (Neal et al., 2006; Tennen, Affleck, Armeli, & Carney, 2000), to more accurately determine the frequency of specific SR experiences or behaviors, such as prayer, meditation, or attendance at religious services.

2.3. Potential Confounding with Third Variables

Measures of SR are known to be related to many other constructs, such as years of education, gender, age, race/ethnicity, personality traits, and positive and negative affect (Spilka et al., 2003). All of these constructs have also been shown to relate to alcohol use and problems. Thus, relationships between SR and alcohol measures could be due in part to confounding with a third variable. While a few studies have examined additional variables as potential mediators or moderators or have controlled for them (e.g., Johnson, Sheets, & Kristeller, in press; Robinson et al., 2007), many studies have failed to measure or control for confounding or other relationships among the variables.

2.4. Cultural Issues

Most existing definitions, dimensions, and measures of SR reflect a Western, Judeo-Christian (often Protestant Christian) perspective. There are exceptions to this (Ho & Ho, 2007; Tarkeshwar, Pargament, & Mahoney, 2003), but such efforts are few and far between, which limits the precision of our attempts to measure SR in individuals or groups from non-Judeo-Christian backgrounds, as well as individuals (such as some alcoholics) who consider themselves to be spiritual but not religious. Even among Christians, SR variables may manifest themselves differently or have different effects within different ethnicities, regions, and denominations in the United States. The greater religiosity of African-Americans than Euro-Americans is widely recognized (see Taylor, Mattis, & Chatters, 1999). The recent study from Baylor University (Baylor Institute for Studies of Religion, 2006) described marked regional differences in perceptions of God and denominational affiliations. Regional differences have also been found in the proportion of the general population who report having had a "born-again" experience (Smith, 2006). Patock-Peckham, Hutchinson, Cheong, and Nagoshi (1998) found that Intrinsic Religiousness (see below) was positively related to alcohol problems in Catholic college students, but inversely related in Protestants. Such findings emphasize the need to consider the population to be studied in choosing one's measures.

Given the methodological issues described above, researchers should articulate their definitions carefully as they develop hypotheses, select measures, and report findings, making their implicit assumptions about SR constructs explicit. Only then will we understand if one researcher's work on the role of spirituality in alcoholism contradicts or confirms another's.

3. Measures of Spirituality and Religiousness

3.1. Resources

Hill and Hood (1999) provided a comprehensive review of more than 120 measures of religiousness, including their reliability and validity and most of

the instruments reviewed. While a number of additional measures have been developed since that work was published (see Hill, 2005), the Hill and Hood compendium remains indispensable for researchers interested in measuring SR. Several more recent review chapters and articles are also quite helpful (Hill, 2005; Koenig et al., 2001, Chapter 33; Slater, Hall, & Edwards, 2001; Tsang & McCullough, 2003). The manual for the BMMRS (Fetzer/NIA, 1999; Idler et al., 2003) is very useful, including measures of each dimension as well as the BMMRS items and norms. Given the vast number of measures available, we have elected to focus on those for which some normative data are available, such as the BMMRS, and/or measures that have been used in studies on alcohol or other drugs.

3.2. Measures of Religiousness

3.2.1. Common Constructs and Measures

As noted above, early research on alcohol and SR tended to use single item measures of church attendance, frequency of prayer, or self-rated importance of religion. The BMMRS includes multi-item measures of both public and private religiousness and two global items rating one's spirituality and one's religiousness (Fetzer/NIA, 1999; Idler et al., 2003). Perhaps the most frequently used constructs in SR research (Spilka et al., 2003) have been Allport's Intrinsic and Extrinsic Religiousness (I and E; Allport, 1950). Someone who is intrinsically religious has internalized the values of his/her faith and practices religion as an end in itself, rather than as a means to some other end. In contrast, extrinsic religiousness is religious involvement for the sake of interpersonal support, status, relief from distress, or some other external reward. Allport initially conceptualized these as opposite dimensions, but later research typically demonstrated that I and E are orthogonal (Spilka et al., 2003). Gorsuch and McPherson (1989) provided a measure of I and E that is usable across various age groups, as well as single items to capture I and two types of E (personal and social benefits).

Public, private, and intrinsic religiousness, as well as ratings of the importance of religion, are consistently inversely related to measures of alcohol and other drug use and problems. While no meta-analysis of the numerous studies including these variables has been published, correlations with alcohol use and problems are generally modest (e.g., -0.15 to -0.25), although stronger negative relationships between SR and use of illegal drugs seem to be common.

Specific religions differ widely in their attitudes toward and norms regarding the use of alcohol. Thus, it may sometimes be useful to assess denominational affiliation or religious preference. Ellison (1999) provides a list of categories. In many situations it may be enough to use broad classifications such as atheist, agnostic, Catholic, Protestant, Jewish, Muslim, Hindu, or Buddhist. However, numerous specific subgroups are possible. Diverse beliefs regarding alcohol exist within broader divisions. Among Protestants, Baptists and Pentecostals have much stronger prohibitions against any alcohol use than mainline

Protestant denominations. Catholics, Jews, and some Lutherans use alcohol in religious sacraments, while Muslims and Latter Day Saints prohibit any use of a variety of intoxicating substances.

3.2.2. Religious Beliefs and Behaviors

Used by a number of alcohol researchers, the Religious Background and Behavior scale (RBB; Connors, Tonigan, & Miller, 1996) was developed for use in Project MATCH and contains 13 items. The first asks participants to select one of the following terms to best describe themselves: atheist, agnostic, unsure, spiritual, or religious, with definitions provided. While worded categorically, the item is scored from 0 (atheist) to 4 (religious). The remaining items ask about past year frequency and lifetime occurrence of thinking about or believing in God, praying, meditating, attending worship services, reading/studying holy writings, and having direct experiences of God. The prayer and meditation items do not distinguish between behaviors occurring in a religious service vs. outside of such a context, a necessary distinction if one is interested in distinguishing between private and public religiousness. Another potential limitation of the RBB is that not all participants may agree with the definitions used in item 1, particularly defining spiritual as "I believe in God, but I'm not religious." It is hard to say how individuals who consider themselves to be both spiritual and religious and those who do not believe in God, but believe spiritual matters are important to them might respond to this item. If recovering alcoholics consider themselves spiritual but do not believe in God (Robinson, Brower, & Kurtz, 2003a), none of the options fit them. In Project MATCH, baseline scores on the formal practices sub-scale of the RBB predicted treatment outcome (Connors, Tonigan, & Miller, 2001). However, other researchers did not find the RBB to be predictive of treatment outcome (Robinson et al., 2007a; Kaskutas, Turk, Bond, & Weisner, 2003).

The BMMRS (Fetzer/NIA, 1999; Idler et al., 2003) offers alternative measures of beliefs, practices, and perceptions of one's self as spiritual and religious that maintains the distinction between these dimensions. The data from the BMMRS are more interpretable and less subject to bias due to respondents who do not fit neatly into the RBB belief categories.

3.2.3. Positive Religious Coping

SR offer many avenues for coping with life problems and stress, including finding meaning in stressful situations, seeking control or comfort, enhancing SR growth, and/or facilitating life transformation (Pargament, Koenig, & Perez, 2000). Pargament (1997, 1999b) has conducted extensive programmatic research on how individuals use SR to cope with various forms of life stress. SR coping can function as both a deterrent to stress (i.e., being associated with lower levels of life stress) or a buffer against harmful responses to stress (i.e., moderating the relationship between stressors and stress responses). However, some forms of SR coping are more effective than others, and some SR coping is even associated

with pathological outcomes. Such "negative religious coping" will be discussed below in Section 3.4. Here we will focus on positive religious coping.

The most comprehensive measure of SR coping is Pargament et al.'s (2000; Pargament, 1999b) RCOPE, which contains conceptually and empirically distinct sub-scales reflecting different methods and goals of religious coping. Many of the items on the RCOPE refer to God, but relatively few sub-scales presume or require that the reader be affiliated with an organized religious group. Several sub-scales (i.e., seeking spiritual connection, religious helping, religious conversion) consist largely of items that are appropriate even for individuals who would identify themselves as spiritual but not religious. The RCOPE is quite long; however, 3- and 5-item versions of each sub-scale are available (Pargament, Smith, Koenig, & Perez, 1998; Pargament, 1999b). The BMMRS includes a 6-item version that measures general levels of positive and negative religious coping (Pargament, 1999b).

Positive religious coping is consistently inversely related to negative well-being and positively related to positive well-being (Ano & Vasconcelles, 2005). It also moderates the relationship between negative life events and depression (Smith, McCullough, and Poll, 2003). To date, relatively little research has examined how religious coping relates to alcohol use. Robinson et al. (2007) found that positive religious coping increased in a treatment-seeking sample of alcoholics, but that increase from baseline was not associated with less drinking at 6 months.

3.2.4. Positive Religious Social Support

In addition to an individual's attempts to use his/her personal SR to cope with life stress, religious involvement has been suggested to protect against negative affect and enhance health by offering social support (Koenig et al., 2001). The BMMRS contains items related to positive social support from one's religious congregation (Krause, 1999). To date, relatively little research has examined how religious social support relates to alcohol use, but it seems a promising construct for future study. In the BMMRS, congregational social support showed much less inter-correlation with other measures than did public or private practices, religious coping, and daily spiritual experiences. In both African-American and white college students, Maddux (2007) found that religious support was a more consistent predictor of alcohol use than was religious coping, while coping more consistently predicted well-being.

3.3. Measures of Spiritual and Religious Experience

Since James' work on religious experiences (1902), many scholars have investigated SR experiences (see Spilka et al., 2003). A number of published reports describe their importance among alcoholics, particularly among those in recovery (Robinson et al., 2007a,b; Robinson et al., 2003a; Kaskutas et al., 2003). Anecdotal reports of the importance of such experiences characterize

much of the AA literature (Kurtz, 1979). The final step of AA proposes that members will have a spiritual awakening as a consequence of carrying out the other steps (Alcoholics Anonymous World Services, 2007).

Transformative events are typically assessed with a single question. In the BMMRS, it is phrased as "Have you ever had a spiritual or religious experience that changed your life?" In the 1998 GSS, 39% of the national sample reported having had such an experience. Robinson et al. (2003b) found that 54% of their sample of alcoholics entering treatment responded positively to this question. In a later study, Robinson et al. (2007b) found that alcoholics from a controlled drinking treatment program reported frequencies of such experiences similar to those in the GSS sample, whereas 58% of alcoholics from a VA program had such experiences. Having had such experiences between the baseline and 6-month follow-up interview was associated with less drinking (Robinson et al., 2007b).

Transformative experiences have also been measured by asking about significant gains or losses in faith, asking if the individual has experienced a spiritual awakening (especially in twelve-step participants), and/or (at least for some Christian populations) asking if the respondent has had a "born-again experience." Kaskutas et al. (2003) and Robinson et al. (2007) have carried out longitudinal research on transformative experiences in alcoholics. It would be valuable to determine the nature of these experiences and the specific ways that they are life changing. Transformation could also be studied not by asking if one has experienced it, but by following individuals over time and measuring changes in life goals or SR constructs. Such research should be less subject to self-report bias than current efforts.

At the other end of the spectrum of SR experiences are more mundane, day-to-day experiences of transcendence, awe, strength, peace, comfort, and connection. The 16-item Daily Spiritual Experience Scale (DSES; Underwood & Teresi, 2002) is intended to capture the frequency of such experiences independent of a particular religion or set of beliefs. Items include experiences of connection to the divine and to all of life, a sense of comfort, strength, and guidance from the divine, and feeling loved and supported by God. Many items assume a belief in God, as they refer to a transcendent deity by that name. The introduction to the DSES encourages respondents who are not comfortable with the word God to "substitute another idea which calls to mind the divine or holy for you."

Underwood and Teresi (2002) developed and validated the DSES in two samples. In addition, the 6-item DSES was used in the 1998 GSS as part of the BMMRS (Fetzer/NIA, 1999). While internal consistency of both the short and long forms are very good (Robinson et al., 2007a; Underwood & Teresi, 2002; Zemore & Kaskutas, 2004), both forms have correlations in the 0.7–0.8 range with other SR variables, including positive religious coping, private religiousness, and intrinsic religiousness (Idler et al., 2003; Johnson et al., in press; Sterling et al., 2006).

Both the full 16-item and the brief 6-item DSES have been used in a number of studies on SR and alcohol use. Given its high inter-correlation with other

scales, several studies have included the DSES in SR composites (Johnson et al., 2008, in press; Sterling et al., 2006). However, studies examining DSES scores in isolation suggest that it may be useful on its own as well. For example, Zemore and Kaskutas (2003) reported that DSES scores were positively related to AA involvement and achievements in step-work. Robinson et al. (2003b) found that alcoholics who had reported a life-changing spiritual experience scored higher on 3 of 6 brief DSES items. Increases in DSES scores over time have been found to be positively related to treatment outcome in alcoholics (Robinson et al., 2007a) and cocaine and heroin users (Avants, Beitel, & Margolin, 2005). Given these findings and the high inter-correlations between DSES and other SR measures, the DSES may prove most useful in longitudinal studies where change scores (which may be less vulnerable to multicollinearity problems) can be computed.

3.4. Measures of Spiritual and Religious Struggles

While positive SR experiences and potential protective effects of SR have received most of the attention in research, there has been increased interest in the concept of SR struggle or strain (Pargament, Murray-Swank, Magyar, & Ano, 2005). Pargament et al. (2005) defined this as "efforts to conserve or transform a spirituality that has been threatened or harmed" (p. 247). Such struggles may be interpersonal (e.g., between a person and his/her congregation), intrapsychic (e.g., religious doubts), or involve one's relationship with whatever one conceives of as the divine (e.g., anger at God, feeling punished by God). Predictors of SR struggle include experiencing negative life events or trauma, particularly if within a religious context, neuroticism, lack of social support, and family problems (Pargament et al., 2005). Pargament et al. (2005) also noted that struggles could be part of a developmental process of spiritual growth, but there is less data regarding this hypothesis.

3.4.1. Interpersonal struggles

Two items related to negative religious social support, reflecting interpersonal SR struggle, are included in the BMMRS. Krause (1999) presented a longer set of such items. Such interpersonal struggles are positively related to depressive symptoms in adolescents (Pearce, Little, & Perez, 2003) and inversely related to well-being and satisfaction with physical health in adult churchgoers (Krause, Ellison, & Wulff, 1998; Krause & Wulff, 2005).

Interpersonal SR struggles might be experienced by members of religious groups who violate their faith's norms about alcohol. Authors from several faiths have suggested that stigma and interpersonal conflict could interfere with drinkers from these faiths seeking treatment (Spiegel & Kravitz, 2001; Stoltzfus, 2006; Suliman, 1983). Relative to the general population, both rates of abstinence from alcohol and rates of problematic alcohol use are higher among members of some faiths that ban all alcohol use (Booth & Martin, 1998), possibly due in part to punishing reactions from other members of that faith. Despite these

observations, little empirical work yet exists regarding interpersonal SR struggles and alcohol problems.

3.4.2. Intrapsychic and Divine Struggles

Pargament's negative religious coping scale (a 3-item version is in the BMMRS and longer versions are published elsewhere; Pargament, 1999b; Pargament et al., 1998) is probably the most commonly used measure of intrapsychic and divine SR struggles. The scale includes items reflecting religious doubts, anger at God, and the experience of feeling abandoned by God. A meta-analysis by Ano and Vasconcelles (2005) found that negative religious coping was consistently associated with negative affect (cumulative effect size = 0.22), but generally unrelated to positive affect. Exline, Yali, and Sanderson (2000) developed a measure of "religious strain" that included factors labeled Alienation from God (i.e., divine struggles), Religious Fear and Guilt (i.e., intrapsychic struggles), and Religious Rifts (i.e., interpersonal struggles). A composite of these sub-scales was positively related to scores on the Beck Depression Inventory, even after controlling for general religiousness. While this measure shows promise, unlike the BMMRS scales it has not yet been used in alcohol research.

Several authors have reported the clinical observation that punitive religious experiences or belief in a vengeful god are associated with later alcohol problems (Doweiko, 1999; Gorsuch, 1995). Such experiences could contribute to SR struggles. In cross-sectional path models using a college student sample, SR struggle as measured by the negative religious coping scale had both direct and indirect (via coping motives for drinking) relationships with alcohol problems (Johnson et al., 2008). However, in a cross-lagged panel design over a 2-year period, SR struggle did not predict subsequent alcohol problems, but alcohol problems did predict subsequent SR struggle (Johnson, Sheets, & Kristeller, 2007). These results suggest that SR struggle may be a consequence rather than a cause of alcohol problems.

3.5. Measures of Meaning

3.5.1. The Meaning of Meaning

Meaning or purpose in life has been found repeatedly to be associated with alcohol problems and with recovery. Although having a sense of meaning in life is included in many definitions of spirituality, there is little agreement on what this means (Park, 2005). The terms meaning, purpose, and significance are often used interchangeably (Yalom, 1980), with some authors defining meaning in terms of a purpose or goal toward which life is directed (Emmons, 1999; Klinger, 1977). There is also no consensus on how meaning in life is achieved. Some definitions of meaning, such as equating meaning with goals (Klinger, 1977), by their nature define how one finds meaning. With some exceptions, existential authors have argued that life is inherently meaningless and that

each individual must create his/her own meaning through altruistic acts, dedication to a cause, creative acts, self-actualization, self-transcendence, or even hedonism (Yalom, 1980). In contrast, religious frameworks tend to offer what Yalom (1980) referred to as "cosmic meaning," a sense of ultimate purpose that is inherent in the universe and, in some faiths, ordained by God.

3.5.2. Measuring Meaning

A number of authors distinguish between having a sense of meaning and the process or motive of searching for meaning (i.e., meaning seeking; Pargament, 1999a; Steger, Frazier, Oishi, & Kaler, 2006). Several measures of having a sense of meaning or purpose have been developed, but much less attention has been devoted to meaning seeking (Steger et al., 2006). The most frequently used measure has been the Purpose in Life Test (PIL, Crumbaugh, 1968), but other measures have also been utilized (see Stegers et al., 2006). In addition, several general measures of spirituality, including measures of spiritual well-being, include factors or items that attempt to measure the experience of life as meaningful (Bufford, Paloutzian, & Ellison, 1991; Peterman, Fitchett, Brady, Hernandez, & Cella, 2002). Scales that attempt to measure a search for meaning include the Seeking of Noetic Goals scale (SONG, Crumbaugh, 1977) and the Life Attitude Profile (Recker & Peacock, 1981).

While the PIL and SONG have both been used in a number of alcohol studies, these and other meaning measures have been heavily criticized on a variety of grounds (Pargament, 1999a; Stegers et al., 2006; Yalom, 1980). The most serious critique of measures of meaning and spiritual well-being is that they are highly confounded with measures of affect and well-being (Koenig et al., 2001; Stegers et al., 2006). Pargament (1999a) also noted that most measures of meaning have not identified whether meaning is derived from SR or from secular sources. While this may be appropriate in some situations, for certain questions researchers may be specifically interested in meaning connected to SR involvement. Pargament (1999a) offered a preliminary measure of meaning derived from SR.

Steger et al. (2006) created the Meaning in Life Questionnaire (MLQ) explicitly to address limitations noted in previous measures of meaning. The MLQ contains sub-scales for the presence of meaning (MLQ-P) and engagement in a search for meaning (MLQ-S). The scale is brief (10 items total) and has lower correlations with measures of well-being than other meaning in life measures. It is yet to be used in alcohol research, but offers a clear improvement over existing measures of meaning.

3.5.3. Meaning and Meaning Seeking in Alcohol Research

Alcohol and drug use are consistently associated with lower scores on the PIL (Minehan, Newcomb, & Galaif, 2000; Newcomb & Harlow, 1986; Nicholson et al., 1994; Padelford, 1974) and PIL scale scores increase over the course of successful recovery (Carroll, 1993; Robinson et al., 2007). In Project MATCH,

baseline meaning seeking, as measured by a composite of scores on the PIL and SONG, did not mediate or moderate the relationship between twelve-step involvement and treatment outcome (Tonigan, Miller, & Connors, 2001). However, Robinson et al. (2007) reported that increases in PIL scores over 6 months predicted positive treatment outcome.

Given the above noted problems with the PIL and SONG, as well as the fact that few of the above studies attempted to control for confounding, it is difficult to interpret the meaning of findings regarding alcohol and meaning. Are the results due to changes in respondents' sense of meaning or value in their lives or to some unmeasured third variable such as depression? We recommend that future work should (1) specify the definitions of meaning being employed (e.g., meaning as given vs. constructed, meaning as pursuit of goals, meaning as unique to each individual); (2) employ the Steger et al. (2006) measure, perhaps in combination with older measures; (3) measure affect, well-being, and/or clinical states separately from meaning; and (4) examine the relationship between these constructs and meaning.

4. Conclusions

The diverse definitions and hundreds of measures available make research on SR challenging, but the central importance of these constructs in human life, the consistent inverse relationships between SR and addiction, and the pivotal role of SR in some approaches to addiction treatment and in recovery argue that such research should continue and even expand in scope. As noted above, researchers should pay careful attention to the definitions of SR they are working with and be able to articulate how they have operationalized these concepts and which dimensions of SR are of concern. In the interest of efficiency, researchers may opt for global measures of SR, yet these may only capture some dimensions of SR or may not be a valid indicator of the concept of interest. A number of measures titled with the words spirituality may, upon item inspection, prove to be measures of religiousness; measures of spiritual experience may be an attempt to measure spiritual development. Basic content validity is an important consideration in the measurement of SR.

In some situations one or a few global measures of SR may be indicated: either composites created as sums of *z*-scores or latent variables created using Structural Equation Modeling. In other situations, examining larger numbers of specific functional SR domains may be more useful. Again, researchers need to be guided by theoretical models and populations of interest as well as the observed relationships among the variables under study.

Relatively little attention has been given to understanding the definitions of SR held by alcoholics in or out of treatment, so this should perhaps be a focus of future work. Researchers should also bear in mind that different SR constructs may vary in their relationships to alcohol use and problems in different populations, depending on ethnicity, gender, age, as well as the presence or

absence of alcohol problems. In a population of elderly African-Americans, congregational support would be a vital dimension to any study of SR, but with middle-aged white alcoholics, SR dimensions less connected to religious beliefs and practices might be more valuable. Some SR constructs, such as SR distress and struggles, actually show positive relationships with alcohol problems, although the direction of causality remains unclear. Lastly, research in non-US and non-Christian populations is also clearly needed.

While it was not possible in the space available to review every measure that might be of interest in alcohol research, we have attempted to provide resources and information about some of the more widely used measures and constructs. Other constructs worthy of investigation in relation to alcohol use include (but are not limited to) forgiveness (McCullough, Hoyt, & Rachal, 2000), mindfulness (Baer, Smith, Hopkins, & Krietemeyer, 2006), concept of God (see Hill & Hood, 1999, Chap. 11), transcendence (Cloninger, Svrakic, & Przybeck, 1993), or mysticism (Hood, 1975). However, over 20 years ago Gorsuch (1984) called for a moratorium on the development of new SR scales, pointing out not only that numerous well-validated scales were already available, but that it is impossible to build up knowledge in a field if there is not some consistency in the measures being used. While certain research questions may require the development of new measures (e.g., Zemore & Kaskutas' [2004] measure of helping in recovery or Murray, Goggin, & Malcarne's [2006] measure of God Related Locus of Control in African-American adolescents) we encourage researchers to focus on measures that have already been used in alcohol research and/or measures for which norms are available. Hopefully this will foster the further development of research on SR and addiction as a vibrant and important area of study.

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Spirituality and Health: Empirically Based Reflections on Recovery

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Abstract: In this chapter, we explore the spiritual functioning and well-being of individuals and how this relates to mental health and recovery from alcoholism within the conceptual framework of Alcoholics Anonymous. We raise the question of whether the spiritually oriented focus of AA is a critical factor in achieving recovery. We suggest that examining the findings from a large body of research on religion and mental health may provide further insight into this question. Specifically, we assert that the mechanisms through which the spiritual focus of AA may influence recovery from alcoholism may be similar to the mechanisms through which spirituality may influence mental health. These potential explanatory mechanisms include the provision of a community, a narrative framework for meaning-making, a means of coping through submission and redemption, and prescribed lifestyle behaviors.

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[†]We regret that our colleague and friend, Clark Rivinoja, passed away before this manuscript was printed.

1. Introduction

What does it mean to recover from alcoholism? Can we consider individuals who have not had a drink for the last 2 years to have achieved a state of recovery? Does it make a difference if the last drink was 10 years ago? Would you consider individuals to be recovered if you knew that they felt empty and depressed, isolated themselves from friends, could not forgive themselves for the impulsive and risky behaviors they engaged in while drinking, and were struggling to find meaning and purpose in life? One might argue that recovery entails only abstinence from alcohol; however, abstinence alone does not imply health. The individuals described above are not flourishing in the areas of their lives impacted by their illness, including their emotions, social relationships, and existential well-being. One of the core principles of Alcoholics Anonymous is that recovery from the illness of alcoholism is a lifelong process regardless of how long it has been since the last drink. In this respect, a successful recovery process must be measured by more than an absence of consumption. Success must include the functioning and well-being of the whole person.

Over the last few decades, there has been a move away from the medical model of disease, which views illness as a biological phenomenon, to relational models of health, which provide a more holistic conceptualization of illness and health [1]. These models emphasize the importance of affective and psychological states, as well as the significance of interpersonal relationships. More recently, Sulmasy [2] asserted that the relational model of health needed to include individuals' spiritual functioning and, as such, proposed the bio-psycho-social-spiritual model of health. Indeed, many medical and mental health professionals agree that the spiritual functioning of individuals is an important and inseparable component of health [3].

Health, according to the relational models, is a set of right relationships among all the dimensions of what constitutes being human. Thus, we can conceptualize a successful recovery process (or "healing") from alcoholism as the process of attending to all of the relationships disrupted by the illness, including one's biological, psychological, social, and spiritual relationships. The focus of this chapter will be on the spiritual functioning and well-being of individuals and how this relates to mental health and recovery from alcoholism within the conceptual framework of Alcoholics Anonymous.

The association of American Medical Colleges Consensus Conference for Spirituality and Health (1998) defined spirituality as "every person's inherent search for ultimate meaning and purpose in life" [4]. Spirituality shapes our worldviews, values, morals, decision making, framework for meaning and purpose and even provides some with a sense of identity. Alcoholics Anonymous (AA) understands alcoholism as a biological/genetic illness *and* a spiritual problem. Indeed, the founders of AA believed recovery involved a spiritual

transformation. To recover, alcoholics must admit their powerlessness over addiction and submit to a higher power. Although AA is a spiritually oriented program, it is not a religion, nor is it currently tied to any particular religious tradition.

Much research has demonstrated a relationship between religion and the prevalence and frequency of substance abuse. Ninety percent of the nearly 140 studies on the relationship between substance abuse and religion have reported less substance abuse among the more religious [5]. Recent analysis of data from three major national surveys revealed that adults and teens who reported that religion is very important in their lives or who attended religious services weekly or more were much less likely to drink or use illegal drugs [6]. Adults who did not consider religion to be very important were at least 50% more likely to use alcohol and three times more likely to binge drink, compared to adults who strongly believed that religion is important. There is also some research suggesting that religion/spirituality may also impact recovery from alcoholism. For example, The National Center on Addiction and Substance Abuse (CASA) at Columbia University conducted a 2-year study on substance abuse, religion, and spirituality [6]. The study found that individuals who both received professional treatment and attended spiritually based support programs (e.g., Alcoholics Anonymous) were much more likely to remain sober than if they received professional treatment alone. This leads to the question of whether the spiritually oriented focus of AA is a critical factor in achieving recovery. We suggest that examining the findings from a large body of research on religion/spirituality and mental health may provide further insight into this question.

A number of research reviews have reported that there appears to be a generally consistent positive relationship between mental health and religious beliefs and practices (for reviews, see [5, 7]). These reviews have also reported that under some circumstances and for some people, spiritual struggles and stress are associated with poorer mental health. Understanding why and how spirituality and health are related is a current important focus in the field. A number of factors have been proposed as explanatory mechanisms for this relationship, including the provision of social support, a framework for meaning and purpose, a psychological coping resource for uncontrollable stressors, and the endorsement and prescription of healthy lifestyle behaviors. We propose that the spiritual focus in AA may influence recovery from alcoholism through these same mechanisms, namely the provision of a community, a narrative framework for meaning-making, a means of coping through submission and redemption, and prescribed lifestyle behaviors. We will begin by reviewing the literature on spirituality and mental health and conclude with a discussion of potential explanations for this relationship and how AA may capitalize on these same explanatory mechanisms.

2. Empirical Review of Spirituality and Mental Health Literature

National surveys have consistently revealed that many Americans have religious beliefs and engage in religious practices. For example, 64% of Americans report praying at least once a day, 44% report attending a religious services in the last 7 days, and 84% report that religion is somewhat or very important to them [8]. Nearly 1,000 studies have examined the relationship between religion and health. Given the space limitations of this chapter, we will focus our review of the spirituality-health literature to the mental health outcomes we believe are most relevant to the discussion of alcoholism and recovery. These include depression, anxiety, guilt, suicide, and positive emotions. We will conclude with a brief review the literature on religious coping and mental health.

Before we begin the review, it is important to define the terms "religion" and "spirituality." Religion refers to "an organized system of beliefs, practices, and rituals of a community of people that are designed to foster a sense of closeness to the transcendent and sense of responsibility to the members of one's community" [5]. Spirituality is a broader term than religion and harder to define. Most definitions include the sentiment that spirituality involves a generic personal quest for meaning and purpose in life [4, 9]. The majority of the research conducted to date has examined religious, not spiritual, factors. However, the terms religion and spirituality are often used interchangeably, and the majority of Americans state that they are both religious and spiritual [10]. To be consistent with the empirical literature, when reviewing a research study we will use the term "religion," unless the authors specifically measured spirituality. Otherwise, in our discussion, we will tend to use the broader term "spirituality."

2.1. Depression

A potentially complex relationship exists between religion and depression. Religion may lead to the development of depression or prevent recovery from depression by teaching doctrine that provokes guilt and remorse for one's sins and shortcomings. Conversely, religious beliefs and practices may function to foster a sense of peace, hope, and grace, resulting in fewer depressive symptoms or faster recovery from a depressive episode. Carefully designed research studies have helped to elucidate the relationship between these two constructs. Over 100 cross-sectional and longitudinal studies on depression have been conducted, the majority of which have found lower rates of depression and faster rates of recovery among those who are more religious [5, 9]. In addition, the majority of clinical trials on religious interventions have found that depressed patients who received religious interventions across a variety of religious perspectives (e.g., Muslim, Christian, Buddhist) recovered more quickly than patients who received a secular intervention or no treatment [11]. Interestingly, religion is most strongly correlated with less depression or faster

recovery during times of stress, trauma, and illness [9]. The findings for the relationship between religion and depression have been consistent across the age span, from adolescence to old age.

It is important to note that not all studies have reported a protective role for religion on depression. The relationship is dependent on what aspect of religion/spirituality one measures (e.g., private practices versus church attendance versus daily spiritual experiences), type of stressor (e.g., family conflict versus financial stressor) [12], history of depression in adolescence [13], ethnicity [14], and gender [15]. For example, some types of interpersonal religious experiences have been associated with greater depressive symptoms among adolescents [16]. Specifically, among 744 adolescents, negative religious interpersonal experiences (i.e., conflict with clergy or church members) were associated with significantly higher levels of depressive symptoms. In contrast, teens who reported greater positive religious interpersonal experiences, frequent religious attendance, and higher self-rated religiousness reported lower levels of depressive symptoms. Thus, among a single sample, the way in which the construct of religiousness is measured influences its relationship with mental health.

Research has revealed a relationship between alcohol use and depression [17] and has also suggested that religion may have an influence on this relationship [18]. Musick and colleagues reported that among a sample of 1,897 Baptists aged 65 years or older living in central North Carolina, those rural Baptists who used alcohol and did not attend church regularly had higher levels of depressive symptoms than those who did attend church regularly. The investigators speculated that those with lower levels of church attendance felt a sense of guilt or stigma, which drinking alcohol exacerbated, or that these individuals lacked the potential buffering effects of church-related social support. It is also possible that those who drank alcohol were less likely to attend church in the first place.

2.2. Anxiety

As with all types of emotions and psychiatric symptoms, religion can theoretically function to increase or decrease anxiety, depending on the individual and the situation. As Koenig [5] pointed out, anxiety and internal conflicts may result from believing in religious doctrines about the devil, hell, and damnation, which may function to guide or motivate behavior. At the same time, anxiety may also cause people to seek out and receive comfort and security from religion, evidenced in individuals' and nations' behavior when major disasters or tragedies occur. For example, 90% of Americans turned to religion to cope with the events of September 11, 2001 [19]. A little more than half of the 76 studies examining anxiety and religion before the year 2000 found that those who were more religious reported less anxiety or fear than those who were less religious [9]. Thirty-two percent of the studies found no association between religion and anxiety, and 13% found a negative association. Each of the

ten studies that reported a negative association was cross-sectional, and as such causality cannot be determined. For example, Rokeach [20] found that college students who classified themselves as believers were more anxious, slept less well, and experienced a greater number of other distressing symptoms than did non-believing students. In this cross-sectional study causality is unknown: students who were more religious may have become more anxious as a result of their beliefs, or students who were more anxious may have become more religious as a way of coping with their anxiety.

Longitudinal studies and randomized clinical trials have helped to determine the direction of causality in the relationship between anxiety and religion. Four of the five longitudinal studies on religion and anxiety published before the year 2000 found that those who were more religious were less likely to experience fear or anxiety several years later [9]. Likewise, six of the seven clinical trials testing a religious psychotherapy for anxiety found that the intervention decreased levels of anxiety. This was true among Christians, Muslims, Hindus, and Buddhists. Research since the year 2000 also points to a relationship between greater religiousness and lower anxiety [5]. Although some religious beliefs and practices may lead to the development of anxiety for some individuals, most of the research suggests that anxiety motivates religious activity, which appears to result in lower anxiety.

2.3. Suicide

The majority of research examining the relationship between suicide and religion (i.e., 57 of 68 studies before the year 2000) has found that those with strong religious beliefs and those who are involved in a supportive religious community have more negative attitudes toward suicide and are less likely to think about or commit suicide [21]. These findings have been replicated across age groups and health status more recently. For example, Greening and Stoppelbein [22] asked 1,098 adolescents to rate how likely they were to die by suicide and found that a strong commitment to core religious beliefs was the strongest predictor of negative attitudes toward suicide, after controlling for other predictors. Among a sample of 835 African American older adults, low religiosity and depressive symptoms were the only two variables of many that uniquely predicted passive suicidal ideation, and only low religiosity and low life satisfaction predicted active suicidal ideation [23]. Other research has reported that terminally ill cancer patients with high spiritual well-being scores had less desire for a hastened death, hopelessness, and suicidal thoughts [24]. Thus, the research has rather consistently reported less suicidal beliefs and beh-aviors among those who report greater religiousness.

2.4. Guilt

The relationship between religiousness and guilt is psychologically and theologically multifaceted. Holding rigid beliefs or being ostracized from

one's religious community for forms of disobedience could lead to fear and inappropriate levels of guilt. Feelings of fear and guilt could then lead to self-destructive behavior, such as alcoholism, in an attempt to reduce painful feelings [21]. Indeed, certain types of religious beliefs are associated with increased guilt [25] and dogmatism [26]. Of course, deviating from one's moral standards or religiously based belief system does not lead all individuals to engage in self-destructive behaviors to reduce guilt. In contrast, individuals may use a number of different spiritually based strategies to reduce the uncomfortable feeling of guilt. For instance, some may use the religious practice of repenting and confessing their shortcoming, perhaps to a religious leader, friend, or directly to their higher power. Others may engage in altruistic behaviors as a type of penance. Some, however, may avoid practices such as confession because this may threaten their identity and external image as a righteous person [27]. Presumably, those for whom religion facilitates a sense of guilt, but not grace, experience the most emotional distress. Those adhering to a form of spirituality not rooted in a particular religious doctrine or tradition may experience less guilt because there are fewer explicit expectations and authorities to whom one is accountable. This poses an interesting question to explore in future research. In summary, certain forms of religion may function to both increase one's feeling of guilt and provide specific practices for reducing this guilt. Careful research designs are needed to elucidate the roles of religion and spirituality in creating, maintaining, and reducing guilt and to determine the psychological function and ramifications of this dynamic relationship.

2.5. Positive Emotions

A review of the literature on spirituality and mental health would not be complete without some discussion of positive emotions such as joy, peace, hope, well-being, optimism, and meaning. Of the more than 100 studies that have examined this relationship, the majority (approximately 80%) have reported that higher religious involvement is associated with greater life satisfaction, psychological well-being, and morale [5]. The relationship is particularly strong for older adults experiencing a life stressor, even after taking into account physical health factors and social support [23]. These findings are not surprising, given that the world religions generally provide their adherents with a framework with which to form meaning and purpose for difficult life events, foster hope and optimism about one's existence and the afterlife, and provide answers to challenging existential questions [5]. Research has demonstrated a relationship between religious activity and well-being across nations and religious belief systems. Studies in Australia, Europe, India, and the Middle East have reported greater life satisfaction and well-being among those who reported being more religious (e.g., more frequent church attendance, praying, studying the Torah, performing religious rituals) [28].

As mentioned, one factor that influences the relationship of spirituality and mental health is the way in which these two constructs are measured (e.g., religious belief versus religious attendance; hope versus well-being). For example, Murphy and colleagues [29] found that among persons diagnosed with clinical depression, greater hope was predicted by religious belief, but not by religious behavior. Ellison and colleagues [30] found that among a sample of over 1,100 adults, both belief in an afterlife and religious attendance were related to greater well-being, but personal prayer had a weak inverse association with well-being. Thus, as with negative emotions, the relationship between religion and positive emotions is dependent on the measurement of the constructs and the populations that are studied.

2.6. Religious Coping

Many Americans rely on religion to cope with difficult and stressful situations, including natural disasters, physical illness, major surgery, crises, and bereavement. Measures of religious coping can answer specific questions about how religion "comes to life" when faced with a difficult event [31]. Religious coping can be defined as the cognitive, emotional, and behavioral ways of relating to the sacred that are used in the search for significance during stress (Pargament, 1997). Religious coping strategies include praying to a higher power, meditating, seeking spiritual counsel, reading religious texts, or performing religious rituals. The use of religion as a coping strategy depends on a number of factors, including age, geographic location, and severity of the stressor [5].

The majority of people rely on positive forms of religious coping, which represent a sense of spirituality, a secure relationship with God, a belief that there is meaning to be found in life, and a sense of spiritual connection with others [32]. Positive religious coping includes methods such as benevolent religious appraisals, collaboration with God, seeking spiritual support, and giving religious support to others and is associated with positive outcomes, including higher self-esteem, better quality of life and psychological adjustment, and spiritual and stress-related growth [32]. However, a substantial minority of people report experiencing spiritual stressors and distress (called "negative religious coping") during crises. Negative religious coping is an expression of a less secure relationship with God, a tenuous and pessimistic view of the world, and a religious struggle in the search for significance. It includes discontentment with God, negative religious reframing, punishing God reappraisals, and interpersonal religious discontent and is related to negative outcomes, including depression, emotional distress, poor physical health and quality of life, callousness, and poor problem resolution [32]. A recent study reported that negative religious coping strategies were predictive of poorer mental and physical health and mortality over a period of 2 years [33]. Thus, the research on religious coping suggests that the particular way in which one relies upon one's religion or spirituality is related to different mental health outcomes.

2.7. Summary of Empirical Research

In summary, a relationship between religion and mental health has been documented in over 724 cross-sectional and longitudinal studies conducted in clinical and representative community populations (for reviews, see [7, 9]). This research has found that greater religious involvement and religious beliefs are typically associated with less depression or faster recovery from depression, less anxiety, fewer suicidal thoughts and attempts, increased guilt for some, as well as the provision of methods to reduce this guilt, and more positive emotions. It is important to reiterate that in some situations, for some people, religion is associated with negative emotions and poorer mental health. A comprehensive review of the literature prior to 2000 revealed that 6% of the 724 studies examining mental health and religion reported worse mental health among the more religious [9]. This is particularly true when religious beliefs and doctrines are used to justify prejudice, hatred, dogmatic thinking, or negative attitudes toward mental healthcare. Religion can also lead to interpersonal strain when individuals hold different religious beliefs or hold certain beliefs more intensely than do others, particularly if those individuals are intimately related (as for spouses) [34]. Strain can also result when members of one's faith community are perceived as critical or demanding [16].

3. Explanatory Mechanisms: Spirituality, Health, and Recovery in AA

A priority in the field of spirituality-health research is to identify mechanisms and processes that could help explain why a relationship between religion/spirituality and mental health exists. George, Ellison, and Larson's [35] comprehensive review of the literature revealed that very few studies have examined potential mediators of the religion–health relationship. Of the longitudinal studies that have tested for meditating factors, four main categories have been identified: social support, sense of coherence or meaning, psychosocial resources, and prescribed healthy lifestyle practices. Each of these explanatory mechanisms for the relationships between spirituality and health will be reviewed. In conjunction, we discuss how these mechanisms may also help to explain how AA's spiritually oriented approach may facilitate and help to maintain recovery from alcoholism.

3.1. Social Support

The relationship between greater social support and better mental health has been well documented [36]. It has been suggested that one of the reasons those who are more religiously involved, particularly those who attend religious services, often have better health outcomes is because they receive greater social support. Indeed, research has confirmed that those with higher religious

involvement (public and private measures of religiousness) tend to have more social support, as measured by greater number of social contacts, more complex social networks, and higher quality of social support [37]. This appears to be especially true for older adults and African Americans [38]. Religious communities provide their members with opportunities and access to emotional, social, and instrumental support [35]. There is research to suggest that the support individuals receive from their religious communities is unique from the support received from other sources, such as bingo and book clubs. For example, Ellison and George [37] found that after controlling for support received from non-religious sources, there was still a significant positive relationship between church attendance and quality of social support among a random sample of adults.

Although the relationship between religious involvement and social support is generally strong and positive, research examining whether or not social support is a statistically significant mediator of the religion–health relationship provides mixed findings (see [35] for review). For example, three longitudinal studies prior to 2002 examined the relationship between religious attendance and depression. In all three studies, social support did not mediate the relationship between attendance and depression [18, 39, 40]. However, other research has reported that religious support (i.e., support received from members of one's religious congregation) does mediate the religion-health relationship, while secular support (i.e., support from family and friends) does not [39]. Thus, more research is needed to determine the extent that social support, particularly support provided by religious communities, mediates the relationship between religion and health. For now, it is clear that there are significant relationships between social support and measures of religion and measures of health. It is also clear that receiving spiritual support from the faith community seems to have an impact on well-being.

3.2. Community in Alcoholics Anonymous

One of the ways by which Alcoholics Anonymous may influence recovery is through facilitation of community. It may do so through encouraging relationships with other group members and with one's higher power. Although many alcoholics begin drinking among friends in an atmosphere of conviviality and jovial fellowship, at some point the obsession to drink usurps their desire to engage in social activities. Problem drinkers often enter the rooms of Alcoholics Anonymous alone and isolated, having severed ties with concerned friends and loved ones. The desire to drink and the actualization of such a desire drive alcoholics into a state of isolation in which their relationships with the outside world dissolve. AA provides a way of restoring these severed relationships by surrounding alcoholics with people who share in their struggles and understand their condition. Comfort comes to isolated alcoholics in the promise that they no longer have to be alone [41].

Such a process of restoring relationships could not be accomplished without a community which embodies particular characteristics, namely vulnerability, honesty, and dependence. In his description of life among developmentally disabled children and adults in the L'Arche communities, Jean Vanier [42] provides a wonderful description of this type of restorative community. To him, a true community is composed of people who accept and welcome one another's strengths and weaknesses and relate to one another from a place of mutual vulnerability, acceptance, and humility. The opening section of "How It Works" in Alcoholics Anonymous [41] indicates that recovery depends on one's ability to be honest. When members of AA acknowledge that they are alcoholics, they are making honest acknowledgments of their own weakness [43]. This admission of weakness makes the alcoholic vulnerable, but, as mentioned, in AA the alcoholic is not alone. In the safety of the community, others also honestly admit their weaknesses, and thus become vulnerable to the group. Importantly, shared vulnerability, not shared strength, binds members together and is believed by some to be the key to recovery in AA [43].

The AA community acknowledges dependence as a healthy and necessary communal characteristic. Alcoholics are quite familiar with dependence. Addiction to alcohol is characterized by physical dependency. The alcoholic cannot function normally without alcohol; its use is not optional. When alcoholics no longer want to drink, they try, without success, to depend on themselves to stop. Coming to AA, therefore, is essentially a twofold acknowledgment: alcoholics no longer want to depend on alcohol, and at the same time they understand that they cannot depend on themselves to quit. Alcoholics Anonymous teaches alcoholics a new and unique form of dependence. Specifically, alcoholics must learn how to depend on other group members, their individual sponsors, and their higher power for the strength and grace to stop drinking. Indeed, through AA, alcoholics make themselves accountable to these others and rely on their guidance, correction, advice, and encouragement.

MacIntyre [44] asserts that acknowledged dependence is necessary for human flourishing. Acknowledged dependence carries with it a combination of virtues: justice, generosity, pity, and beneficence. Members of a community can model and teach these virtues because they share a common conception of the good. The community makes one human's good their own and helps that person through periods of affliction and disability, thus creating relationships comprised of unconditional giving and grace-filled receiving. MacIntyre [44] emphasizes that every member of the community must understand that the requirements of giving may be completely disproportionate to what is received and that the logic of equal exchange does not permeate the community's ethos. Such a community will recognize that all persons, at some point in their lives and to various degrees, will undergo affliction and suffering and will be dependent on others. That these individuals are cared for and spoken for is in the interest of the society as a whole, not one particular person or advocacy group.

In sum, AA provides its members with a uniquely supportive community. Each member's participation provides other members with much needed support and fellowship and, at the same time, provides for their own need for community and support from like-minded individuals. This community appears to be a vital component in the alcoholic's pursuit and attainment of wholeness.

3.3. Framework for Meaning-Making and Purpose

Researchers and theologians alike have pointed to religion as an important source of meaning and purpose for individuals, particularly for those facing difficult and stressful life events. It has been postulated that the meaning-making function of religion may help to explain the relationship between spirituality and mental health. Spirituality and religious worldviews typically foster a hopeful and optimistic perspective. Indeed, the majority of research has shown that greater religiousness is associated with greater hope and optimism [5]. Furthermore, the few studies that have examined the cognitive and motivational components of religious belief systems suggest that individuals who rely on a religious worldview have fewer symptoms of depression, anxiety, and somatization than those who do not rely on a religious worldview [45]. Interestingly, those from the most fundamental Christian groups, adhering to strict and rigid doctrines, report the highest levels of optimism [46]. The authors speculated that these groups may foster hope and optimism through their teachings on salvation and triumph over evil and suffering. Not surprisingly, the framework that religion provides for meaning-making and purpose may be particularly important for those who are marginalized and have few other resources, including the elderly, minorities, the physically ill, and perhaps the alcoholic as well [47].

Only a handful of empirical studies have directly tested the hypothesis that specific religious belief structures mediate the relationship between religion and health. In a study conducted by Ellison [48], individuals who were more certain about the importance of their religion in providing meaning in specific life domains, named by these researchers as "existential certainty," had higher scores on psychological well-being. Moreover, existential certainty mediated the relationship between religious service attendance and psychological well-being. McIntosh, Silver, and Wortman [49] specifically tested the mediating effects of meaning-making in a study in which they interviewed 124 parents who lost an infant to sudden infant death syndrome. These researchers found that both religious participation and importance of religion led to individuals' finding greater meaning in the loss of their child, which subsequently led to greater well-being and less distress. In a recent study, Pearce and colleagues [50] found that among 162 informal caregivers of terminally ill cancer patients, those who formed negative religious coping attributions (e.g., God has abandoned me; God is punishing me for my sins) became less optimistic, which then led to an experience of greater symptoms of anxiety, lower quality of life, and less caregiving satisfaction. Thus, a few studies provide empirical evidence that the religious or spiritual framework within which one operates can function to create (or wreak havoc upon) meaning, purpose, and optimism, which has subsequent ramifications for one's mental health.

3.4. Narrative Framework for Meaning-Making in AA

A common phrase heard within the rooms of Alcoholics Anonymous is that its members are not bad people trying to be good; rather, alcoholics are sick people trying to get well. Learning about alcoholism as a disease rather than as a lack of willpower places the alcoholic's problems within a medical, and thus a more legitimate and accepted, framework of meaning. Alcoholics learn that they are not morally inept, nor do they lack sufficient control over their own alcoholic behaviors. The medical understanding of alcoholism, however, serves only as the beginning of making sense of their problems. A portion of *Alcoholics Anonymous* which is read aloud at the beginning of most AA meetings states, "Our stories disclose in a general way what we used to be like, what happened, and what we are like now" [41, p. 58]. This process of relaying one's story through personal narratives of suffering, rebirth, and renewal enables members of AA to share with each other their experience, strength, and hope. The purpose of such narratives, as stated in the AA Preamble, is so that members of AA may solve their common problem and help others to recover from alcoholism.

Memory and hope are two elements of the narrative that functions as a framework for meaning-making within Alcoholics Anonymous. Remembering the stories of "what is was like" immerses alcoholics into a continual process of learning and re-learning their exact place within a story of spiritual bankruptcy and spiritual growth. The individual narratives of members of AA contribute to a larger narrative structure of meaning within the AA community. Stanley Hauerwas [51], a Christian ethicist who writes extensively about narrative theology, suggests that to function effectively, all narratives need a community that can remember and interpret them. Active reinterpretation for Alcoholics Anonymous occurs at every AA meeting when members are encouraged to share from their own experience how they struggled and how their distinctive way of life as sober members of AA continues to unfold. For newcomers to Alcoholics Anonymous, hearing others share their memories of "what is was like" enables them to know that they are not alone in their struggles. For the old-timers in AA, the memory of active alcoholism reminds them of what their life will be like should they choose to drink again. AA literature is clear that a critical defense against resuming the addictive behavior is to regularly bring to one's consciousness one's former suffering and humiliation [41]. The stories told in AA serve the important purpose of adding bricks of memory to the wall that defends the alcoholic from the first drink.

The stories of life in sobriety lead to another key element of narrative as a framework for meaning: hope. Perhaps the most immediate and tangible way for new members of AA to develop hope simply requires them to look around the room. Laughter and friendship of persons who have months and years of

sobriety show the newcomer not only that living without alcohol can be accomplished but also that living soberly can be fun and meaningful. In addition, at the conclusion of many AA meetings, the following text, known as "The Promises," is read aloud:

If we are painstaking about this phase of our development.... We are going to know a new freedom and a new happiness.... Our whole attitude and outlook upon life will change.... We will suddenly realize that God is doing for us what we could not do for ourselves. Are these extravagant promises? We think not (emphasis added). They are being fulfilled among us—sometimes quickly, sometimes slowly. They will always materialize if we work for them [41, pp. 83–84].

During the reading, the group often says aloud the above italicized sentence. There is hope for the struggling alcoholic, and the group attests for such hope. Through the narratives heard and expressed within Alcoholics Anonymous, alcoholism is contextualized into a broader framework of meaning, increasing the likelihood of recovery.

3.5. Psychological Coping Resource and Active Surrender

A third pathway through which religion/spirituality may influence mental health is the belief in the promised care and help of a higher power. Naturally insurmountable life circumstances and uncontrollable events may become more tolerable and manageable by surrendering the situation and one's self to a higher power. Several of the founding fathers of the discipline of psychology, including Sigmund Freud, and more recently, Albert Ellis, have criticized religion as the "universal neurosis" [52, p. 43] and believed that "the less religious [people] are, the more emotionally healthy they will tend to be" [53, p. 637]. Both of these esteemed mental health professionals implied that those who rely on religion to cope are less emotionally mature and less healthy. However, since that time, a substantial amount of research has been conducted on the different ways people use their faith to manage stress and problematic life events. And, as discussed, reliance on religious faith is generally, although not always, associated with better mental health outcomes. Moreover, research suggests that religious coping is multidimensional, encompassing active, passive, and interactive methods and includes problem solving, emotion-focused, and avoidant approaches [54], suggesting a complex, if not advanced, form of coping.

A religious coping style named "surrender" was proposed by Wong-McDonald and Gorsuch [55]. These researchers defined surrender as "an *active* choice to surrender one's will to God's rule," such that the individual lets go of what he or she wants in preference to what God wants. Surrendering to God appears to have positive ramifications, as this construct was associated with spiritual well-being among a sample of Christian adults [55]. A greater sense of well-being may stem from a sense of empowerment;

that is, even in a seemingly uncontrollable and stressful situation, one still holds the power to give something up, namely his or her will and means of achieving it. This illustrates the paradox that one is most in control when one has relinquished control.

The practice of active surrender is not exclusive to Christianity or conservative Judaism. Actively letting go of control, unwanted thoughts, attachments, and anxieties is a practice of many ancient faiths. Buddhist philosophies and rituals have been incorporated and indeed form the basis of several recent psychological treatment interventions. Research has demonstrated that meditation and mindfulness can decrease self-focus and self-attachment, reduce anger and increase empathy, and improve immune reactivity and physical health [56]. Thus, spirituality may influence health by facilitating an active acceptance of difficult situations and surrender of one's control to a more powerful other.

3.6. Control and Surrender in AA

Similarly, recovery in AA may result, in part, by the recognition of one's own powerlessness over the addiction to alcohol and surrender of one's control to a higher power. *The Twelve Steps and Twelve Traditions* [57] asserts that complete and utter failure is the founding root of the AA Society. This root remains firmly planted in soil cultivated by alcoholics' powerlessness over alcohol. Such powerlessness threatens alcoholics with insanity and/or death. Bill Wilson, the founder of AA, writes, "How well we of AA know that for us 'To drink is eventually to go mad or die.' " [58, p. 98]. This threat of death necessitates an urgent existential response within alcoholics, as they are confronted by the possibility of death. They must respond either by acquiescing to imminent death or by choosing to live. If they choose to live, AA provides a solution which involves a program of recovery expressed paradigmatically in AA's twelve steps. The steps are understood as a group of spiritual principles that hold the key to recovery and wholeness.

The process of reclaiming this most fundamental desire to live begins with an admission of the alcoholic condition: "My name is X, and I am an alcoholic." This powerful moment in an alcoholic's life marks an acceptance of brokenness. It marks one's identity as an alcoholic in need. No longer is the new member a person who cannot stop drinking; rather, he or she is an alcoholic in need of help. At this point, hopelessness begins the slow transformation into hopefulness. Individuals who come to AA bring their own particular social distinctions. Some are doctors, lawyers, and professors. Others are homeless, broke, and jobless. But they share one common trait: alcoholism. All distinction which might suggest privilege or poverty is discarded in the simple admission, "My name is X, and I am an alcoholic." Confessing one's condition as an alcoholic helps to remove pride and difference by pointing to the single commonality of alcoholism. Removing pride and perceptions of difference creates room for humility—the foundation of each of the twelve steps [57].

Once thoroughly humbled by the admission of their condition, they are ready for further acts of surrender. Step 1 states, "We admitted we were powerless over alcohol, that our lives had become unmanageable." The alcoholic must be broken to be remade. Personal anguish and despair must be complete. There must truly seem no way out. In AA, powerlessness is a conviction which must be deeply felt, not simply affirmed intellectually. The "I" must be broken as the alcoholic says to himself or herself, "I am beaten and my life is unmanageable; I cannot control and manipulate my destiny as I have always willed to do." Only from these depths of deeply felt personal powerlessness can the anguished cry for help arise. "We admitted we were powerless" is the gate to rebirth. For alcoholics at their bottom, Step 1 is the acceptance of their own finitude and limitation.

Upon admission of powerlessness and defeat, alcoholics are ready to be rebuilt by a higher power of their own understanding. The entire twelve-step program of Alcoholics Anonymous revolves around one's ability to surrender completely and continuously to a higher power. The twelve steps are rigorous acts of truthful self-examination, open confession, and vigilant action which ultimately result in surrendering one's injurious habits and patterns to God so that alcoholics can live less by their own will and more according to God's will.

3.7. Prescribed Lifestyle Behaviors: Altruism and Forgiveness

A fourth mechanism by which religion may influence mental health is the specific lifestyle behaviors it prescribes or endorses. Loving others through one's thoughts, words, and actions appears to be a key principle, if not the founding principle, of all religions and spiritual philosophies. Two ways in which one can enact this principle are through altruistic behaviors and the act of forgiveness. Given the value religion places on altruism, it is not surprising that those who are more religious are more likely to engage in helping behaviors [59]. Research has demonstrated what those who volunteer their time, energy, and resources have long intuited and experienced: that is, helping others feels good and is linked to positive moods, better physical health, and longevity [60]. This is true even after controlling for potentially confounding variables (e.g., demographic, personality, physical/mental health variables) [61].

Studies among AIDS survivors has revealed that those who help others struggling with AIDS live longer than those who do not help others [62]. Thus, it is possible that recovering alcoholics who help one another through the AA program may actually be increasing their own survival status. Indeed, those who give social and instrumental support actually have better long-term physical and mental health outcomes and lower morbidity than do those who receive the support, even after controlling for the variables that may have an obvious impact on these findings (i.e., social economic status, physical and mental health status of giver and receiver, education, age, gender) [63]. Helping others may also have a dose–response effect on health, such that the more one helps others the longer one may live [61]. One's attitude appears to be an important

factor in the relationship between altruism and health. Steffen and Masters [64] found that compassionate attitudes had a greater protective effect on mental health than did compassionate behaviors alone.

Forgiveness and the humility it requires to engage in this practice are also understood as generally universal spiritual principles. Forgiveness can also be considered as another means of "active surrender," as it entails choosing to let go of the perceived right to retaliate and/or the negative psychological sequela of being the recipient of a perceived wrong. Forgiveness has been defined as "the replacement of the negative emotions of unforgiveness by positive, love-based emotions," such as empathy, compassion, sympathy, and affection for the offender [65]. Although forgiveness does not necessitate being religious or spiritual, some research has shown that those who are religious tend to be more likely to forgive others [66]. Forgiveness can lead to significant and positive health consequences and greater emotional stability for the individual who forgives [67]. More specifically, a meta-analysis of interventions promoting forgiveness revealed that when individuals were able to forgive their transgressors they experienced improved physical and mental health, produced fewer stress hormones, and reported reduced psychological distress [68].

3.8. Prescribed Altruistic Behavior in AA

"The spiritual life is not a theory. We have to live it" [41, p. 83]. Living the spiritual life requires that alcoholics depend on God by a "faith that works." Such statements bear witness to the sometimes perplexing paradoxicity of Alcoholics Anonymous' "keep it simple" philosophy. "Faith that works" takes on two meanings. The first is a faith which is efficacious to the person possessing it. Essentially, it means a faith that keeps you sober. In this sense faith results in something very tangible, evidenced by the sober members of Alcoholics Anonymous. On the other hand, a "faith that works" can also be understood as a faith which is not passive. It actively works for something, and in the alcoholic's case, it works for sobriety. In this sense, faith requires something very tangible: the alcoholic in unselfish action. In a letter to a friend, Bill Wilson quotes and expands upon James 2:17, a popular text from the Christian Bible. He writes, "Nothing is truer for us of AA than the Biblical saying 'Faith without works is dead.' AA's services, all designed to make more and better Twelfth Step work possible, are the 'works' that insure our life and growth" [58, p. 284]. The Twelfth Step to which Bill Wilson refers states, "Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs" [41].

Practicing the principles of Alcoholics Anonymous in all of one's affairs involves forgiveness, which begins in Step 5: We admitted to God, to ourselves, and to another human being the exact nature of our wrongs. AA literature states that alcoholics' moral inventory is the key to their giving and receiving forgiveness. Again and again, the literature emphasizes the importance not only of forgiving others but also of being forgiven by God. Without forgiveness received

and administered, and without the subsequent corrective actions to make right the committed wrongs, the alcoholic is in danger of spiraling into self-pity or resentfulness. In such a state, the alcoholic's spiritual condition grows unfit and he or she is in greater danger of drinking again.

Twelfth Step work can take on a variety of forms, such as setting up AA meetings in jails and prisons, visiting alcoholics in hospitals, providing rides to AA meetings, and giving shelter to homeless alcoholics. Altruism is an intrinsic element of the aforementioned AA principles; thus, in all Twelfth Step work, the AA member has a genuine concern for the welfare of others. Indeed, sobriety is understood to be contingent upon thinking of others and meeting their needs [41]. However, members of AA who practice altruistic acts do not do so in a purely unconditional manner; altruistic acts are understood as the foundation of recovery, and they must be done frequently [41]. Although alcoholics might go to any length to help a fellow struggling alcoholic, they do expect one thing in return: sobriety. Helping other alcoholics will not guarantee sobriety, but without it, there is a greater likelihood of their drinking again.

4. Summary and Conclusions

We began this chapter by asking two questions: What does it mean to recover from alcoholism? and Is the spiritually oriented focus of AA a critical factor in achieving recovery? We asserted that in answering these questions one must take into consideration each of the relationships that are disrupted by the illness of alcoholism. We focused specifically on the spiritual functioning and well-being of individuals and how this relates to mental health and recovery from alcoholism. Reviews of the literature on religion/spirituality and health provide support for a generally positive relationship between religion and mental health. Researchers have begun to examine potential explanatory mechanisms for these relationships, including the provision of social support, a framework for meaning and purpose, a coping resource for stressors, and a prescription of healthy lifestyle behaviors, such as altruism and forgiveness. We then outlined ways in which the recovery process, within the framework of Alcoholics Anonymous, may be explained by these same four mechanisms, namely AA provides its members with a uniquely supportive community, a narrative framework for meaning-making, the encouragement to surrender control and depend on a higher power to cope, and prescriptions for altruism and active service to others. The empirical research to date on AA does not allow us to substantiate, or reject, a claim that the spiritually oriented focus of AA is one of the key components, or even a component, of recovery. However, we believe we have elucidated some important similarities between the effects of religion/spirituality on mental health, as evidenced by the research we reviewed, and the potential mechanisms through which spirituality may influence recovery for alcoholics participating in the AA program. It is our hope that this chapter has provided researchers with several intriguing avenues

to pursue a greater understanding of the sacred pathways of recovery from alcoholism.

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Spiritual Change in Recovery

Gerard J. Connors, Kimberly S. Walitzer, and J. Scott Tonigan

1. Introduction

Alcoholism has often been referred to as a "spiritual disease," especially within the context of Alcoholics Anonymous (AA). Consistent with this view, spiritual growth and development have been a central focus within the recovery process. AA, in this respect, offers a spiritual path to recovery from alcohol use disorders.

In this chapter, we focus broadly on spiritual change in recovery, particularly in relation to involvement in AA. We open with a discussion on defining spirituality and provide an operationalization of spirituality for present purposes. We next provide a conceptualization of alcoholism as a spiritual disease. This is followed by a review of topics pertaining to spirituality and AA. In this regard, we identify the core spiritual beliefs in AA, the AA practices thought to be relevant to spirituality, and the subjective experiences of spirituality in AA. We also discuss the important issue of spiritual awakenings. Following this, we survey the literature on changes in spirituality during the process of recovery from alcoholism.

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2. Defining Spirituality

Few individuals would have difficulty in using the words "spiritual" and "spirituality" in their conversations or writings. Although there sometimes is a loss for words on how to define "spiritual" or "spirituality," when people do apply the terms there is a consistent colloquial usage that equates spirituality with a variety of generally positive experiences, emotions, and states of mind.

One reason people have difficulty defining spirituality is that it is a complex phenomenon viewed as not sufficiently or adequately operationalized by any single continuum or by dichotomous classifications (Miller & Thoresen, 1999). Instead, spirituality is multidimensional. LaPierre (1994), for example, proposed six dimensions of spirituality: a search for meaning in life; an encounter with transcendence; a sense of community; a search for ultimate truth, or highest value; a respect and appreciation for the mystery of creation; and a personal transformation. Larson, Swyers, and McCullough (1998) proposed that definitions of spirituality need to include recognition of the sacred, the divine, and/or the transcendent. This appreciation for the multidimensional nature of spirituality has contributed to advances in our knowledge on this topic (for summaries, see Cook, 2004, Miller, 2003, and Larson et al., 1998).

Despite being defined in a variety of ways, spirituality (and also religious involvement) has been found to be positively related to health and negatively related to physical and mental disorders (Larson et al., 1998; Miller & Thoresen, 1999). In the case of substance use, spirituality and religiosity have been associated with lower levels of substance use in the general population (Gorsuch, 1995; Larson et al., 1998).

In an effort to develop a working definition of spirituality, Cook (2004) surveyed 265 published books and papers on spirituality and addiction. Cook's summary indicated a range of uses of the term and a lack of clarity in its operationalization. However, he was able to specify 13 "conceptual components" of spirituality, at least as observed in the collection of works he evaluated. These domains reflected relatedness (i.e., interpersonal relationships), transcendence, humanity, a person's inner core, force, or soul, meaning and purpose in life, authenticity and truth, values, non-materiality, non-religiousness (generally reflecting the opinion that spirituality is not the same as or mediated by any particular religious hierarchy or belief system), wholeness, self-knowledge, creativity, and consciousness.

In considering these results and indications, Cook developed a working definition of spirituality. It read as follows:

Spirituality is a distinctive, potentially creative and universal dimension of human experience arising both within the inner subjective awareness of individuals and within communities, social groups and traditions. It may be experienced as relationship with that which is intimately "inner," immanent and personal, within the self and others, and/or as relationship with that which is wholly "other," transcendent and beyond the self. It is

experienced as being of fundamental or ultimate importance and is thus concerned with matters of meaning and purpose in life, truth and values. (Cook, 2004, pp. 548–549)

Cook was clear in acknowledging the provisionality of the working definition and its limitations. Nevertheless, it is offered herein as a productive heuristic in our discussion of spirituality in the context of addictions generally and in the context of AA in particular.

3. Alcoholism as a Spiritual Disease

From its founding in June, 1935, in Akron, Ohio, AA has had a profound appreciation of a spiritual dimension in alcoholism and in recovery. This dimension is well represented in the two core texts of AA: *Alcoholics Anonymous* (also called the Big Book) (Alcoholics Anonymous, 1976), first published in 1939, and *Twelve Steps and Twelve Traditions* (Alcoholics Anonymous, 1981), first published in 1953.

AA most centrally provides a spiritual path to recovery. In the Big Book, it is asserted that "The great fact is just this, and nothing less: That we have had deep and affective spiritual experiences which have revolutionized our whole attitude toward life, toward our fellows and toward God's universe" (AA, 1976, p. 25). Abstinence in and of itself is not viewed as recovery. Instead, abstinence alone is typically associated with what is called "white-knuckles sobriety" (Buxton, Smith, & Seymour, 1987), whereby the individual seeks (generally unsuccessfully) to avoid drinking through willpower alone. The stress associated with the use of this strategy typically overwhelms the individual, leading to a high probability of relapse.

The path to recovery espoused by AA does not suffer the above liability because it addresses physical, psychosocial, and especially spiritual aspects of recovery. The path to recovery is outlined in the Twelve Steps (see Table 1). Six of the steps include a direct reference to God or a higher power. Noteworthy is that Step 12 refers to a spiritual awakening that results from the working of the steps. We will have more to say about spiritual transformations later in this chapter.

4. Spirituality and AA

4.1. Distinguishing the Program and the Fellowship

Before discussing spirituality-related beliefs, practices, and subjective experiences in AA, it is important to note the fundamental distinction between the program of AA and the fellowship of AA. As highlighted by Tonigan, Toscova, and Connors (1999), the program of AA is comprised of the prescribed beliefs, values, and behaviors of AA. In essence, the program entails the working of the Twelve Steps, often involving the guidance of a sponsor.

Table 1. The Twelve Steps of Alcoholics Anonymous	Table 1.	The Twelve Ste	ps of Alcoholics	Anonymous
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Step 1	We admitted we were powerless over alcohol—that our lives had become
	unmanageable
Step 2	Came to believe that a Power greater than ourselves could restore us to sanity
Step 3	Made a decision to turn our will and our lives over to the care of God as we understood Him
Step 4	Made a searching and fearless moral inventory of ourselves
Step 5	Admitted to God, to ourselves, and to another human being the exact nature of our wrongs
Step 6	Were entirely ready to have God remove all these defects of character
Step 7	Humbly asked Him to remove our shortcomings
Step 8	Made a list of all persons we had harmed, and became willing to make amends to them all
Step 9	Made direct amends to such people when possible, except wherever to do so would injure them or others
Step 10	Continued to take personal inventory and when we were wrong promptly admitted it
Step 11	Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out
Step 12	Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics and to practice these principles in all our affairs

Alcoholics Anonymous (1976), pp. 59-60

The fellowship of AA, on the other hand, entails the practice and activities of AA. Helping others, building relationships among other members, and the sharing of joys and hardships, as examples, are aspects of what is described as the fellowship. In these respects, the fellowship of AA refers to the experiencing of AA. The guiding principles for fellowship are provided in the Twelve Traditions (see Table 2).

4.2. Spiritual Beliefs in AA

There are five predominant spiritual beliefs in AA (Tonigan et al., 1999), each of which plays a core role in the recovery process. These central beliefs—higher power, personal relationship with a higher power, mysticism, renewal, and discord—will be discussed in turn.

The first spiritual belief, and the one most commonly associated with AA, is that of a higher power, introduced in Step 2. For many members of AA, this higher power is God. However, the AA literature is not dogmatic on this issue and is clear on the importance of the higher power being any transcendent being or source that can serve in this capacity. The key notion in adopting recognition of a higher power is that it is greater than and external to the individual.

It was with considerable foresight that the founders of AA allowed for a broad and encompassing definition of God and/or higher power. The following

Table 2. The Twelve Traditions of Alcoholics Anonymous

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Tradition 1	Our common welfare should come first; personal recovery depends on AA unity	
Tradition 2	For our group purpose there is but one ultimate authority—a loving God as He may express Himself in our group conscience. Our leaders are but trusted servants; they do not govern	
Tradition 3	The only requirement for AA membership is a desire to stop drinking	
Tradition 4	Each group should be autonomous except in matters affecting other groups or AA as a whole	
Tradition 5	Each group has but one primary purpose—to carry its message to the alcoholic who still suffers	
Tradition 6	An AA group ought never endorse, finance, or lend the AA name to any outside facility or enterprise, lest problems of money, property, and prestige divert us from our primary purpose	
Tradition 7	Every AA group ought to be fully self-supporting, declining outside contributions	
Tradition 8	Alcoholics Anonymous should remain forever nonprofessional, but our service centers may employ special workers	
Tradition 9	AA, as such, ought never be organized; but we may create service boards or committees directly responsible to those they serve	
Tradition 10	Alcoholics Anonymous has no opinion on outside issues; hence the AA name ought never be drawn into public controversy	
Tradition 11	Our public relations policy is based on attraction rather than promotion; we need always maintain personal anonymity at the level of press, radio, and films	
Tradition 12	Anonymity is the spiritual foundation of all our traditions, ever reminding us to place principles before personalities	

Alcoholics Anonymous (1976), p. 564

excerpt from the Big Book of AA (1976), in a chapter titled "We Agnostics," captures this flexibility:

Much to our relief, we discovered we did not need to consider another's conception of God. Our own conception, however inadequate, was sufficient to make the approach and to effect a contact with Him. As soon as we admitted the possible existence of a Creative Intelligence, a Spirit of the Universe underlying the totality of things, we began to be possessed of a new sense of power and direction, provided we took other simple steps. We found that God does not make too hard terms with those who seek Him. To us, the Realm of Spirit is broad, roomy, all inclusive; never exclusive or forbidding to those who earnestly seek. It is open, we believe, to all men.

When, therefore, we speak to you of God, we mean your own conception of God. This applies, too, to other spiritual expressions which you find in this book. Do not let any prejudice you may have against spiritual terms deter you from honestly asking yourself what they mean to you. At the start, this was all we needed to commence spiritual growth, to effect

our first conscious relation with God as we understood Him. Afterward, we found ourselves accepting many things which then seemed entirely out of reach. That was growth, but if we wished to grow we had to begin somewhere. So we used our own conception, however limited it was. (AA, 1976, pp. 46–47)

The Big Book, in referencing the personal stories included in the volume, notes that "Every one of them has gained access to, and believes in, a Power greater than himself. This Power has in each case accomplished the miraculous, the humanly impossible" (p. 50). Importantly, all persons are viewed as fully capable of embracing this higher power. Indeed, this capability was viewed as likely innate, in that it is stated in the Big Book that "We finally saw that faith in some kind of God was a part of our make-up" (p. 55).

A second spiritual belief is that one must develop a personal relationship with one's higher power. Developing and sustaining this personal relationship is a cornerstone for pursuit of the Twelve Steps. The process begins with Step 3. According to the Big Book, many AA members began the process by indicating the following to their respective higher power: "God, I offer myself to Thee—to build with me and to do with me as Thou wilt. Relieve me of the bondage of self, that I may better do Thy will. Take away my difficulties, that victory over them may bear witness to those I would help of Thy Power, Thy Love, and Thy Way of life. May I do Thy will always" (AA, 1976, p. 63). The initiation of this process is viewed within AA as a crucial "spiritual step" (p. 63).

It is likely that the nature of one's relationship with a higher power will vary in terms of circumstances and where one is in working the Twelve Steps. Relevant to this point is research by Pargament et al. (1988) on styles of spiritual coping. They identified three styles that varied on the nature of the relationship with a transcendent power. The first was a collaborative style that emphasized the interchange between the individual and the higher power. The second was a deferring style in which the individual is passive and awaits answers to life problems from the higher power. The third was a self-directing style of coping in which there is an emphasis on taking personal responsibility for dealing with life problems and relying less on support from a transcendent power.

Tonigan et al. (1999) have discussed these different spiritual coping styles in the context of different stages of working the Twelve Steps. For example, Steps 1–3 often are described as "surrender steps," during which the person admits his/her powerlessness over alcohol, derives hope in the ability of a higher power to restore health, and turns over one's will and life to the care of the higher power. These steps have correspondence to the spiritual coping skills associated with Pargament et al.'s (1988) description of a deferring relationship with a higher power. In contrast, Steps 4–10 focus on self-examination, disclosure, and making amends to harmed persons, and Steps 11 and 12 highlight a deepened commitment to prayer and meditation and to service work (e.g., bringing the message to alcoholics in need). In these steps, listening and

speaking with a higher power are highlighted, reflecting a collaborative relationship with one's higher power. Pargament et al.'s (1988) third spiritual coping style, a self-directed coping strategy, is reflected broadly in steps and activities associated with accepting and pursuing personal responsibility.

A third AA spiritual belief is mysticism, often evidenced in miracles. Mysticism in AA reflects an appreciation of transcendental intervention that can and does occur. Importantly, transcendental intervention is not viewed as a random event. Instead, it is thought to reflect the unfolding of a larger purpose or reality, the plan of which may or may not become clear to the person. The foremost and overriding miracle within AA is the achievement of sobriety. Sobriety in this context is considerably more than quitting drinking. Instead, it reflects as well a profound spiritual transformation within the person, often taking years to fully emerge. This transformation is attributed to divine intervention.

A fourth spiritual belief in AA involves renewal. The notion here is that as steps are achieved (e.g., admitting powerlessness over alcohol, belief in a higher power, taking personal inventory), they are not left in the background. Instead, faith in a higher power, for example, needs to be begun anew and restored on a daily basis. As such, spirituality is experienced "in the moment," on a day-to-day basis, and cannot be assumed or taken for granted. If it does dissipate, it can be restored through activities such as reaffirmations and renewals. Not attending to the process of daily renewals, according to the Big Book, places one at significant risk, as described in the following excerpt:

It is easy to let up on the spiritual program of action and rest on our laurels. We are headed for trouble if we do, for alcohol is a subtle foe. We are not cured of alcoholism. What we really have is a daily reprieve contingent on the maintenance of our spiritual condition. (AA, 1976, p. 85)

A final spiritual belief in AA concerns discord. Such distress is a sign that something is wrong with the person, independent of the cause (AA, 1981). The critical message to the individual is that he or she is in a state of incongruency with the plan of the higher power. Signs of discord often can be detected through regular, if not daily, personal inventories. It is important to note that discord is at least periodically experienced by most members of AA. In some cases it might entail, as an example, anger or resentment in the context of an interpersonal interaction. What becomes critical to the individual in terms of his or her recovery is a diligent working of the steps and reestablishing a syncronicity of the plan of the higher power.

4.3. The Practice of Spirituality in AA

The overall practice of AA entails the working of the Twelve Steps. Several of the activities associated with the working of the Twelve Steps have relevance to spirituality, and we discuss these activities in this section.

Among the foremost spiritual practices in AA are prayer and meditation. Step 11, for example, explicitly identifies prayer and meditation as a vehicle for improving conscious contact with one's higher power. Steps 2, 3, and 5–7 all acknowledge and affirm the existence and power of a higher power and entail direct or indirect interaction with the higher power, which most frequently would be through prayer and meditation. In Step 5, an admission of one's wrongs is made to the higher power, and in Step 7 the higher power is requested "to remove our shortcomings."

Research has shown that prayer and meditation are practiced often by members of AA. In their development of the Brown–Peterson Recovery Progress Inventory, Brown and Peterson (1991) surveyed self-help group members on how they "work the program." The 58 survey participants (43% male) had a mean age of 35.5 years and 3.13 years of sobriety. All reported belief in a higher power. In terms of prayer, 57% engaged in prayer upon rising, 74% before retiring, and 35% during the day. In terms of meditation, 45% practiced meditation, relaxation, or quiet time daily and 48% read from one or more meditation books.

It is anticipated that prayer and meditation will result in divine intervention for the individual. Often this divine intervention is viewed as a miracle, the ultimate miracle being sobriety. In Step 2, divine intervention is anticipated to restore health and sanity, and in Step 7, such intervention is sought to remove shortcomings.

A second spiritual practice in AA involves the identification of past and present wrongdoings and making a personal disclosure about such misdeeds "to God, to ourselves, and to another human being" (Steps 4, 5, and 10), along with the willingness and commitment to make amends for these (and any future) wrongdoings and misdeeds (Steps 8–10). As described by Tonigan et al. (1999), the activities associated with these steps should engender positive and mutually beneficial social relationships, based now on honesty, respect, trust, and the ability to acknowledge past misdeeds. Not surprisingly, these are the same qualities that ultimately characterize a personal relationship with one's higher power.

The development of personal relationships is another important spiritual practice in AA. Such relationships could involve a number of components, including the expressing of feelings, talking honestly, admitting when one is wrong, treating others as one would like to be treated, forgiving others as quickly as possible, and listening to others even when not agreeing with them (Brown & Peterson, 1991). The "sharing of experiences" among AA members may be a particularly important aspect of those relationships, given research by Kingree (1997) that such sharing was significantly and positively related to commitment to AA.

A final spirituality-related practice in AA is service. As a starting point, the working of the Twelve Steps, and especially the working of relevant steps on a daily basis (traditionally Steps 1–3 and 10–12), sets the stage for two particular service contributions. The first contribution is to the unity and common welfare of the organization. According to Tradition 1 of AA, any member's

personal recovery is dependent on the unity within AA. When working the steps and pursuing and/or maintaining one's personal recovery, the AA member is servicing the common welfare of the organization. A second contribution is the service provided to others by carrying the AA message "to the alcoholic who still suffers" (AA, 1981, p. 150). Taken together, as the AA member "conforms to the principles of recovery" and pledges "obedience to spiritual principles" (AA, 1981, both quotes p. 130), he or she is providing service to the organization and to others in need.

4.4. Subjective Experiences of Spirituality in AA

As noted earlier in this chapter, spirituality at minimum is complex and multidimensional. Not surprisingly, experiences of spirituality within AA similarly are complex and varied. Nevertheless, there are several subjective experiences of spirituality in AA that are experienced by many members, and we will present them in turn. These subjective experiences of spirituality are humility, serenity, gratitude, hope, and forgiveness.

Humility is a profoundly important concept in AA, above and beyond its relevance to the working of Step 7. According to the text of *Twelve Steps and Twelve Traditions* (AA, 1981), "the attainment of greater humility is the foundation principle of each of AA's Twelve Steps. For without some degree of humility, no alcoholic can stay sober at all. ... Without it, they cannot live to much useful purpose, or, in adversity, be able to summon the faith that can meet any emergency" (p. 70).

Among AA members, humility "amounts to a clear recognition of what and who we really are, followed by a sincere attempt to become what we could be. Therefore, our first practical move toward humility must consist of recognizing our deficiencies" (AA, 1981, p. 58). Among one's greatest deficiencies as an alcoholic, according to the Big Book, is selfishness/self-centeredness. "So our troubles, we think, are basically of our own making. They arise out of ourselves, and the alcoholic is an extreme example of self-will run riot, though he usually doesn't think so" (AA, 1976, p. 62).

Achieving humility in large part begins with a recognition of an all-knowing and powerful higher power. This recognition occurs in the process of working Steps 1 and 3, which highlight the powerlessness of the individual to overcome alcohol and the desirability of turning one's life over to the care of a higher power. Humility is also developed in Steps 5–7, whereby the individual admits the nature of his/her misdeeds (following "a searching and fearless moral inventory") and humbly requests that the higher power remove one's deficits in character and other shortcomings. Relatedly, the practice of Step 10, reflecting an ongoing personal inventory and admitting any wrongs identified, represents an effort to maintain and reinforce humility.

Another core experience of spirituality in AA is serenity. The term serenity has been used in the broader psychological literature to reflect peace of mind or inner peace, often in the presence of difficult times. Writing specifically in the

context of addictions, Bailey (1990) defined serenity as "feelings of tranquility, gratitude, contentment, affection for others, and a deep inner peace" (p. 1). Bailey (1990) highlighted serenity as "the cure for all addictions" (p. 1).

The importance of serenity in AA is reflected in part by its adoption of the Serenity Prayer, which is shown in Table 3. The Serenity Prayer was popularized in the United States by Reinhold Niebuhr, a twentieth-century theologian, and it has been used within AA since the 1940s. Although the term *serenity* is not formally defined in the AA literature, the text of the prayer includes coverage of a variety of AA elements and themes (Connors, Toscova, & Tonigan, 1999). These include acceptance, letting go of control over certain elements of life, developing trust in and surrendering to God's will, discerning when to take appropriate action, accepting life on life's terms, having a present-day orientation, and experiencing joy.

Gratitude is a third subjective experience of spirituality in AA. From a religious–spiritual perspective, gratitude typically represents an awareness or recognition of God's grace. Grace in this context can take the form of a gift or the provision of strength to address a difficult or pressing task. Sobriety is viewed by many AA members as a gift of divine intervention by a higher power, for which the AA member expresses gratitude on a regular if not daily basis. This gratitude is expressed in the continual working of the Twelve Steps and the daily living of a sober life and all that it represents.

A fourth subjective experience of spirituality is hope. Hope has a long-standing status as central and vital to healing and recovery. Yahne and Miller (1999) have outlined the ways in which hope may operate in service of recovery. For example, they note that hope for many individuals is will or willpower, as in the will to overcome and/or recover. According to Yahne and Miller (1999), other forms in which hope can contribute to healing and recovery are as a

Table 3. The Serenity Prayer

God, grant me the serenity to accept the things I cannot change, the courage to change the things I can, And the wisdom to know the difference.

Living one day at a time, Enjoying one moment at a time, Accepting hardship as a pathway to peace, Taking this sinful world as it is, Not as I would have it.

Trusting that you will make all things right
If I surrender to your will,
So that I may be reasonably happy in this life
And supremely happy with you forever in the next.

Note: In the public domain.

"wish" for a particular outcome and as a "horizon," such that individuals look "down the road," beyond their current difficulties.

There is another manner in which hope facilitates healing and recovery, and it has particular relevance to spirituality in AA. This aspect of hope is what Snyder (1994) has labeled *wayfulness*. It pertains in part to where people place or invest their hope, and in the context of AA hope is placed fully and unconditionally in one's higher power. It is not possible to overemphasize this dimension of hope in AA and the manner in which it operates to engender the belief that a higher power can restore health and sanity and that one could turn over one's will and life to the care of this higher power.

A last spiritual experience for many in AA is forgiveness. As discussed by Sanderson and Linehan (1999), "the spiritual practice of forgiveness...points a way out of destructive retribution and offers practical guidelines for effective reconnection with oneself and others" (p. 208). Forgiveness can be applicable in two senses—forgiveness of others and forgiveness of self. In the context of others, forgiveness permits a letting go of anger and the expression of understanding or compassion. Forgiveness of self is for many just as, if not more, relevant. The working of Step 5, in which there is the admission "to God, to ourselves, and to another human being the exact nature of our wrongs," is the means through which AA members understand that they can be forgiven. According to the text of Twelve Steps and Twelve Traditions (AA, 1981), "Our moral inventory had persuaded us that all-round forgiveness was desirable, but it was only when we resolutely tackled Step Five that we inwardly knew we'd be able to receive forgiveness and give it, too" (p. 58, italics in original). Webb, Robinson, Brower, and Zucker (2006) have postulated, based on data gathered from patients in treatment and at follow-up, that forgiveness of self may be particularly difficult to achieve.

4.5. Spiritual Awakening

The Twelfth Step of AA reflects the expectation that the working and practicing of all of the steps will result in a spiritual awakening. After having had this awakening, however defined, AA members attempt to carry the AA message to other alcoholics and they more broadly apply the twelve-step principles throughout their lives. It is acknowledged that members' definitions of a spiritual awakening may vary considerably from person to person. Nevertheless, there are important common threads. According to the *Twelve Steps and Twelve Traditions* (1981),

When a man or a woman has a spiritual awakening, the most important meaning of it is that he has now become able to do, feel, and believe that which he could not do before on his unaided strength and resources alone. He has been granted a gift which amounts to a new state of consciousness and being. He has been set on a path which tells him he is really going somewhere, that life is not a dead end, not something to be endured or mastered. In a very real sense he has been transformed, because he has laid hold of

a source of strength which, in one way or another, he had hitherto denied himself. He finds himself in possession of a degree of honesty, tolerance, unselfishness, peace of mind, and love of which he had thought himself quite incapable. What he has received is a free gift, and yet usually, at least in some small part, he has made himself ready to receive it. (pp. 106–107)

In addition to being discussed in *Alcoholics Anonymous* (1976) and *Twelve Steps and Twelve Traditions* (1981), the nature of the spiritual awakening receives attention in an appendix to the Big Book. Much of the text of the appendix clarifies that while some individuals may experience spiritual awakenings that are "sudden and spectacular upheavals" (AA, 1976, p. 569), many do not. Indeed, most spiritual awakenings occur more gradually. It is noted that most such awakenings are similar to what William James called the "educational variety," in that spiritual changes develop gradually over an often extended period of time. These clarifications were provided by the organization to counter any impression that spiritual awakenings should be or needed to be "sudden and spectacular."

The importance of spiritual awakenings to the process of recovery in AA has been discussed in some detail by Forcehimes (2004), who highlighted spiritual awakening as "the true mechanism of change in AA" (p. 504). Forcehimes postulated a three-step process toward a spiritual transformation. The first step involves hitting bottom, when the individual faces the reality that he or she has lost all control over drinking. Hitting bottom is followed by a phase of contrition, which in turn is followed by surrender, reflecting in many ways what occurs in the working of Steps 1–3. Forcehimes identified several outcomes of spiritual transformations: a release from burden, the loss of a desire to drink, the provision of service to others, and inner peace.

5. Changes in Spirituality over the Course of Recovery

The past several decades have witnessed laments that there has been so little research on the role of spirituality in alcoholism, alcoholism treatment, and recovery (e.g., Galanter, 1999; Miller, 1990). However, this state of affairs is gradually changing, and progressively more research on spirituality and addictions is appearing in the scientific literature. We have benefited from this growing body of literature in developing this section on changes in spirituality over the course of treatment and/or involvement in AA.

Before surveying some of this literature, we should note that a review of the research on the relationship of AA participation (whether alone or in conjunction with formal treatment) to recovery is beyond the scope of this chapter. Nevertheless, it is worth stating, as a background context, that AA participation during or after treatment is positively associated with better recovery outcomes, including higher odds of abstinence (e.g., Tonigan, Connors, & Miller, 2003; Tonigan & Toscova, 1998). When AA involvement (as opposed to AA attendance) is the focus, this relationship is particularly strong

(Horstmann & Tonigan, 2000; Montgomery, Miller, & Tonigan, 1995). Research also has shown that individuals who attend AA during or after professional treatment are more likely to describe improvements in drinking than those who do not (Emrick, Tonigan, Montgomery, & Little, 1993; Moos & Moos, 2005). A comparable indication emerges from a study by Humphreys, Moos, and Cohen (1997) using a general community sample of alcoholics. It was found that those who attended AA during the first year of follow-up showed greater improvement than those who did not. Furthermore, the number of AA meetings attended in the first 3 years was a significant predictor of improved status at an 8-year follow-up. Similar findings have been reported in a 16-year follow-up study of treated and untreated alcohol abusers (Moos & Moos, 2006).

These findings, considered in the context of a broader literature concerning AA-related outcomes, suggest strongly that AA involvement is associated with improvements in substance use outcomes. However, the nature of these changes and the mechanisms by which they are manifested have received much less attention. The relationship between AA involvement and specific changes in the domain of spirituality, along with the causal role spirituality may play, is only slowly being articulated.

5.1. AA Activities in Relation to Spirituality and Outcome

We noted earlier that greater involvement in AA is associated with superior outcomes. This raises the question of which AA activities account for such improvements. This issue was pursued in reviews by Emrick et al. (1993) and Tonigan and Toscova (1998). In the latter review, the relationship between 12 AA-related activities (reaches out for help, has an AA sponsor, works Step 1, leads a meeting, does twelve-step work, tells a story at a meeting, sponsors an AA member, works Steps 6–12, works Step 2, works Step 3, takes-retakes Step 4, and takes-retakes Step 5) and abstinence. Ten of the 12 activities (all except takes-retakes Step 4 and takes-retakes Step 5) were positively related to abstinence, indicating that many of the activities described in the Twelve Steps and in the AA core literature contribute to abstinence. The activities with the strongest relationship to abstinence were reaches out for help, has an AA sponsor, and works Step 1. Interestingly, working Steps 2 and 3, maintaining belief in a higher power and turning one's life over to the higher power, were much less strongly related to abstinence. Related to this, Morgenstern, Labouvie, McCrady, Kahler, & Frey (1997) found that increased AA involvement predicted better outcomes among substance abusing patients and that these effects of AA affiliation were mediated by a set of common change factors (maintenance of self-efficacy, maintenance of motivation, and increased active coping efforts) (see also Bogenschutz, Tonigan, & Miller, 2006, and Connors, Tonigan, & Miller, 2001). More recently, Tonigan, Miller, and Connors (2000) found that increased engagement in AA-related practices and beliefs predicted significantly more abstinence and less intense drinking when drinking occurred. Finally, in another study related to step work, Carroll (1993) found

that spirituality (operationalized as the extent of practice of Steps 11 and 12) was positively associated with length of sobriety and with perceived life purpose.

Another AA-related activity is helping behaviors, which have been systematically pursued in research by Kaskutas, Zemore, and their colleagues (e.g., Zemore, 2007; Zemore & Kaskutas, 2004). In this work it has been shown that greater helping in AA is associated with higher levels of spirituality (Zemore & Kaskutas, 2004). Relatedly, Pagano, Friend, Tonigan, and Stout (2004) have shown that individuals who engaged in helping behaviors in AA (operationalized as sponsorship or completing Step 12) were less likely to relapse in the year following alcoholism treatment, relative to those who had neither of these helping behaviors. These findings emerged independent of the number of AA meetings attended.

Taken together, it appears that many AA-related behaviors, several of which can be viewed as spiritual in nature, are related to varying degrees to recovery. Activities one might view as spiritual processes were not among the strongest predictors of abstinence, although it may be that spiritual activities may operate in important ways as a mediator, setting the stage for one's continuation and subsequent maintenance of important AA behaviors (Tonigan & Toscova, 1998). This issue will be discussed later in this chapter.

5.2. Changes in Spirituality in Recovery

There have been indications in the past that spirituality-related dimensions change over the course of recovery. Brown and Peterson (1990), for example, surveyed AA members on factors associated with their recovery. They found a marked shift in "core values," a shift that was described as a significant point in participants' personal recovery. Brown and Peterson noted that AA members in recovery in particular highlighted the value of "inner harmony." In a more recent project, Tonigan, Miller, and Connors (2001) found that meaning and purpose in life increased over the course of treatment, consistent with previous research (e.g., Waisberg & Porter, 1994). These indications are consistent, of course, with the Twelve Steps and their outlining of a plan for spiritual development and growth.

More recent research has begun to assess changes in spirituality in recovery along a broader array of dimensions. Research by Robinson, Cranford, Webb, and Brower (2007) is an excellent example. They assessed individuals as they entered outpatient alcohol treatment and again 6 months later, evaluating a range of behaviors, beliefs, and experiences associated with spirituality and religiosity. There were significant increases along half of the ten aspects of spirituality/religiosity assessed, and specifically for spiritual/religious practices, daily spiritual experiences, forgiveness, positive religious coping, and purpose in life. Significant decreases in alcohol use also were observed. Follow-up analyses revealed that the odds for "no heavy drinking at 6 months" were associated with increases in daily spiritual experiences and purpose in life. This

finding was observed even after statistically controlling for involvement in AA and for gender.

Another recent study explored comparable dimensions of spirituality over the course of residential treatment and a 6-month posttreatment followup (Connors, Walitzer, & Giegel, 2003). In addition, a particular focus was placed on AA participation over these periods of time. Several noteworthy findings were reported. First, the patients reported significant increases (from pretreatment-to-treatment discharge) on the majority of the 13 dimensions of spirituality assessed (e.g., hope, forgiveness of others and self, existential and religious well-being, serenity, purpose in life). Second, engagement in AA practices during treatment was significantly related to pretreatment-totreatment discharge change scores on several measures of spirituality (i.e., hope, forgiveness of others, religious practices, and serenity). Third, pretreatmentto-treatment discharge change scores on several measures of spirituality (i.e., forgiveness of others, religious practices, purpose in life, serenity, existential well-being) were significantly correlated with percent days abstinent during the 6-month follow-up period. Fourth, AA attendance during the first 3 months following treatment discharge was significantly related to 6-month scores on a variety of dimensions of spirituality (e.g., forgiveness of others, serenity, existential and religious well-being, purpose in life). Taken together, these findings indicate that patients in residential treatment report significant increases along a range of dimensions related to spirituality; that AA practices during treatment are associated with increases along a range of dimensions related to spirituality; that increases along certain dimensions of spirituality (forgiveness of others, religious practices, life purpose, serenity, and existential well-being) are related to abstinence at 6-month follow-up; and that AA attendance immediately (first 3 months) following treatment is associated with month 6 reports on measures of spirituality.

A final dimension of spirituality, if not the overarching dimension according to the AA core literature, is spiritual awakening. Of course, whether and to what degree one may have experienced a spiritual awakening is highly subjective. In a study on this issue, Tonigan (2007) reported that one in five individuals (20%) who participate in AA and who engage in step work report having a spiritual awakening. In another report, Piedmont (2004) found that experiences of spiritual transcendence among substance abusers in treatment increased from the beginning of treatment to an 8-week follow-up assessment. Furthermore, Kaskutas, Turk, Bond, and Weisner (2003) found that patients who reported the experiencing of a spiritual awakening as a result of the AA participation were almost four times more likely to be abstinent at a 3-year follow-up relative to patients who did not experience a spiritual awakening. However, Tonigan (2007) highlights an important caution in the interpretation of spiritual awakenings. In this regard, he notes that most individuals already report a belief in God before initiating AA participation, raising the question of whether individuals might be experiencing multiple "re-awakenings" over time.

An important issue that warrants attention is the interplay of changes in spirituality and changes in drinking during recovery. Not clearly specified to date is whether changes in spirituality precede changes in drinking, if changes in drinking precede changes in spirituality, or if they operate in concert with each other. The data reviewed above would suggest that changes in spirituality are related to changes in drinking, although perhaps only modestly. However, they do not establish the precise causal relationships between spirituality, AA involvement, and recovery. It is anticipated that continuing research in this arena will provide better insights into these relationships. For example, Zemore (2007) recently conducted a mediational analysis specifically testing the hypothesis that spiritual change helps to explain the effects of selfhelp group involvement on recovery outcomes. The study included individuals receiving treatment for chemical dependency. Results showed that, as expected, increases in self-help group involvement from baseline to follow-up predicted higher odds of total abstinence at the 1-year follow-up and that this relationship was partially explained by increases in measures of spirituality. Thus, emerging evidence seems to be supporting a causal role for spiritual change in the efficacy of self-help groups.

Another important issue warranting mention is consideration of outcomes beyond drinking behavior. It will be of interest to determine how changes in spirituality are related to other domains of life functioning, including psychological and physical health, marital and family relationships, friendships, and vocational pursuits.

A final issue concerns direct versus indirect effects of spirituality. Most research has focused on potential direct effects of spirituality on achieving and maintaining abstinence. As noted by Tonigan (2007) and also earlier in this chapter, this relationship appears to be modest, at least based on the research available to date. In discussing this matter, Tonigan (2007) highlighted the possibility that spirituality and/or spiritual practices facilitate or produce behaviors that in turn account for achieved abstinence. In such a scenario, spirituality would be serving as an indirect effect. As an example, Tonigan (2003) studied the indirect effects of spirituality in AA-related activities over time. He found that AA practices assessed 3 years after treatment were positively associated with spirituality, which predicted sustained AA practices assessed 10 years after treatment, which in turn were predictive of abstinence at that point in time. This finding suggests the benefit of spirituality as reflected in its contribution to the maintenance of AA practices over time.

6. Conclusions

Spiritual growth and development are a central focus of AA. Indeed, AA has been described as providing a spiritual path to recovery. This chapter has described a variety of topics pertaining to spirituality and AA, including core spiritual beliefs, AA practices relevant to spirituality, and subjective experiences

of spirituality in AA. A growing body of literature has been addressing the interplay of changes in spirituality, changes in drinking, and AA involvement. Research to date indicates a positive relationship between AA-related activities and abstinence and that dimensions of spirituality (e.g., inner harmony, life meaning) change over the course of recovery. Increases on these and other dimensions of spirituality appear to coincide with abstinence and/or decreases in drinking. Further research in this area will be advancing our understanding of the interplay of changes in spirituality and changes in drinking over time, whether changes in spirituality are related to improvements in other areas of life functioning, and the direct versus indirect effects of spirituality on achieving and maintaining sobriety.

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Mindfulness and Addiction

Sharon H. Hsu, Joel Grow, and Alan Marlatt, G.

1. Introduction

The increasing popularity of Eastern spiritual traditions over the last several decades has led to the application of meditation in a wide variety of settings. While the meditation literature describes many different meditative practices (Goleman, 1988; Ospina et al., 2007), reviewers tend to group them into two basic types: concentrative or "mantra" meditation and mindfulness meditation (Ospina et al., 2007). The purpose of this chapter is to illuminate the role of mindfulness meditation in the treatment of addictive behaviors.

This chapter is organized as follows. The second section provides definitions, history, and clinical applications of mindfulness meditation, followed by a discussion of potential mechanisms of action. Section 4 discusses clinical applications of mindfulness meditation. Section 5 describes a recent study comparing mindfulness meditation to a treatment as usual group in a sample of incarcerated men and women. Section 6 discusses the recent development of a mindfulness-based relapse prevention program. Section 7 explores the similarities and differences between mindfulness meditation and twelve steps. Section 8 describes areas of future mindfulness research. The ninth and final section comprises a case study (Marlatt, 2005), which illustrates how meditation and Buddhist philosophies can be utilized to help individuals who may not benefit from traditional treatments.

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2. Mindfulness and Addiction: History and Definitions

2.1. Definitions of Mindfulness

Rooted in Buddhist *Vipassana* (translated as "insight" or "to see things as they really are") meditation, mindfulness meditation encourages the cultivation of moment-to-moment awareness, observing whatever comes up in the mind without judging it. Kabat-Zinn (1994) defines mindfulness as "paying attention in a particular way—on purpose, in the present moment, and without judgment." The goal of mindfulness training, then, is not to change the content of thoughts, but to develop a different attitude toward thoughts and sensations as they occur (Bishop et al., 2004). The meditator observes thoughts and sensations rising and passing and accepts them as "just thoughts," aware of their impermanence. The meditator stops identifying strongly with thoughts, realizing "thoughts are not facts." Mindfulness is an awareness skill, developed through repeated daily practice, much like learning a musical instrument. As this skill develops, negative thoughts are de-personalized and lose their power to dictate subsequent feelings and activities (e.g., substance use).

Concentration-based approaches, such as transcendental meditation (TM), train individuals to focus attention solely on a single stimulus, such as a word (e.g., a mantra), sound, or object. When attention wanders, it is directed back to the object of meditation, with no attention paid to the nature of the distraction. Mindfulness meditation, in contrast, begins with observation of the breath and expands to include awareness of bodily sensations, thoughts, emotional states, and all aspects of current experience. It involves choiceless awareness—simply observing constantly changing stimuli as they arise and pass.

In discussing Buddhism in the context of this chapter, we are taking liberties by implying that there is only one approach to "Buddhism." It is important to mention there are several schools of Buddhism (e.g., Tibetan, Zen, Pure Land), each with specific interpretations and emphases. The points raised in this chapter, however, will generally be held across the different schools. Although derived from Buddhism, mindfulness is secular in nature and open to those of any religious denomination or none. The mindfulness approach is more of a philosophy or science than a religion, and the teachings can be viewed as a manual of how to deal with the behavior of the mind. Mindfulness practice is not necessarily "spiritual," although this can be incorporated (discussed in Section 7).

2.2. Mindfulness and Addiction

Buddhism teaches that emotional stress arises due to craving (*tanhâ*, literally "thirst"). From this perspective, craving equates to sensuous desire, the constant impulse to gratify the senses with things that are pleasant. Being dissatisfied with what *is*, the mind longs for what is *not*, or what could be (e.g., the next "fix"). Whether it is seeking pleasure or avoiding an uncomfortable

situation, everyone experiences craving on some level, through food, entertainment, sleep, sex, exercise, or substance use.

Addiction, according to this view, is not fundamentally different from other cravings (Marlatt, 2002):

Craving can be experienced either as a desire to continue or prolong a pleasant experience (continue the "high") or to avoid or escape an unpleasant state (alleviate the "low"). Because craving is directed toward the future (anticipation of immediate positive or negative reinforcement), the addict becomes trapped in his or her attachment or "clinging" to the addictive behavior as the only source of relief from present or potential suffering. The addicted mind becomes fixed on the future ("When will I get my next fix?"), and the individual is less likely to accept what is happening in the present moment. (p. 46)

Engaging in drug use is a "false refuge" because it is motivated by a strong desire for relief from suffering, despite the fact that continued involvement in the addictive behavior increases pain and suffering in the long run (Marlatt, 2002). The mindfulness meditator seeks to develop insight into the impermanent nature of cravings and desires, how they arise, what forms they take, and how they can be managed. This allows him/her to respond with awareness rather than react automatically.

Research on alcohol use indicates that frequency of unwanted thoughts related to use may not be as important as the manner in which an individual copes with those thoughts (Bowen, Witkiewitz, Dillworth, & Marlatt, 2007). In a study working with participants with alcohol misuse, Kavanagh and colleagues (2004) showed that at least some thoughts about alcohol use were transient. They concluded, "If both suppression and elaboration can be avoided, many intrusive thoughts will be relatively transient." Mindfulness meditation is a method that could allow this acceptance to occur. The intrusion would remain a fleeting thought, and the participant would not automatically act on it.

As stated by Groves and Farmer (1994), "In the context of addictions, mindfulness might mean becoming aware of triggers for craving...and choosing to do something else which might ameliorate or prevent craving, so weakening the habitual response." Meditation offers the recovering addict a powerful tool to successfully deal with a wave of craving. Because there is no judgment of the addictive craving or impulse, more choice-points for action are opened up than are typically apparent to someone less mindful.

3. Mechanisms of Action

3.1. Examining Mindfulness Utilizing Three Different Models

Although the precise mechanisms of action that underlie the effectiveness of mindfulness meditation are uncertain, several models have been proposed. Some researchers have described meditation as a metacognitive intervention.

Observing how cognitions may give rise to negative emotions leads to a gradual change in the meditator's attitude toward thinking. The meditator develops a sense of heightened, detached awareness of thought experience. Teasdale and colleagues (1995) described mindfulness as "attentional control," a metacognitive state of detached awareness which changes a person's relationship to his/her thoughts.

Shapiro and colleagues (2006) recently posited a triaxiomatic model of mindfulness, defining its three components as intention, attention, and attitude. It is through the simultaneous cultivation of these three components that a fundamental shift in perspective occurs, which they call "reperceiving." They argue that this meta-mechanism of action, like Teasdale's attentional control, allows the meditator to disidentify from the contents of consciousness and view moment-by-moment experience with greater clarity and objectivity.

Harvard psychologist, Ellen Langer, has developed a cognitive model of mindfulness that also supports this view. While Langer's model derives from a different historical and cultural background, it shares mindfulness meditation's emphasis on flexible awareness in the present moment. Margolis and Langer (1990) differentiate between mindfulness and mindlessness:

Mindlessness can be defined as a cognitive state in which an individual relies rigidly on categories and distinctions created in the past.... Mindfulness, on the other hand, can be defined as a state of continuous category formation. A mindful individual creates new approaches to events and situations. He or she is not bound by previously formed rigid attitudes; rather, the mindful person, situated in the present, explores a situation from several perspectives. (p. 107)

Langer defines mindfulness as a cognitive style characterized by a freedom from rigid attitudes or cognitive categories (Marlatt, 1994), allowing the mindful individual to view the situation from multiple perspectives. A mindless individual, on the other hand, remains cognitively committed to one way of seeing information (Carson & Langer, 2006).

3.2. From a Neurological Perspective

Growing evidence supports the view that mindfulness meditation changes neurological functioning. Witkiewitz and colleagues (2005) reviewed recent neurobiological and psychophysiological studies and found demonstrated changes in neurotransmitter levels, brain wave activity, and cerebral blood flow, activation of neural structures involved in attention, and other neurological changes. A more recent review of neurophysiological concomitants of mindfulness (Ivanovski & Malhi, 2007) provides more support, reporting that mindfulness meditation leads to improvements in multiple aspects of attention, including sensitivity, concentration, openness to experience, and ability to inhibit distracting stimuli, and has an effect on perceptual sensitivity and

perceptual rivalry. For a more thorough analysis of mindfulness meditation's effects on the brain, see the *Mindful Brain* (Siegel, 2007).

3.3. Active Ingredients in Mindfulness Meditation

Experiential avoidance, the unwillingness to remain in contact with one's experience, is related to various forms of psychopathology (Hayes, Strosahl, & Wilson, 1999). A recent study supports the hypothesis that mindfulness meditation directly opposes escape and experiential avoidance (Simpson et al., 2007). By fostering nonjudgmental acceptance of moment-to-moment thoughts and feelings, the mindfulness meditator limits efforts to avoid internal and external experience. The previously discussed work of Shapiro and colleagues (2006) also supports this idea. The process of reperceiving interrupts automatic maladaptive habits, as illustrated in the following example (Shapiro et al., 2006):

If anxiety arises, and we strongly identify with it, there will be a greater tendency to react to the anxiety unskillfully and subsequently regulate it by some behavior such as drinking, smoking, or overeating. Reperceiving allows us to step back from the anxiety, to see it clearly as simply an emotional state that is arising and will in time pass away. Thus, this knowledge of the impermanence of all mental phenomena allows a higher level of tolerance for unpleasant internal states. (p. 380)

Accepting thoughts and experiences rather than attempting to avoid or suppress them has been shown to be an effective component of mindfulness practice in relation to decreasing substance use (Bowen et al., 2007). Mindfulness-based relapse prevention (discussed later in this chapter) incorporates several strategies for countering experiential avoidance, including "urge surfing." This coping strategy uses the imagery of a wave to help the meditator gain control over impulses to use drugs or alcohol. By identifying and accepting the urge to use, the meditator experiences it rise and pass, like a wave, without getting "wiped out" by the urge.

Learning processes such as habituation and desensitization have also been suggested as mechanisms of mindfulness (Ivanovski & Malhi, 2007). For example, Kabat-Zinn and colleagues (1992) suggest that the process of desensitization as a result of prolonged exposure leads to symptom relief in patients with chronic pain and anxiety. Breslin and colleagues (2002) analyzed relapse and concluded that mindfulness meditation has the potential to help clients prevent relapse through desensitization and increased tolerance of uncomfortable cognitive and affective states. The repeated experience of exposure to cues coupled with nonreactivity can increase one's sense of control and self-efficacy. This is consistent with cognitive-behavioral therapy, which attempts to increase an individual's capacity to cope with negative affective states; classically conditioned responses are addressed through extinction procedures and the acquisition of more effective coping strategies.

The self-medication hypothesis (Khantzian, 1997) is a model of alcohol use supported by a substantial body of research. This theory postulates that alcohol use often arises as a means of coping with other psychiatric problems, and individuals with mental health problems often use alcohol to reduce and manage their symptoms (Blume, Schmaling, & Marlatt, 2000). Marlatt and Chawla (2007) note that from this perspective, mindfulness meditation may serve as a useful alternative to alcohol use and may result in some of the same positive consequences, such as tension reduction and relaxation. Glasser (1976) echoed this perspective when he described meditation as a "positive addiction," one that "increases your mental strength and is the opposite of a negative addiction, which seems to sap the strength from every part of your life except in the area of the addiction." Mindfulness meditation may not be especially reinforcing in the short run, but it is associated with long-term rewards such as greater psychological balance and well-being.

Meditation may also be viewed as a vehicle for spiritual growth. Some mindfulness meditation researchers emphasize disengaging meditation from its Eastern roots (Kabat-Zinn, 1990; Hayes, 2002), which may allow an easier fit into the theoretical matrix of scientific psychology. Others (Goldstein & Kornfield, 1987) point out that leaving out the spiritual aspect may limit a full understanding of the potential of meditation practice (Marlatt & Kristeller, 1999). From this view, meditation may be a way to cultivate a sense of inner calm, harmony, and transcendence often associated with spiritual growth. Marlatt & Kristeller, 1999 suggests a possible mechanism: meditation may bypass cognitive processing of usual daily concerns, allowing access to these other aspects of being.

Finally, meditation has often been described as a relaxation technique. Research on the physiological effects of meditation shows that meditators exhibit a "wakeful hypometabolic state" (Wallace, Benson, & Wilson, 1984). Noticing that many types of meditation and relaxation procedures produce a similar response, Benson and Proctor (1984) referred to this reaction as the "basic relaxation response." However, recent neurophysiological research suggests that mindfulness meditation is a unique form of consciousness and not merely a degree of a state of relaxation (Ivanovski & Malhi, 2007). Leading mindfulness researcher Jon Kabat-Zinn (2003) emphasizes mindfulness meditation's "radical, transformational essence," that it is more than just a relaxation tool. He describes the similarities between mindfulness and relaxation strategies as "important, but not necessarily fundamental, and often only superficial."

To explore this further, Jain and colleagues (2007) conducted a randomized trial to determine the relative efficacy of mindfulness meditation compared with relaxation interventions. Their results help illuminate the distinctions between meditation and relaxation techniques. Both the relaxation and mindfulness groups showed lower overall psychological distress compared to the control group, but the mindfulness group was unique in its ability to reduce rumination

and distraction. The researchers concluded that these decreases in rumination and distraction are likely unique mechanisms of action for mindfulness training and are not simply a consequence of relaxation effects (Jain et al., 2007).

4. Clinical Applications

4.1. Applications in Three Different Settings

The application of mindfulness meditation as an intervention for psychological disorders is not unique to the treatment of addictions (Baer, 2003). Mindfulness-based stress reduction (MBSR) was among the first programs to integrate mindfulness meditation into treatments for chronic pain and illness (Kabat-Zinn, 1990). Now offered at clinics around the world, MBSR has been demonstrated by controlled trials to be useful for a wide range of problems, including stress and psychosomatic complaints. Linehan (1993) combined mindfulness meditation with principles of cognitive-behavioral therapy into her revolutionary dialectical behavioral therapy (DBT), the first treatment with proven efficacy for symptoms of borderline personality disorder. Hayes and colleagues utilized mindfulness techniques in their acceptance and commitment therapy (ACT; Hayes et al., 1999). Clients in ACT are taught to recognize an observing self who is capable of watching his/her own bodily sensations, thoughts, and emotions (Baer, 2003). More recently, mindfulness-based cognitive therapy has been developed for the treatment of chronic depression (Segal, Williams, & Teasdale 2002). An adaptation of MBSR, this treatment promotes a decentered view of one's thoughts, emotions, and body sensations and includes formal meditation practice as part of therapy.

4.2. Applications in Addiction Research

Over the past several decades, Marlatt and colleagues at the Addictive Behaviors Center at the University of Washington have been studying meditation as a treatment for problematic substance use. Based on several early survey studies on meditation and substance abuse (Benson, 1975; Marcus, 1974), Marlatt and Marques (1977) applied the practice of a mantra meditation (TM) as an intervention for high-risk college student drinkers. Encouraged by the results suggesting meditation was helpful in reducing excessive alcohol consumption, the research team conducted a randomized trial comparing TM with two control groups: deep muscle relaxation and daily quiet recreational reading. All three conditions reported significant reductions in alcohol use and associated drinking problems, and those in the TM group reported the most consistent reductions in alcohol use. A second randomized trial (Murphy, Pagano, & Marlatt, 1986) showed that meditation and daily aerobic exercise were equally effective in reducing alcohol use when compared with an assessment-only control group. Subsequently, Marlatt and colleagues have expanded on these

ideas to include other aspects of Buddhism and mindfulness meditation in the treatment of substance use disorders (Marlatt, 1994; Marlatt & Kristeller, 1999).

5. Mindfulness Meditation and Substance Use in an Incarcerated Population

In 1999, Marlatt and colleagues began a study investigating the effectiveness of Vipassana meditation (VM) as a stand-alone treatment program for alcohol and drug problems among inmates in a minimal-security prison. Male and female inmates were recruited from the North Rehabilitation Facility (NRF) to participate in a 10-day VM course. Those who were not interested in the VM course were assigned to a case-matched "treatment as usual" group and were allowed to attend other rehabilitation courses (e.g., psychoeducation, Alcoholics Anonymous, social skills training). The VM course consists of many hours of daily meditation that are held in silence, except for the oral instructions given by the teachers (Marlatt & Chawla, 2007). All were assessed for alcohol/drug problems at a 3-month follow-up following release from incarceration. The course consists of a series of discussions on basic Buddhist principles, including the Four Noble Truths (discussed in Section 7), and meditation as the conduit of moving toward spiritual enlightenment.

Results from the study provided preliminary support for the main hypotheses (Bowen et al., 2006b): Compared to inmates in the control group, those who participated in the VM course reported significant reductions in substance use (alcohol, marijuana, and crack cocaine) and fewer alcohol-related negative consequences. Inmates who participated in the VM course also reported significant lower levels of psychiatric symptoms, higher levels of optimism, and higher levels of internal alcohol-related locus of control. A secondary analysis demonstrated that there was no difference in PTSD severity between those who did and did not volunteer to participate in the VM course, indicating that VM was accepted by those with PTSD symptoms (Simpson et al., 2007). Overall, the results of this study provided support for developing a mindfulness-based intervention program for substance use disorders, as well as those with co-morbid disorders.

6. Mindfulness-Based Relapse Prevention Study

Currently, Marlatt and colleagues are developing and evaluating mindfulness-based relapse prevention (MBRP), a manual-guided, group-based, outpatient intervention for problematic substance use. Based on the previously discussed theoretical and empirical support for the effectiveness of mindfulness meditation in the treatment of chronic pain (MBSR; Kabat-Zinn, 1990) and chronic depression (MBCT; Segal et al., 2002), MBRP integrates traditional cognitive-behavioral relapse prevention techniques (Marlatt, 1985) with mindfulness meditation. The goal of the program is to develop awareness and

acceptance of thoughts, feelings, and sensations through the practice of mindfulness meditation and to utilize these skills as a coping strategy in the face of high-risk situations for relapse (Witkiewitz, Marlatt, & Walker, 2005).

Based on the structure of MBSR and MBCT, MBRP features 8-weekly 2-h closed-group sessions. Each group of participants discusses and practices relapse prevention and mindfulness techniques. In-group discussions include topics like noticing the tendency to be on "automatic pilot," identifying triggers to relapse, learning to be more aware of each moment, staying present during pleasant and unpleasant thoughts and experiences, cultivating an attitude of acceptance, and working with barriers to practice. In addition to in-group instruction, participants receive meditation CDs and are expected to institute a regular mindfulness practice outside the group. They are also assigned mindfulness and relapse prevention exercises as homework.

A primary focus of the program is the application of mindfulness skills to thoughts, urges, and cravings, especially those involving alcohol or substance use. This tool is essential in promoting awareness and acceptance of psychological and physiological reactions to substance withdrawal (Witkiewitz et al., 2005). Participants are taught awareness of impulses, acceptance of uncomfortable affective states, and the ability to monitor their experiences as they are happening. The focus on emotions and episodes of craving strengthens the participant's discriminative awareness and may provide a "pause" in the process of reacting impulsively to urges and cravings.

The identification of high-risk situations for relapse also remains a central component of the treatment (Witkiewitz et al., 2005). Participants learn to develop a system for recognizing early warning signs for relapse and an awareness of triggers, such as people or places previously associated with substance use. Mindfulness provides participants a new tool for monitoring one's reaction to the environment. Repeated exposure to being mindful in high-risk situations without giving in to alcohol or drug use in the presence of substance-related cues should enhance self-efficacy and coping capacity (Marlatt & Chawla, 2007).

The current MBRP trial is composed of three phases: initial development of the MBRP protocol, therapist training, and development of therapist adherence/competence measures; a pilot study; and a main implementation trial. To date, only the pilot phase has been completed. This phase consisted of conducting four gender-segregated MBRP groups at a private treatment agency. There was no control condition for this phase; the purpose was simply to provide an opportunity for therapists to practice leading groups and to refine the MBRP treatment manual.

The second phase of the study, a randomized clinical trial currently in progress, involves conducting MBRP groups as part of an aftercare program in a county treatment agency, which allows researchers to recruit individuals from varied ethnic and socioeconomic backgrounds. Eligible participants must first complete intensive outpatient or inpatient treatment. The study aims to assess

the feasibility and efficacy of the MBRP groups as compared to traditional continuing care programs.

7. Mindfulness Meditation and Twelve Steps

Because this chapter addresses the role of spirituality in recovery, it is worthwhile to consider the similarities and differences between mindfulness approaches and another spiritual approach, twelve steps.

The mindfulness meditation utilized in the MBRP program derives from Buddhist philosophy but is secular in nature. Buddhist meditation and secular mindfulness meditation differ in two important ways: the ultimate goal of training and involvement in intensive retreats (Ostafin et al., 2006). In traditional Buddhist meditation, the goal of training is to realize Enlightenment, the impermanence of self, and the training usually involves intensive, often silent, retreats. In the secular mindfulness context, the goal of training is to realize the impermanence of thoughts and emotions *related* to self (e.g., "I am hopeless" is just a thought). The subsections below compare each mindfulness approach separately with the twelve-steps approach (e.g., Alcoholics Anonymous).

7.1. "Pure" Buddhist Meditation and Twelve Steps

Fundamentally, Buddhist meditation and twelve steps are dissimilar in their conceptualization and treatment of addictive behaviors: twelve steps, based on the disease model (Brickman et al., 1982), contends the root of the addictive problem stems from biological or heritable causes. Alcoholism is perceived as a disease of chemical dependency. Buddhist mindfulness, on the other hand, states that the cause of addiction is lack of awareness (Bowen, Parks, Coumar, & Marlatt, 2006a). Afflicted individuals do not have the "Right View," which refers to the ability to see and understand the impermanence of perceived reality (Marlatt & Kristeller, 1999). Through comprehension of the Four Noble Truths, individuals can move toward a more enlightened state. The Four Noble Truths acknowledge the reality of suffering (addiction), attachment/craving (for alcohol and drugs) as its cause, the cessation of craving as the cure for suffering, and the path to cessation of suffering. Objects of attachment include the idea of "self," which is a delusion, because what we call self is just an imagined entity. While the twelve-steps philosophy holds a different view regarding the root of addiction, it echoes Buddhism by recognizing the importance of attachment to self or "self-centeredness." As the "Big Book" describes (Alcoholics Anonymous, 1976),

Selfishness- self-centeredness! That, we think, is the root of our troubles. Driven by a hundred forms of fear, self-delusion, self-seeking, and self-pity, we step on the toes of our fellows and they retaliate...so our troubles, we think, are based on our own making, they rise out of ourselves, and the alcoholics is an extreme example of self-will run riot.... We alcoholics must be rid of this selfishness. (p. 62)

In Buddhist psychology, the Noble Eightfold Path, the path to cessation of suffering, consists of a set of practical guidelines for ethical and mental development, with the goal of freeing individuals from craving. The path includes mindfulness meditation practice as the way to see things as they really are—Right View—which leads to the cessation of suffering (Marlatt, 2002). This viewpoint is different from twelve-steps framework, which states that there is no ultimate cure for alcoholism.

Although twelve steps and Buddhism perceive addictive behaviors differently, they both emphasize living a life adhering to moral and ethical principles, which in turn repels problematic substance use. Griffin (2004), a recovered alcoholic who integrates meditation with twelve steps, perceives these approaches as fundamentally compatible. He argues that fundamentally, Buddhism states that the cause of human suffering is desire, and the twelve steps' main objective is to heal people from extreme levels of desire, namely addiction. However, twelve-steps literature does not explicitly conceptualize desire. The word "desire" was used to refer to a will to stop drinking, which is the only requirement for Alcoholics Anonymous (AA) membership.

Buddhism and twelve steps are also disparate in their views on treatment for addictive behaviors. On one hand, the Buddhist notion of the "Middle Way," or moderation, allows for a continuous conceptualization and treatment of addictive behaviors. This standpoint is compatible with both an abstinence-based goal and a harm reduction goal (as demonstrated in the case study). The Middle Way, a compassionate approach, attempts to "meet the clients where they're at," rather than introducing action-based ideas prematurely (before one is ready to change). On the other hand, the twelve-steps framework perceives addiction as a dichotomous state; one is either completely abstinent or actively using (total relapse). The AA expression, "one drink is too many, a thousand isn't enough," demonstrates the mindset that lapses are not acceptable. However, the Middle Way could also be viewed as a lifestyle modification principle: live a simpler life, seeking emotional balance instead of the extreme pleasure (e.g., abusing substances). This is similar to the twelve-steps tenet in which individuals are encouraged to seek serenity in life through spiritual development.

Some differences in twelve steps and Buddhism are driven by different interpretations of the core concepts in twelve steps. While some interpretations are consistent or parallel with Buddhist tenets, others are not. The twelve-steps framework states that recovery requires surrendering oneself to a higher power, and only through this surrender can one's sanity and health be restored (Alcoholics Anonymous, 1952). Some might think that the implicit assumption of this viewpoint is that afflicted individuals are helpless, that they do not have the power to change their own thoughts or behaviors. Others, however, might think that powerlessness does not mean helplessness; afflicted individuals are powerless over the *effects* of alcohol and its negative consequences, but they are not powerless over making a change in their own behaviors (Griffin, 2004). The latter interpretation is consistent with the Buddhist view in which individuals are held responsible for their actions, and are not just victims of fate or

concealed forces (Griffin, 2004). In a Buddhist's view, recovery does not demand surrendering to an external higher power.

"Higher power" is another concept that can be interpreted in several ways. For example, Griffin (2004) suggests that a higher power can be perceived as a vast subtle energy diffusing throughout all things—a Great Spirit, as found in the Native American belief system. A higher power could also be mindfulness itself (Griffin, 2004); meditation is described as a way of going beyond the self (small mind) and moving toward the "big mind" of spiritual enlightenment. Finally, higher power could also be interpreted as the underlying rules governing the cause and effect of all things: the Buddhist law of Karma. These interpretations, different from the monotheistic concepts of "God," may allow more individuals to access AA without feeling the pressure of conforming to a specific religion. Griffin (2004) proposed that as one practices the twelve steps, one's understanding of a higher power might change many times. This idea, considering higher power as a revolving entity, resonates with the Buddhist notion that everything is impermanent.

The compatibility of Buddhist mindfulness and twelve steps was described in Griffin's (2004) experience of practicing both approaches:

Their (Buddhist mindfulness and 12 steps) respective means may seem very different at times. . . . But I found that as I learned more about both traditions, the deeper means and purposes of such came into harmony: understanding powerlessness helps me let go in my meditation practices; investigating my mind in meditation helps me do inventory work; listening to the suffering of others in self-help groups develops my heart of compassion. (pp. xviii–xvx)

In order to maintain longer-term sobriety, both approaches demand continuous commitment to practice of either meditation or repetition of the steps in different configurations and patterns (Griffin, 2004).

7.2. Secular Mindfulness and Alcoholics Anonymous

To the best of our knowledge, the MBRP study is the first program developed to treat substance use problems utilizing a secular mindfulness-based approach. In this chapter, we will therefore use the MBRP program as an example to compare to Alcoholics Anonymous (AA), a recovery program based on the twelve steps, across several dimensions: background, group dynamics and format, rationales, models of addiction, recovery goals, meditation practice, techniques of self-monitoring, and treatment mechanisms.

MBRP is a manualized aftercare program aimed at preventing relapse after completion of substance use treatment. As discussed above, it is modeled after the empirically supported mindfulness-based cognitive therapy (MBCT). Developed by recovering alcoholic Bill W. and Dr Bob (an alcoholic physician), AA has been self-described as a self-help program that is spiritual but not religious. Given that it is rooted in Judeo-Christian doctrine (Kurtz, 1979), it may be difficult for some not to perceive it as having a Christian religious focus. For

example, eleven of the twelve steps explicitly refer to the significance of God or a higher power for recovery (Tonigan, 2007). In order to attract a broader range of recovering individuals, both MBRP and AA attempt to separate themselves from their original religious roots. Further, research has indicated that even though belief in God seems to be fairly unimportant in receiving benefit from attending AA, atheist and agnostic individuals are less likely to initiate and sustain AA attendance compared to those who are spiritually focused (Tonigan, Miller, & Schermer, 2002). While AA may be more accessible due to its high availability in the United States, MBRP's secular approach might be more appealing to those who are self-reported atheists and agnostics.

In terms of group dynamics and format, AA and MBRP are dissimilar in three aspects. First, clinical research indicates that with some groups being more supportive, expressive, and cohesive, AA is not a homogeneous entity (Tonigan, Ashcroft, & Miller, 1995). The AA groups that discuss twelve steps more often appear to be more supportive (Tonigan, 2007). In spite of large differences among AA groups in perceived group functioning, studies reported that spirituality is uniformly and frequently discussed in AA meetings (Hortsmann & Tonigan, 2000; Tonigan et al., 1995). In contrast, the MBRP groups are expected to be more homogenous compared to the AA groups, as the practitioners deliver the program according to the treatment manual. Spirituality is not explicitly discussed in MBRP sessions. Secondly, in AA groups, there are no therapists. Some groups might ask their members to serve as facilitators for discussion on a rotating basis or as sponsors for less-experienced members. On the contrary, each MBRP session is led by two therapists, who may or may not have been in recovery. The therapists are required to personally practice meditation in order to maintain their ability to deliver authentic MBRP sessions. The MBRP practitioners adopt a person-centered Rogerian approach (Rogers, 1959) and are trained to utilize *motivational interviewing* style (Miller & Rollnick, 2002) to facilitate group discussions. This style, which focuses on exploring and resolving clients' ambivalence about change, may be beneficial to those in the early stages of change (Prochaska & DiClemente, 1984). This is different from the AA approach, which states that the only requirement to AA membership is the desire to stop drinking. The implicit assumption of this view is that the clients themselves are responsible for "bringing" motivation to change distress behaviors to the AA meetings. Thirdly, although both are aftercare programs, MBRP, unlike AA, does not hold continuous groups. How participants in MBRP can receive continued support for meditation practice and relapse prevention is a challenge for future research.

In terms of rationale, both programs emphasize developing an acceptance toward one's addiction. As described above, MBRP encourages afflicted individuals to develop a present-focused awareness and acceptance of thoughts, bodily sensations, and emotional states through the practice of mindfulness meditation and to utilize these mindfulness skills as a coping strategy for relapse prevention (Witkiewitz et al., 2005). Similarly, the first step of the twelve

steps is to admit or come to an acceptance toward one's alcoholism. The serenity prayer said at most AA meetings demonstrates that an attitude of acceptance is crucial to recovery in AA: "God grant me the serenity to accept the things we cannot change, courage to change the things we can, and wisdom to know the difference." Even though both approaches emphasize acceptance, it is unclear what strategies AA participants use to cope with urges and cravings to use alcohol. When individuals have urges to drink, they are often encouraged to attend an AA meeting or call a sponsor. Given the heterogeneous nature of AA groups (Tonigan et al., 1995), it may be difficult to identify universal coping strategies for AA participants.

MBRP, being a mindfulness meditation program integrated with cognitive-behavioral therapy and relapse prevention, acknowledges multiple potential biopsychosocial causes contributing to the development and maintenance of alcohol abuse and dependence. These causes may include biological vulnerabilities or psychological, sociocultural, and spiritual factors (Daley & Marlatt, 1997). Rather than viewing addiction as a multi-determinant behavior, AA is based on the disease model (Brickman et al., 1982), which indicates that addiction is caused by a single, biological determinant. The twelve-steps principles state that the "disease" of alcoholism is progressive and never can be completely cured. This is dissimilar from the biopsychosocial model in which the cessation of alcohol abuse and dependence is possible.

In terms of recovery goals, both AA and mindfulness emphasize short-term recovery goals. In MBRP, clients are asked to just "be" in the present moment. Correspondingly, the twelve-steps adage, take things "one day at the time," expresses a similar idea of focusing on the present. However, MBRP further narrows down to focusing on "moment-to-moment" or "one-breath-at-atime" experiences (Griffin, 2004).

Both MBRP and AA encourage individuals to practice meditation. Step 11 of the twelve steps states that alcoholics should seek to improve their conscious contact with God through prayer and meditation (Alcoholics Anonymous, 1952). To the best of our knowledge, however, no formal, universal meditation techniques are taught in the typical AA meetings. The MBRP program, on the other hand, offers a variety of meditation techniques to participants throughout the 8-week period. Guided meditation CDs are given to participants for personal practice.

Steps 4 and 10 in twelve steps encourage individuals to make a personal inventory, which entails recording past and present events and making amends for one's wrongdoing. The aspect of recording one's own thoughts and behavior is similar to self-monitoring, a behavioral technique which has also been utilized in meditation (Marlatt & Kristeller, 1999). However, mindfulness meditation takes the further step of removing one's mental and subjective functioning, as it aims to help clients develop the ability to observe the stream of consciousness from the perspective of a vigilant but detached observer

(Marlatt & Kristeller, 1999). Marlatt's "urge surfing" technique, as described in Section 3, is a good example of a self-monitoring technique.

We will explore the following behavioral change mechanisms that have either appeared or can potentially appear in both MBRP and AA: self-efficacy, spirituality, thought suppression, and social support. Studies of AA exposure reported that AA participation, not attendance alone, is predictive of increased self-efficacy (Owen et al., 2003). Progress through the twelve steps of AA accounted for increased self-efficacy in relation to attending AA meetings and receiving support in AA fellowship. Similarly, continued meditation practice is predictive of increased self-efficacy (Murphy et al., 1986). Based on this finding, MBRP researchers have hypothesized that personal meditation practice, not just MBRP session attendance, will predict higher self-efficacy. This increase, in the context of both approaches, may further reduce the chances of relapse and increase individuals' ability to cope with stressful situations.

Like culture, health, and personality, spirituality can be described as a latent construct that is not observed directly but can be inferred from observations of some of its component dimensions (Miller & Thoresen, 2003). To date, little evidence has supported that spirituality accounts for later abstinence (Tonigan, 2007). However, spirituality has a significant indirect effect in predicting later reductions in alcohol consumption: spirituality helps to maintain AA-related involvement, affiliations, and practices over time, which in turn predicts greater abstinence. Spiritual beliefs may promote a code for living that is congruent with abstinence and incongruent with problematic alcohol use. Owen and colleagues supported this idea when they found that AA participation affects abstinence indirectly through lifestyle changes, such as getting involved in recreational activities, giving up friends who use alcohol, and quitting smoking cigarettes (Owen et al., 2003).

To the best of our knowledge, only one study has examined the relationship between mindfulness and spirituality (Leigh, Bowen, & Marlatt, 2005). Results of the study suggest that spirituality and mindfulness may be independent constructs. This can be explained by differences in how to best operationally define each construct. One way of conceptualizing spirituality is to perceive it as an adoption of philosophical beliefs that may or may not contain a mindfulness approach. Similarly, mindfulness can be viewed as a way of approaching one's life experience in the presence or absence of pursuing spiritual goals. Nonetheless, given the complex nature of spirituality and the fact that no scientific consensus yet exists on how to best assess spirituality (Miller & Thoresen, 2003), future research is needed to replicate and sustain the findings in this study.

Thought suppression often leads to an increase in unwanted thoughts (Wegner, 1997; Wegner, Schneider, Cater, & White, 1987). Research in addictive behaviors has found that thought suppression hinders attempts to quit smoking and elicits a higher level of alcohol expectancies when compared to control groups (Palfai, Monti, Colby, & Rohsenow, 1997; Toll, Sobell, Wagner, & Sobell,

2001). The results of the NRF study support the hypothesis that avoidance of unwanted thoughts may be a significant element in the relationship between meditation and alcohol use. Inmates who participated in the 10-day Vipassana meditation course reported greater reduction in their attempts to avoid unwanted thoughts (i.e., triggers and urges to use alcohol) than those in the control group. Differences in levels of avoidance partially mediated the relationship between Vipassana course participation and alcohol use and consequences 3 months following release from jail. To the best of our knowledge, no study has examined the role of thought suppression in behavioral change among those who participate in AA groups. As discussed above, the twelve-steps framework also underlines the important of acceptance toward one's alcoholism. Therefore, future research is needed to investigate thought suppression as an important construct in the context of AA research.

AA's mechanism of action is partly due to changes in the social network (Owen et al., 2003). Those who received support from AA members were more likely to be abstinent at follow-up than those with no support at all or those who received support from non-AA members. These results suggested that AA members provide types of social support that differ from those typically provided by nonmembers. What a sponsor can typically do for a less-experienced member is probably a good example: role modeling how to decline a drink in a social situation, 24-h availability for a supportive phone call whenever a sponsee has a craving to drink, and sharing one's experience about how to live a life in sobriety (Kaskutas et al., 1998; Zemore, 2007). Likewise, due to the experiential nature of meditation, participants in the MBRP study might be able to offer social support for each other through sharing experiences of meditation. Whether this potential social support has a significant effect on treatment outcome is an area for future research.

8. Future Direction

The past few decades have seen a surge of interest in integrating Eastern spiritual traditions with Western psychology, making frequent appearances in theory, research, and practice. Ospina and colleagues (2007) noted that although many mindfulness techniques have been developed during this time to treat psychological disorders, the field of research on mindfulness practices and their therapeutic applications is beset with uncertainty. More rigorous study designs and better operational definitions are needed. The inconsistency in measurements and techniques reflects the differing underlying views of mechanisms of action (Ospina et al., 2007).

MBRP researchers therefore have formulated several questions related to the current treatment:

1. "Dose" of meditation: How much meditation does a participant need to produce change in drinking behavior? For example, does one need to

- do an intensive, 10-day, 10-h-per-day Vipassana retreat, or can 20 min per day meditation practice at home be effective? How do these different doses compare to the MBRP 2-h group session plus home practice format?
- 2. Therapists' personal meditation practice: When assessing therapists' competency, results of the pilot study of MBRP indicate that therapists with personal meditation practices are significantly more skilled at both delivering the didactic material and embodying the spirit of mindfulness. Given that Buddhist teachers study for years before taking on students, can a therapist effectively learn and teach the mindfulness techniques without a strong personal meditation practice?
- 3. Components of mindfulness: With MBRP being secular in nature, researchers in the study have been selective in their choice of which elements of mindfulness to include in treatments. Could ancient principles like wisdom, compassion, and enlightenment be incorporated into research designs? If so, is it worth it to assess efficacy of a secular Buddhist meditation compared to a relatively "pure" Buddhist meditation in future studies?
- 4. Methods for facilitating personal meditation practice: MBRP researchers have hypothesized that higher involvement in personal meditation practice outside of the weekly sessions will lead to lower likelihood of relapse. Similarly, AA research has shown that it is possible to facilitate AA attendance through implementing Twelve Steps Facilitation therapy (Owen et al., 2003). Should scientists develop an intervention or specific strategies to encourage personal practice? Perhaps starting the MBRP program with a 1-day intensive retreat can be an effective method in facilitating personal practice by helping participants become comfortable and familiar with the concepts of mindfulness meditation.

Finally, it is worthwhile to investigate how to possibly integrate a mindfulness-based approach with twelve-steps framework, as Miller (Owen et al., 2003) illustrated that AA cannot be ignored in comprehending treatment outcome. The preliminary result of MBRP indicated that it is crucial for the therapists to understand twelve-steps principles as well as the treatment cultural of AA meetings. It is certainly worthwhile to capitalize on what the client already knows and is familiar with. The potential integration of twelve steps and MBRP in a clinical research setting echoes the spirit of harm reduction approach: "meet the clients where they're at."

9. A Case Study

This case study illustrates how meditation, a Middle Way approach, and Harm Reduction Therapy can be utilized concurrently to treat patients with co-occurring disorders, as well as those who may not benefit from traditional treatments based on the disease model (Brickman, 1982). The patient, Tina, was seriously depressed and made little progress working with her psychiatrist. After the psychiatrist found out that Tina had been drinking heavily, he referred her to an alcohol treatment center, as well as requested Marlatt for an alcohol evaluation.

When Tina met with Marlatt, she told him about the conflicting information she had received from the treatment center and her psychiatrist. The staff at the treatment center told Tina that drinking was the cause of her depression; unless she committed herself to total abstinence, she would remain depressed. On the contrary, the psychiatrist thought Tina's depression was the cause of her drinking; she used alcohol to self-medicate her depression symptoms. The psychiatrist could not see Tina until she got sober first.

At that point, Tina was not ready to stop drinking since it was her way of self-medicating. Given Tina's situation, Marlatt thought that Tina would be a good candidate for the harm reduction approach, which focuses on allowing individuals to maintain their coping strategies until more functional, effective alternatives are developed.

In conducting the evaluation, Marlatt learned that marital stress was the trigger for Tina's drinking. In her early years of marriage, Kyle, her husband, had insisted that Tina give up a promising career and be a stay-at-home mom. This became a constant source of tension between them and was one of the reasons she felt so depressed. Resenting Kyle's control over her life, Tina remained very passive and compliant (except for the drinking, which greatly irritated him).

Given Tina's family history of alcoholism, Kyle, as well as the staff at the treatment center, were convinced that she had a genetic disease. Kyle insisted that Tina get into Alcoholics Anonymous. He also started going to Al-Anon groups that buttressed his view that Tina was indeed a helpless alcoholic in denial.

Contrary to Kyle's belief, Tina was not in denial. She had gone to some AA groups but just did not feel the structure of the meeting suited her. Moreover, she had trouble with admitting that she was powerless over alcohol. To Tina, this step would represent complete surrender. Since feeling helpless was the main problem in her life, she did not feel like giving up even more control.

Tina eventually gave in to Kyle's demand and started attending AA meetings. As she tried her best to stop drinking completely, her depression became worse. Unable to see the psychiatrist, Tina was *again*caught between conflicting ideologies and could not see a way out. Following the latest episode, Kyle demanded that Tina seek inpatient treatment or leave her home and children. Tina gave in and was enrolled in a 28-day inpatient program.

When Tina returned home from treatment, she found out that her husband was having an affair. Tina was heartbroken and desperate for some kind of relief other than medication or alcohol. Marlatt introduced her to a mild form

of meditation, called "urge surfing," which could be used for self-management when she would normally experience triggers to drink.

Subsequently, Tina attended a month-long meditation retreat in an effort to deal with her substance use issues. Immediately upon arrival, all participants were expected to take a precept that included avoidance of all intoxicants. Once she got up in front of the whole group and announced that she would abide by all the precepts, she knew that she would never have another drink. In examining later how this program worked for her, while AA groups had not, Tina pointed out that she had not been required to admit she was powerless, as in the first step of the twelve-steps programs. Instead, she did exactly the opposite: she declared that she had the power to make a promise and keep it, no matter what. Meditation was the vehicle for Tina to maintain sobriety: occasionally, even though her mind still says she needs a drink, she realizes that it is just a thought inside her head. She no longer has to be dictated to by her thoughts.

After this case, Marlatt discovered that Buddhist thought provided alternative ways to look at addictions, in terms that emphasize harm reduction rather than self-labeling. Additionally, results of the NRF study, summarized above, affirm empirically what Marlatt believes: addictive behaviors can be controlled, if not managed, effectively, by first adapting a "Middle Way" approach between the abstinence-only requirement and giving in to harmful indulgences and loss of control.

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III

Twelve-Step Membership

Lee Kaskutas, Section Editor

Introduction

Lee Ann Kaskutas

This section takes up the question of AA membership. Throughout this volume (and in the broader alcohol literature as well), authors have noted that AA is the most widely used source of help for alcohol problems. This remarkable finding leads to compelling research questions. Is there a profile of the AA attender? If so, then what is it? Are certain people less likely to attend? What predicts attendance? What predicts meeting drop-out following a period of meeting attendance? Should treatment and healthcare providers encourage AA attendance? How should they do that? The four chapters in this section attempt to address these questions. Taken together, they provide the reader with a sense of what distinguishes AA engagers from disengagers, offering providers tools for assessing roadblocks to AA attendance and advice for facilitating involvement in twelve-step programs for the addictions.

The first chapter by *Kaskutas, Ye, Greenfield, Witbrodt*, and *Bond* provides multiple perspectives on the question of the epidemiology of AA attendance. Lead author Lee Ann Kaskutas has a history of research on mutual help, having conducted the first survey of Women for Sobriety (Kaskutas, 1994; Kaskutas, 1996) and contributed the US case study to the International Collaborative Study on AA (Kaskutas, 1998), among other works on AA (Kaskutas, Bond, & Humphreys, 2002; Kaskutas, Turk, Bond, & Weisner, 2003); and co-authors from the Alcohol Research Group are alcohol epidemiologists and methodologists (Greenfield, Nayak, Bond, Ye, & Midanik, 2006; Room & Greenfield, 1993; Witbrodt & Kaskutas, 2005). Their chapter uses diverse samples of drinkers and former drinkers that allow for comparisons on important trends across time as well as data on disengagement from AA.

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With such epidemiological questions, the sample is paramount. It influences to whom the results generalize, the limitations inherent in who is (and is not) represented (e.g., response rate, exclusion criteria), as well as the actual questions that can be addressed with the data. A key issue, especially when it comes to AA attendance, is the sampling universe from which the respondents are drawn. If recruiting at AA meetings, for example, then the sample is biased somewhat in favor of those who attend regularly. As we will see from the multiple data sources used here, it is often not possible to answer all of the research questions from a single sample.

To begin with, how can researchers collect data from a group like AA, which does not maintain records of current and prior members? Fortunately, since 1968 AA has conducted triennial anonymous surveys of meeting attenders over a 2-week period, providing a starting point for this quest. From these, we can determine snapshots of the demographics of AA's membership over time and can discern the topography of reported abstinence among the membership survey's respondents. For example, what has been the representation of women and ethnic minorities at AA meetings across time? Are there more young people in the AA membership now than in prior years? Does AA appear to be equally attractive to married and single persons? How many of the AA members report long-term abstinence?

Since surveys at AA meetings do not capture those who attend irregularly or who no longer attend at all, the chapter next accesses representative, national, general population surveys that asked about AA exposure. The first series (conducted by the NIAAA-funded national alcohol research center at the Alcohol Research Group (ARG) in Berkeley) provides trends data since 1979, providing a valuable population-based comparison to the membership data collected by AA at its meetings over the same time span. Presentation of these data, across time, in a single article gives readers a perspective that would otherwise require accessing 13 AA membership surveys and six general population surveys.

The general population trends data are augmented by another national survey, NESARC (National Epidemiological Survey on Alcoholism and Related Conditions, conducted by NESARC in 2000–2001), that asked not only about AA exposure but about the timing of that exposure, including disengagement from AA and being exposed to AA for the first time. We know very little about the demographics of those who continue versus those who cease their AA meeting attendance, or about the profile of the AA newcomer. For example, do women drop out more than men? Are those who dropped out more likely to be drinking now? Are most of the newcomers to AA young? Are those who attend treatment more likely to engage in AA and stay engaged, compared to those who do not go to treatment?

A longitudinal treatment sample (from the ARG Epidemiology Laboratory, EpiLab) "rounds out" the membership and general population perspectives offered on AA attendance in the chapter by Kaskutas et al. Here, rather than looking at trends over time, or of retrospective data on AA engagement

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and disengagement, readers are introduced to different patterns of AA engagement across time among the same treatment seekers who were followed and reinterviewed over a 7-year period. The underlying "trajectories" of AA exposure are uncovered using advanced statistical modeling techniques, and the profiles of each trajectory are compared. For instance, are women more likely to be in the group in which high proportions report AA exposure at each follow-up? How does treatment correspond to AA exposure patterns? Do those in the group characterized by low rates of AA exposure over time also report low levels of treatment over the same period? What about abstinence?

Grounded by these data on AA membership, the next chapter in this section turns to concerns about underutilization of twelve-step programs. Prior work by chapter authors *Richard Cloud* and *Kip Kingree* has been seminal to our understanding of the reasons why people do not affiliate with AA (Cloud, 2004; Cloud, Ziegler, & Blondell, 2004; Kingree et al., 2006). Their work, while empirical, has been grounded in theory (several, in fact, listed below), which complements the more applied approach taken in the epidemiology chapter that precedes it in this section. Acknowledging that despite considerable effort twelve-step utilization has not been successfully modeled (neither statistically nor theoretically), the chapter begins with a review of what we do know about the correlates and predictors of AA dose.

A focus of their review is on the aspects associated with treatment that influence post-treatment attendance or involvement and on identifying variables that are suggestive of theoretical mechanisms at work. They then report on an innovative content analysis they conducted of five recent reports of multivariate relationships in predicting AA affiliation, pulling out the theoretical formulations implicit in the discussion sections of these published works.

Cloud and Kingree next offer four psychometrically validated scales that clinicians can use to judge client resistance to AA. Fairly specific attitudes and expectations are included in these scales, so that counselors can identify, and work to address, these client concerns (rather than having to speak in vague terms about things clients do not like about AA meetings, culture, and program). The scales are the Kingree et al. Survey of Readiness for AA Participation (including items such as "I will feel better about myself if I go to AA"), the Cloud et al. Twelve Step Ambivalence Scale ("meetings interfere with important things," etc.), the Twelve Step Participation Expectancies Questionnaire developed by Kahler, Kelly, Strong, Stuart, and Brown (e.g., "going to AA would motivate me to stay sober"), and Laudet's Negative Aspects of Twelve Step Group Scale (for instance, "twelve step group meeting leaders dominate the rest of the group"). Consistent with their theoretically driven perspective, they then subject the subscales of these scales to content analysis (as they did before, with the reported results of multivariate predictors of AA affiliation).

The chapter culminates by integrating three related theories that have been used to explain AA dose into a compelling, theoretically motivated model of AA utilization. This part of the chapter specifically applies aspects of the considered theories to findings from the literature and the AA resistance scale, so that readers benefit not only from an exposition of the theories but also from an application of the theories to the problem of AA (under)utilization. The theories are the Health Belief Model, Motivation and Self-Determination Theory, and Person-in-Organizational Culture Fit Theory. Notably, these are classic theories from social science, health, and community psychology. Authors demonstrate the compatibility of these theories, offering an integrated theory of attendance. The chapter concludes with a summary of the key findings related to the dose of twelve-step group attendance and offers clinicians concrete suggestions on commonly observed barriers to twelve-step program utilization.

The next chapter in this section, by *Donovan* and *Floyd*, provides readers with a succinct review of the latest research on techniques that can be delivered in specialty substance abuse treatment settings to facilitate involvement in twelve-step groups. Dr Dennis Donovan was involved in the committee that oversaw the development of the three Project MATCH therapies, including twelve-step facilitation (TSF), and has noted that the results of the Project MATCH efficacy trial (Donovan, Carroll, Kadden, Diclemente, & Rounsaville, 2003; Donovan et al., 1994) and the large Department of Veterans naturalistic effectiveness trial both demonstrated that the twelve-step-focused treatments had outcomes comparable to or better than the other treatments against which they were being compared (Donovan, 1999). Dr Donovan is especially well positioned to first-author our chapter on TSF, as he is spearheading the current NIDA effort to study a TSF-based intervention in the treatment of stimulant abusers within its Clinical Trials Network (Donovan & Wells, 2007). Co-author Floyd has argued that as cost-effective additions to primary treatment, AA and continuing care services deserve greater attention in the treatment of substance abuse disorders (Floyd, Hoffmann, & Karno, 2001).

Donovan and Floyd suggest that the underlying rationale for such interventions is twofold: changes in funding created a need for free services to complement what can be offered in formal treatment, and recent trials have shown that TSF leads to more use of AA. Echoing the findings from the earlier chapters in this section, Donovan and Floyd note the low rates of twelve-step attendance and involvement following treatment. Available TSF interventions aim to change this, each in its own way, with one focusing (for example) on providing clients with a cognitive understanding and appreciation of twelve-step programs and another helping clients to connect with the people in AA.

Their review of recent research on available TSF approaches begins with results from twelve-step-oriented treatment programs whose philosophy inherently facilitates AA involvement, then presents studies from Project MATCH and other trials which tested individually delivered TSF with alcohol-dependent samples and with combined drug and alcohol-dependent samples. Their review is sensitive to the practicality of these interventions, so takes up issues of generalizability and sustainability as well. For example, since so much of the treatment in the United States is group format, their review pays special

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attention to group-delivered TSF. Because of limits to length of stay in formal treatment, they introduce the reader to a number of brief interventions that encourage twelve-step involvement in only 1–6 sessions.

In their closing remarks, Donovan and Floyd review conclusions about the current status and future direction of research and clinical practice in this area as articulated at the seminal New Mexico conference on research on AA in 1993. It is satisfying to realize that the recommendations made then appear to have been heard by researchers and providers in the intervening 15 years, resulting in an impressive research base on TSF, as presented in this chapter. Since most of the approaches reviewed here are manual guided, the interventions are available now to treatment providers who are interested in strengthening their programs' referral process to twelve-step groups in the community.

Of course, only a small proportion of problem drinkers or dependent alcoholics attend specialty treatment, with recent data from NESARC estimating that three-quarters of those with a lifetime diagnosis of alcohol dependence have never sought help for their drinking problem. Among those who had sought help but had not participated in a twelve-step group, treatment from private physicians, psychologists, and social workers was the norm (Dawson, Grant, Stinson, & Chou, 2006). Data from the EpiLab over a decade ago similarly noted that many more problem drinkers were seen in primary healthcare and mental health clinics than in the specialty treatment setting: For example, 41% of the caseload of mental health workers were problem drinkers, and only 12% of the problem drinkers in the community had received specialty alcohol treatment (Weisner, Schmidt, & Tam, 1995). Acknowledging the opportunity that healthcare providers represent potential referral agents to AA, the final chapter in this section aims to equip providers in non-specialty treatment centers with a sufficient working knowledge of the AA program and of TSF approaches, designed to enable them to educate appropriate patients about the available resource that AA might represent for them. The chapter is written by John Kelly, who has authored more than 20 works on AA and is an expert on AA among adolescents (Kelly & Myers, 2007; Kelly, Myers, & Brown, 2000), and Barbara McCrady, who (with William Miller) convened the formative New Mexico conference on Research on AA (McCrady & Miller, 1993) and has integrated TSF into marital couples counseling (McCrady, Epstein, & Hirsch, 1999).

The chapter begins with a brief history of AA. Their synopsis is a wonderful parallel to White and Kurtz' engaging chapter on the defining moments in AA's history in this volume. As they walk readers through the first meeting with AA's founders, they provide us with a glimpse of the essence of mutual help: that helping helps the helper. This complements Zemore and Pagano's chapter on the research base that associates helping in AA with better outcomes. They then briefly review the psychological mechanisms at work via participation in AA, foreshadowing a thoughtful analysis of the potential therapeutic outcomes that arise from each of the twelve steps. Their theoretical framing, in

psychological terms, adds to the theoretical perspectives on AA participation presented in the earlier chapter by Cloud and Kingree.

After discussing the steps, they explain other aspects of AA that often are a mystery to the AA novice: what happens at AA meetings, what is a sponsor, what does "service" entail, what is a "higher power" in AA parlance, and what is the meaning and purpose of the slogans one hears at AA? Kelly and McCrady offer straightforward interpretations for eight of the more common slogans; for example, that "live and let live" is simply intended to "remind members of the importance of focusing on oneself" rather than being judging about others. Although the slogans are ubiquitous within the AA culture, there has been little research attention to their practical application and benefits.

The chapter then moves to the specific job of facilitating AA involvement outside of specialty treatment, focusing on the COMBINE study that was intended for delivery in primary care settings. Seven additional clinical strategies are offered, such as "keep an open mind," and visit your local AA groups. Flowing from this, they confront possible clinician and patient barriers to twelve-step participation that may emerge, such as concern that AA meetings are a form of dependency, that AA is only for religious individuals, or that AA members are all "down and out." Recent research is offered that addresses these concerns; for example, that only 6% of the respondents to AA's 2005 membership survey said they were unemployed. Bringing us full circle, data reported in the first chapter in this section might also offer providers helpful facts about the demographic composition of AA participants.

This section was envisioned as imparting a sense of who goes to AA, why so many drop out, and how we can facilitate involvement in AA. It responds to several of the most important research questions that were articulated in the New Mexico conference proceedings (McCrady & Miller, 1993, see question 1 in Appendix), including: who does not go and why; are there gender differences; what can large demographic surveys tell us about current members; what happens to AA members over time, especially if they stop attending; what are the barriers to affiliation, and which model(s) explain entry into (and disaffiliation from) AA; what are the therapeutic aspects of AA and what is the role of the AA tools; and how can professionals help facilitate AA? Although we have only touched upon each of these questions, chapters in this section provide readers with a good starting point for understanding the epidemiology of AA attendance, barriers to AA, and methods of facilitating AA involvement.

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Epidemiology of Alcoholics Anonymous Participation

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Abstract: This chapter draws on AA membership surveys, US general population surveys, and longitudinal treatment data to compile profiles of those ever exposed to AA in their lifetime, those who no longer report AA meeting attendance, and those who attend AA meetings currently. We consider demographics (gender, age, ethnicity, marital status), receipt of specialty treatment, and short- and long-term abstinence rates among these AA exposure groups. Results suggest stability in the representation of women and minorities among the AA membership, but a decline among youth. Fully one-half of those completing AA's most recent membership survey reported that they had been abstinent for more than 5 years. Those receiving specialty treatment any given year are likely to report AA exposure that year. Disengagement from AA does not appear to necessarily translate to loss of abstinence among those with initial high levels of AA exposure, but long-term abstinence is more likely among those with continued engagement.

1. Introduction

Although Alcoholics Anonymous (AA) is the most widely sought source of help for alcohol problems (Room & Greenfield, 1993), researchers have yet to develop definitive profiles of the AA member or of the AA dropout. Part of the reason for the paucity of knowledge about the epidemiology of AA participation is that AA is an anonymous, voluntary organization that takes no position

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on outside issues and thus neither opposes nor endorses studies of its members (as noted in Dr. Borkman's chapter on the AA program in this volume), posing a challenge to scientists seeking to recruit representative samples of AA participants and follow them over time. Capitalizing on available secondary data sources, this chapter provides multiple perspectives on the question of the epidemiology of AA attendance, using diverse samples that allow us limited comparisons on important trends across time as well as to study disengagement from AA.

While the earliest vision of the typical AA member may have been a white male (reflecting in large part AA's founding fathers), we know from AA's membership surveys that this has changed over time. The best available data on trends in AA membership comes from AA itself, via its triennial membership surveys conducted in the United States and Canada since 1968, which we summarize here. From these, we can determine the demographics of AA's membership over time and can discern the topography of abstinence among the membership survey respondents. For example, what has been the representation of women and ethnic minorities at AA meetings across time? Are there more young people in the AA membership now than in prior years? Does AA appear to be equally attractive to married and single persons? How many of the AA members report long-term abstinence?

Of course, surveys at AA meetings do not capture those who may have been exposed to AA at some point in their lifetime, but who no longer are engaged, at least at the level of meeting attendance, and membership surveys could be selective in other ways as well. To understand trends in populationlevel exposure to AA and to get a representative picture of who disengages from AA over time, researchers must turn to general population surveys that have included questions about exposure to AA in samples that are representative and generalizable. One set of available comparable surveys dates back to 1979 and has been repeated about every 5 years since and thus provides a populationbased comparison to the membership data collected by AA at its meetings. These data are augmented here by still another national survey that asked not only about AA exposure but about the timing of that exposure, including disengagement from AA and being exposed to AA for the first time. We know very little about who stays versus drops out from AA meeting attendance or about the profile of the AA newcomer. For example, do women drop out more than men? Are those who dropped out more likely to be drinking now? Are most of the newcomers to AA young?

Another consideration when thinking about AA affiliation is the role that the treatment system plays in AA exposure. Most alcohol treatment programs in the United States are twelve-step based and encourage or even require AA meeting attendance during treatment. Are those who attend treatment more likely to engage in AA, and stay engaged, compared to those who do not go to treatment? These questions similarly require general population data, although longitudinal treatment studies also are informative. Much of what

we know about AA affiliation comes from treatment studies (Emrick, Tonigan, Montgomery, & Little, 1993), in which samples are recruited when seeking treatment and are followed longitudinally. To complement the perspectives available from the membership and general population surveys presented here, we introduce data from a county-level treatment sample that was interviewed 5 times over a 7-year period. This allows us to study the different patterns of AA engagement across time and to develop the demographic profiles associated with these patterns. For example, are women more likely to be in a group with high levels of AA exposure over time? How does treatment correspond to AA exposure patterns; e.g., Do those in a group with low levels of AA exposure over time also report low levels of treatment over the same period?

These and other related questions are taken up here, using AA's cross-sectional membership surveys, two sets of cross-sectional national general population surveys, and a longitudinal treatment survey. All studies report four key demographic characteristics: gender, age, marital status, and ethnicity. In addition, several surveys provide data on two other important constructs of relevance to AA involvement, treatment exposure, and abstinence. To facilitate comparisons across the surveys, the categorizations published for AA's membership surveys are applied to our analyses of age, ethnicity, marital status, and abstinence distributions. The specific sources of data presented in this chapter are the following:

- (1) AA's triennial membership surveys conducted by AA since 1968
- (2) The National Alcohol Surveys, general population surveys conducted about every 5 years by the Alcohol Research Group (ARG), considering results since 1979
- (3) The National Epidemiological Survey of Alcoholism and Related Conditions, a general population survey conducted in 2001 by the National Institute on Alcohol Abuse and Alcoholism (NIAAA)
- (4) The Epidemiological Laboratory longitudinal survey of treatment seekers followed over 7 years, conducted by ARG and the University of California San Francisco

The questions we consider across these surveys reflect priority areas identified among the most important questions for future research on AA by participants in the seminal 1992 conference on research on AA sponsored by NIAAA. The data sources used here allow us to focus on issues pertaining to demographics and AA dropout that were highlighted in the publication that emerged from the conference (McCrady & Miller, 1993):

[We need] Larger demographic surveys to better understand current members (p. 398); What gender and cultural differences are related to AA attendance, drop-out, outcome, etc.? (p. 400); What happens to those that quit attending? (p. 398), Do they return to AA, seek other help, or do nothing?

(p. 401); Do dropouts after several years of attendance fare differently from those who drop out early? (p. 399); The drop-out phenomenon needs to be explored further—does it lead to resumed drinking? (p. 401)

2. Methods

Each data source employed different sampling frames and interview strategies, described below. More details on these studies are available in the references provided.

2.1. AA Membership Surveys

AA's General Service Office (GSO) conducts membership surveys approximately every 3 years, using a two-stage sampling methodology (AA World Services, 1990; AA World Services, 1993; AA World Services, 1997; AA World Services, 1999; AA World Services, 2002; AA World Services, 2005; Alcoholics Anonymous World Services, 1978; Alcoholics Anonymous World Services, 1981; Alcoholics Anonymous World Services, 1984; Alcoholics Anonymous World Services, 1987; Norris, 1974). First, AA groups in the United States and Canada are selected for participation. Second, membership surveys are distributed to attendees at those groups across a 2-week period, for mail return to GSO. Table 1 includes the sample sizes and, where available to us, the numbers of AA groups surveyed, as well as the total numbers of AA groups and estimated numbers of AA members to which the survey results are intended to generalize. The sample sizes have ranged from 6,500 (in 1992) to almost 25,000 (in 1980). Response rates are not available, and it was not possible to restrict these data to the US membership alone, as the published membership survey results include Canada. We report on the gender, age, marital status, and ethnic composition of the AA membership across time. We also include the length of sobriety reported by the AA members at each survey. For simplicity and consistency of reporting, we averaged the published age and sobriety distributions for the 1977–1983 surveys. In addition to the results from the membership survey, we include estimates of the number of AA groups and number of AA members in the United States and Canada from 1986 onward, conveyed to us via personal communication with the Public Information Office of AA's General Service Office in New York City.

2.2. National Alcohol Surveys (NAS)

ARG's NAS are interviews of cross-sectional probability samples of the general population, conducted in-person using multi-stage stratified sampling of primary sampling units in the contiguous United States (1979–1995) or by telephone using random digit dialing to all 50 states and Washington DC (2000–2005) (Kerr, Greenfield, Bond, Ye, & Rehm, 2004). The response rates for

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Year	1968	1971	1974	1977	1980*	1983* 1986	1986	1989*	1992	1996*	1998	2001*	2004*
Estimated number of members	N/A	N/A	N/A	N/A	N/A	N/A	750,511	916,782	1,170,454	1,247,844	1,268,578	1,260,926	1,283,615
Estimated number of groups	N/A	N/A	N/A	N/A	N/A	N/A	38,250	45,442	53,920	55,930	56,274	56,839	57,619
Number of groups sampled	N/A	N/A	N/A	N/A	N/A	N/A	481	585	496	603	639	701	704
Sample size	11,355	7,194	13,467	15,163	24,950	7,611	226'9	9,394	6,500	7,200	008′9	7,500	7,500
Gender													
Female	22%	%97	28%	33%	33%	33%	34%	35%	35%	33%	34%	33%	35%
Male	%82	74%	72%	%29	%29	%29	%99	%59	%59	%29	%99	%29	%59
Age													
30 years. and younger	2%	%9	%8	11%	15%	20%	21%	22%	19%	13%	11%	11%	10%
31–50 years	22%	26%	25%	52%	51%	52%	52%	25%	22%	26%	28%	25%	51%
51 + years	34%	37%	37%	35%	32%	28%	27%	23%	24%	28%	31%	34%	39%
Ethnicity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
White										%98	%88	%88	%68
Black										5%	2%	2%	3%
Hispanic										4%	4%	4%	4%
Other										5%	3%	3%	4%
Marital Status	N/A	N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
Married										36%	36%	37%	38%
Single										28%	27%	31%	29%
Widowed/divorced/separated										33%	34%	32%	33%
Abstinence													
<1 year	38%	38%	40%	37%	37%	37%	33%	34%	31%	27%	27%	30%	76%
1–5 years	37%	36%	35%	38%	38%	38%	38%	37%	34%	28%	76%	22%	24%
>5 years	25%	26%	25%	25%	25%	25%	29%	29%	35%	45%	47%	48%	20%

*Years approximating those for which NAS data are available (1979, 1984, 1995, 2000, 2005)

Exposure Profiles						
Year	1979	1984	1990	1995	2000	2005
Sample size	1772	5221	2058	4925	7612	6919
Response rate	71%	72%	70%	77%	58%	56%
Percentage ever attended AAb	0.91%	2.03%	3.15%	3.86%	2.23%	3.12%
N ever attended AA ^b	20	84	74	202	164	220
Demographics of those who ever attended AA:						
Gender						
Female	35%	21%	26%	32%	28%	28%
Male	65%	79%	74%	68%	72%	72%
Age						
18–30 years	27%	34%	38%	22%	18%	12%
31–50 years	41%	34%	44%	55%	63%	54%
51+ years	32%	32%	18%	23%	19%	34%
Ethnicity						
White	95%	80%	80%	78%	80%	81%
Black	5%	8%	10%	10%	5%	9%
Hispanic	0%	9%	8%	10%	10%	7%
Other	0%	3%	2%	2%	4%	3%
Marital status						
Married	49%	61%	47%	61%	63%	67%
Single	9%	11%	27%	20%	19%	13%
Widowed/divorced/separated	42%	28%	26%	19%	18%	20%

Table 2. National Alcohol Surveys of the US General Population: Trends in AA^a Exposure Profiles

the in-person surveys ranged from 70% to 77%, and for the two telephone surveys averaged 57%. NAS samples have ranged from 2,058 (in 1990) to 7,612 (in 2000). Specific response rates and sample sizes for each survey are shown in Table 2, along with the weighted proportion and number of respondents who reported having attended an AA meeting in their lifetime for a problem with their drinking. Among those who attended AA, we show the gender, age, marital status, and ethnic composition using the same categories as for the AA membership surveys. Since we are reporting on lifetime (rather than current) AA exposure, we do not present lengths of sobriety as we did for the AA membership survey. To allow readers to readily compare demographic profiles between the AA membership surveys and the NAS general population surveys, in Table 1 we have highlighted (with asterisks) the years in which the AA surveys were conducted within 1 year of NAS.

2.3. NIAAA's National Epidemiological Survey on Alcoholism and Related Conditions (NESARC)

The 2001 NESARC is a large (n = 43,093) in-person survey, with data collected in 2001–2002 as the initial wave of a longitudinal survey (81% response

^a Does not include NA or CA

^b Lifetime attendance

rate) weighted to be representative of the US adult population (Grant, Kaplan, Shepard, & Moore, 2003). We include NESARC in addition to the NAS because NESARC asked about AA (and Narcotics or Cocaine Anonymous, NA/CA) attendance in a way that allows us to distinguish those who report prior but not current (past year) AA/NA/CA attendance (i.e., disengaged) from those who report both prior and current attendance (continued to affiliate). Newcomers to AA/NA/CA in the past year are shown in the table but are excluded from the analysis of disengagement because of our focus on the important issue of disaffiliation that we can examine in these data. One consideration is that NESARC does not differentiate between AA and other types of twelve-step meetings such as NA (Narcotics Anonymous), CA (Cocaine Anonymous), or AlAnon (for friends and family members of alcoholics), asking globally about attendance at "Alcoholics Anonymous, Narcotics or Cocaine Anonymous meeting[s], or any twelve-step meeting" that the respondent had ever gone to "for any reason related to your drinking" (question 2a1). It is not clear how many individuals who do not attend AA at all might go to NA or CA (or AlAnon for that matter) "for any reason related to their drinking," and thus might be inappropriately included in comparisons here with data on AA exposure. The extent of this potential bias will be informed by comparing the rate of exposure to AA/NA/CA among the NESARC general population sample to the rate obtained for lifetime exposure to AA in the NAS general population sample (presented below; see Section 4). We use Chi-square statistics to compare the profiles of those who have disengaged versus continued to affiliate with a twelve-step program. Profiles include the above common demographic variables, receipt of specialty alcohol or drug treatment (never, prior to past year, past year), and abstention status (drank in past year, abstinent short term (1–5 years) and long term (>5 years)). As conceptualized here, specialty treatment includes detoxification centers, alcohol or drug rehabilitation programs, and halfway houses including therapeutic communities.

2.4. Epidemiological Laboratory (EpiLab) Longitudinal Treatment Surveys

The Epidemiological Laboratory's ("EpiLab") longitudinal treatment survey has been conducted under the auspices of ARG and the University of California San Francisco. Individuals were recruited in 1995 (n = 926) when seeking treatment at 10 alcohol programs representative of public, HMO and private-for-profit programs in the Northern California county that is the site of the EpiLab (Kaskutas et al., 2005). Follow-up interviews were conducted 1, 3, 5, and 7 years following recruitment (respective response rates were 79%, 75%, 72%, and 67%). We present the results based on the full sample for whom we have AA attendance exposure data (n = 919), replicated with the subgroup who completed two or more follow-up interviews (n = 716). Our approach to studying disengagement exploited the longitudinal nature of the EpiLab study, using latent class growth curve analysis (Kaskutas et al., 2005; Muthén, 2004) to

uncover the most common set of patterns (latent trajectories) of AA exposure in the sample. The underlying assumption of this approach is that the collection of the individuals' observed trajectories over time can be represented by a smaller set of latent clusters or classes of those trajectories; in our case, the four-class solution represented the best fit and most interpretable solution of the patterns of AA exposure over time. The profiles (in terms of demographics, treatment, and abstinence) are shown for each of the four trajectories of AA exposure. Rates for treatment and abstinence are based on the 12-month period prior to a given follow-up interview. As above, specialty treatment includes detoxification centers and inpatient, residential, or outpatient alcohol or drug treatment programs.

In NAS, NESARC, and the EpiLab results, reported *N*s are unweighted. To take account of research design and non-response, proportions are weighted.

3. Results

3.1. Trends in AA Membership Based on the AA Membership Surveys (Table 1)

In 2004, AA estimated its US and Canadian membership at 1,283,615, with that number having increased gradually since 1986 when it was first reported and was 750,511. The number of AA groups similarly has grown, from 38,250 in 1986 to 57,619 in 2004. As shown in Table 1, the steepest growth in terms of both AA members and AA groups occurred between 1986 and 1992.

In 1968 (the year of the first published AA membership survey), only 22% of the respondents were women. The percentage increased gradually over the next decade to 33% and has remained at approximately this level since then. Next considering age, the proportion of members in the youngest age group (30 years old and under) was only 7% in 1968, increasing gradually to a high of 22% over the next 20 years but then descending, such that only 10% of the respondents were in this youngest age group by the year of the most recent survey (2004). Related to this, almost 4 out of 10 of the AA membership survey respondents in 2004 were over age 50, possibly reflecting long-term members progression through the life course. Ethnicity was not reported until the 1996 survey; the ethnic make-up has been stable since then, with most AA survey participants (over 85%) white and the remaining members pretty much equally divided among black, Hispanic, and other ethnicities. Marital status also was first reported in 1996, with similar stability seen, almost two-fifths of the respondents at any given survey being married, a quarter to a third being single, and about a third either widowed, divorced, or separated.

In the first (1968) membership survey, 38% of the respondents reported being abstinent for less than 1 year and about the same number said they had been sober between 1 and 5 years. Over time, the balance has shifted, such that by 2004 half of the respondents reported more than 5 years of abstinence while

only about a fourth were sober under a year and the remaining quarter sober from 1 to 5 years. This likely reflects increasing sobriety among longstanding AA members and may be associated with the dominance, by 2004, in the proportion over age 50, if our interpretation holds.

3.2. Trends in AA Membership Based on National Alcohol Surveys (Table 2)

The proportion of the general population that reported ever having attended an AA meeting for their own drinking was 0.9% in 1979, increasing gradually to almost 4% by the 1995 survey. After that, the rate appears to have lowered, varying from 2% to 3%. As shown in Table 2, these rates of AA exposure translate to modest numbers in terms of cases available for demographic analysis for several of the survey years (i.e., n = 20 in 1979, n = 84 in 1984, and n = 74 in 1990), rendering results unstable for those years. Averaging the rates across 1979, 1984, and 1990 provides a more reliable perspective on the demographic make-up of persons in the general population who were exposed to AA in those years. Thus, about 27% of those exposed to AA across the 1979 and 1990 NAS were females, increasing to 32% in 1995, then back to 28% in both 2000 and 2005. These rates for female representation in AA are a bit lower than rates reported in AA's membership surveys from 1980 to 2004 (about one-third females all years). If females had somewhat lower disaffiliation rates, this discrepancy might be explained, a question we will return to in NESARC.

The proportion of those exposed to AA in the youngest (18–30 years) age group averaged about 33% over the first three NAS, declining to 22% in 1995, 18% in 2000, and 12% by 2005. These rates are higher than in AA's surveys in earlier years, but converge by 2004–2005 when about one-tenth were aged 18–30 in both samples. The trend toward an aging AA population appears consistent across these two data sources.

Regarding ethnic make-up, about 80% of those exposed to AA in the NAS (from 1984 on) were white (versus 89% white in the 2004 AA membership survey), whereas representation among blacks and Hispanics exposed to AA in NAS was between 2 and 3 times that reported in AA's membership surveys over time. This could be due in part to the inclusion of Canada in the membership surveys. It also may reflect less regular attendance among minority AA members, lower participation rates in the membership survey among minorities, or both. We have no information about the coverage of predominantly ethnic minority neighborhoods in the AA survey.

About 16% of those exposed to AA across the 1979 and 1990 NAS were single and half were married. By the 2005 NAS, two-thirds of those reporting lifetime AA exposure were married, compared to almost two-fifths among the 2004 AA membership survey. This may reflect less regular attendance at meetings among married persons (since recruitment only spanned two consecutive weeks). Compared to AA's membership surveys, proportionately more NAS respondents who went to AA reported being single and widowed.

3.3. AA Engagement and Disengagement Profiles Based on NESARC (Table 3)

In 2001–2002, 3.4% of the NESARC survey respondents reported exposure to a twelve-step program such as AA for their alcohol problem in their lifetime. Of these, 105 were "newcomers" to AA/NA/CA in the past year (with no prior exposure to the programs); 988 had attended AA/NA/CA prior to the past year but had "disengaged," defined here as having attended in the past but not having attended any meetings in the past 12 months; and 348 had attended AA/NA/CA prior to the past year as well as continuing to attend in the past 12 months, referred to as "continued engagement." To study disengagement, our analytic focus here is on comparing the latter two, non-newcomer groups (n = 1,336). This is a matter seldom studied in nationally representative surveys but of considerable importance, as it speaks to the ongoing appeal of this widely available resource. Table 3 also includes the profiles of the newcomers, about whom we know very little, shown separately.

No differences emerged in the profiles for gender, age, or ethnicity among those who had disengaged versus continued their engagement, with about three-fourths of the non-newcomers having disengaged and about a quarter having continued their attendance. However, the distributions for marital status were slightly different, with the disengaged group having slightly more married people (54% versus 45%) and fewer single and widowed/ divorced/separated individuals than the continued engagement group (p < .05).

Significant differences between the disengaged and continued engagement groups also were found with respect to exposure to specialty substance abuse treatment (p < .0001) and abstention (p < .0001). For example, about one-quarter of those with continued engagement in AA/NA/CA reported never having gone to specialty treatment in their lifetime, compared to about twice that proportion among those who had disengaged. About two-thirds of those who had disengaged from AA/NA/CA reported drinking in the past 12 months, compared to almost two-fifths among those with continued AA/NA/CA engagement. Long-term sobriety (over 5 years) was reported by about a fifth of the disengaged group, while slightly over one-third of those with continued AA/NA/CA engagement had been abstinent that long.

We also provide the characteristics of the small (n = 105) group of newcomers to AA/NA/CA (far right column of Table 3). Because of the small sample size of the newcomer group, we have not conducted statistical tests comparing the newcomers to the other AA/NA/CA-exposed groups in NESARC. About one-third are females. Forty percent of the newcomers are in the youngest age group, and only 11% are in the group aged 51 years and older. This stands in contrast to the other samples, with about 4 times the proportion of newcomers aged 18–30 years than was observed in the other NESARC groups or in AA's membership surveys and NAS, where newcomers were not distinguished. The percentage aged 18–30 years among the combined newcomer and continued

Table 3. 2001–2002 NESARC US General Population Survey: Differences in AA/NA/CA Profiles for Past-Year Disengagement Versus Continued Engagement; Newcomers Shown Separately

		Disengaged	Continued Engagement	Significance Level	Newcomers
	N	988	348		105
Gender				n.s.	
Female		26%	28%		31%
Male		74%	72%		69%
Age				n.s.	
18–30 years		14%	13%		40%
31–50 years		57%	58%		49%
51+ years		29%	29%		11%
Ethnicity				n.s.	
White		77%	77%		63%
Black		9%	9%		11%
Hispanic		8%	7%		20%
Other		5%	7%		7%
Marital status				.05	
Married/partner		54%	45%		34%
Single		19%	22%		38%
Widowed/divorced/separated		27%	34%		27%
Specialty treatment				<.01	
Never		45%	26%		37%
Attended prior to this year		53%	49%		15%
Attended in the last year		2%	25%		48%
Abstinence				<.0001	
Drank in the last year		66%	38%		82%
Abstained for 1–5 years		12%	26%		10%
Abstained for >5 years		22%	36%		8%

engagement NESARC groups equals 19% (result not shown), a rate similar to the other survey findings for that age group. One-fifth of the new members are of Hispanic ethnicity, a rate 2–3 times higher than the other samples. Nearly 4 out of 10 newcomers are single, compared to about 2 out of 10 in the disengaged and continued engagement NESARC sample, over 1 in 4 in the membership survey, and barely 1 in 10 in NAS. Almost half of the newcomer group reported attending specialty treatment in the past year, and the majority (82%) reported drinking in the past year.

3.4. Patterns of AA Exposure over Time Based on the EpiLab Longitudinal Treatment Surveys

Four classes of AA exposure patterns over time were found (Figure 1): low AA (n = 348; 38% of the treatment sample); medium AA (n = 253; 28%); descending

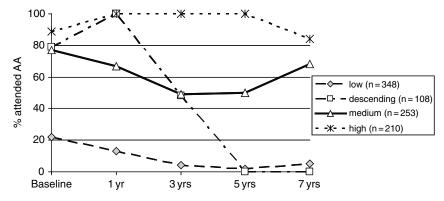


Figure 1. Trajectories of AA exposure over time (n = 919).

AA (n = 108; 12%); and high AA (n = 210; 23%). The rate of AA exposure in the low AA group was greatest for the 12-month period prior to the baseline interview, with 22% of the members of the low AA group having been to an AA meeting in the past year. This rate decreased to 13% by the next year. By the 3-year follow-up interview, only 4% of those in the *low AA* group had gone to an AA meeting in the past 12 months, decreasing to 2% at year 5, then up to 5% at the year 7 follow-up. In contrast, 89% of those in the high AA group had gone to AA during the year prior to the baseline interview, and all of them had gone to AA during the 12-month period prior to their 1-, 3-, and 5-year follow-up interviews. The rates of AA exposure at baseline and at year 3 were similar for the medium AA and descending AA groups (over three-quarters at baseline and about one-half at 3 years), but diverged at the other time points. All of those in the *descending AA* group attended AA at the 1-year follow-up, but none reported past-year attendance at either the 5- or 7-year follow-ups. In contrast, about two-thirds of those in the *medium AA* group reported past-year attendance at year 7, closer to the *high* AA group's level.

Significant differences were found in the demographic, treatment, and abstinence profiles of the four classes of AA exposure (Table 4). In terms of gender, 28% of those in the *medium AA* group were females (compared to about 38% in the other three groups; p < .03). Seventeen percent of the *low AA* group were in the oldest age categories (51+), compared to about 10% in the other age categories (p = .07). The ethnic distributions differed, with blacks representing about a quarter of the *low AA* and *high AA* groups but 41% of the medium and 31% of the *descending AA* groups (p < .001). Note that in terms of gender, age, and to a lesser extent, ethnicity, the demographics of the *low AA* and *declining AA* groups are similar.

The *descending AA* group was evenly divided among the three marital status groups, while married/partner individuals dominated the *low AA* group (40%), single individuals were heavily represented in the *medium AA* group,

Table 4. EpiLab Treatment Sample: Profiles of AA^a Exposure Trajectories

		Low AA	Medium AA	Descending AA	High AA	Significance Level
	\mathbf{N}^{p}	348	253	108	210	
Overall	919	38%	28%	12%	23%	
Gender						.03
Female	357	37%	28%	38%	38%	
Male	562	63%	72%	62%	62%	
Age						.07
18–30 years	199	22%	19%	25%	19%	
31–50 years	599	61%	71%	64%	%02	
51+ years	118	17%	10%	11%	10%	
Ethnicity						<.001
White	536	%89	43%	55%	28%	
Black	250	27%	41%	31%	27%	
Hispanic	09	2%	5%	%9	2%	
Other	72	2%	11%	%8	%8	
Marital status						<.001
Married/partner	327	40%	25%	35%	23%	
Single	569	79%	40%	34%	31%	
Widowed/divorced/separated	322	34%	35%	32%	46%	
Specialty treatment	treated/followed					
Treated at 1 year follow-up	230/721	14%	51%	36%	46%	<.001
Treated at 3 year follow-up	164/693	12%	35%	23%	36%	<.001
Treated at 5 year follow-up	110/666	2%	30%	12%	31%	<.001
Treated at 7 year follow-up	94/620	2%	36%	2%	25%	<.001
Abstinence (past 12 months)	abst./ followed					
Abstainer at 1 year follow-up	257/720	27%	28%	47%	48%	<.001
Abstainer at 3 year follow-up	259/693	27%	31%	44%	26%	<.001
Abstainer at 5 year follow-up	252/666	27%	36%	42%	51%	<.001
Abstainer at 7 year follow-up	248/619	28%	42%	20%	53%	<.001

 a Does not include NA or CA b N's do not always add to 919 because of missing values (demographics) or missed interviews (time-varying variables).

and widowed/divorced/separated persons made up almost half (46%) of the $high\ AA$ group (p < .001).

In the EpiLab data, rates of specialty alcohol or drug treatment at the 1-year follow-up (reporting for the past 12 months) were 14% in the *low AA* group, 51% in the *medium AA* group, 36% in the *descending AA* group, and 46% among the *high AA* group (p < .001). Significant differences in past-year treatment continued at the 3-, 5-, and 7-year follow-ups as well (p < .001), with rates of specialty treatment remaining low among the *low AA* group, at about one-third each year among the *medium AA* group, and decreasing steadily over time for both the *descending AA* and *high AA* groups (to 5% and 25%, respectively, by the year 7 interview).

We also studied the rates of abstinence for the 12 months prior to each follow-up interview in the EpiLab trajectory groupings. About a quarter of the *low AA* group and about half of the *high AA* group were abstinent at any given follow-up point. Abstinence rates for the *declining AA* group were similar to those of the *high AA* group years 1 and 7 but about 10% lower years 3 and 5. In the *medium AA* group, rates of abstinence were 28% at year 1 but up to 42% at year 7.

Comparisons between NESARC and the EpiLab must be done cautiously, for several reasons. First, the demographic distribution of the AA/NA/CAexposed non-newcomers in NESARC's general population survey differs from those of the EpiLab treatment sample, with (for example) 77% white and half married in the former versus 58% white and only 30% married in the latter. (Note that Ns shown in tables are unweighted, which is why different rates obtain for the proportions presented here.) Second, disengagement in NESARC is characterized as having been exposed to AA/NA/CA in one's lifetime but not in the past year, whereas the EpiLab trajectories were constructed based on AA exposure patterns across 5 time points in 7 years (and NA/CA exposure was not included). The EpiLab trajectories' group most similar to the NESARC disengaged group is the descending AA group, whose AA exposure for the 12-month period prior to years 5 and 7 was nil. Third, rates of formal treatment and of abstinence in the EpiLab do not span a continuous period of time, but rather cover only the 12 months prior to each interview; thus, the overall rates of specialty treatment or long-term abstinence cannot be deduced. The only comparable rates are for drinking in the past 12 months in the disengaged NESARC group and the descending AA EpiLab group at year 7: 66% of the disengaged NESARC group reported drinking in the past 12-month period, compared to 50% for the 12-month period prior to the year 7 interview among the descending AA EpiLab group.

4. Discussion

As shown in the above analyses, valuable perspectives on the epidemiology of AA participation are gleaned from considering data sources as diverse as AA membership surveys, general population studies, and treatment samples.

In presenting our results, we have offered several comparisons regarding the demographics, treatment profiles, and abstinence of AA attenders and disengagers. In this section, we add to that discussion.

First, a comment on the comparability of AA exposure rates in the general population between NAS and NESARC is provided. The proportion of respondents to the in-person 2001–2002 NESARC survey who reported ever having gone to AA, NA, or CA for their drinking is 3.4%, while the rates for lifetime exposure to AA in the NAS telephone surveys whose timing brackets the NESARC survey (2000 and 2005) are 2.2% and 3.1%, respectively. The higher rate in NESARC may be due to the inclusion of respondents who attended NA or CA (but not AA) for their drinking or because of fewer AA-exposed individuals either being reached or willing to participate in the telephone survey.

4.1. Demographics of AA Exposure

One of the most interesting findings, from an epidemiological standpoint, is the general stability in AA membership and exposure across time for gender, ethnicity, and marital status and the decline in the youngest age group that are evident from both the AA membership surveys and (although to a lesser extent) the general population NAS. Although the representation by women in the initial membership surveys was about one-quarter, it increased from 28% to 33% between the 1974 and 1977 surveys and has remained at about onethird for almost 30 years. Another interesting point about the demographics of AA exposure pertains to marital status, especially stable in the membership surveys, less so in NAS. Earlier we noted that a much higher proportion of married people were found in the NAS than in the membership surveys (about 60% versus about 38%, on average, respectively), a difference that could be driven by less regular attendance among married persons (so that fewer married persons were captured during the 2-week membership survey recruitment period). There were also proportionately more married than single or widowed/divorced/separated individuals in the disengaged NESARC group than in the continued engagement group (54% versus 45%, respectively), possibly suggesting more of a propensity to dropping out of AA among those who are married. This is consistent with the EpiLab treatment data, where married people were more likely to be in the descending AA (35%) than the medium AA or high AA groups (25% and 23%, respectively). Although it is premature to conclude from these results that AA is generally less compelling for married individuals, this is a hypothesis that warrants further testing.

In contrast to the relative stability in gender, ethnicity, and marital status across time, the proportion of young (30 years old and younger) AA membership survey respondents dropped by over half in the past 15 years (22% in 1989 versus 10% in 2004), and the respective proportion in NAS dropped by two-thirds in the same period (from 38% to 12%). Since there is no apparent difference in the rates of disengagement between the age groups (based on NESARC), it appears that proportionately fewer young people have initiated regular AA attendance in recent years. On the other hand, the proportion in the

oldest age group (over age 50) has increased by half in the membership surveys (from 23% in 1989 to 39% in 2004) and has doubled for lifetime AA exposure according to NAS (from 18% in 1990 to 34% in 2004). It is also worth noting that the relative age distribution for the youngest and oldest age groups in the earliest membership surveys (e.g., 1977), and in NAS, was similar to what we are seeing again now.

What happened in the intervening years, which would have so changed the age distributions in AA's membership surveys? One thing to consider is growth patterns in the AA program, for which we have data starting in 1986. Between 1986 and 1992, the estimated number of AA members increased by 56% (about 420,000 new members), but over the next 12 years (1992–2004) it only grew a total of 10% (about 110,000 new members). The decline in representation among youth began in 1992, the year that signaled the slowing in AA's growth. During its high-growth period, the number of members increased in all age groups—by 41% in the youngest group, by 71% in the middle group, and by 39% in the oldest age group. In contrast, between 1992 and 2004, the number of AA members aged 30 years and younger declined by 42%, the number aged 31–50 years decreased by only 2%, and the number of members over 50 years of age increased by 78%. We know that there is a large proportion in the youngest age group among the AA newcomers (based on NESARC), so it is not the case that younger people do not join AA, but rather that their representation is diminished. Several hypotheses come to mind. If drug problems dominated among youth in the last decade, their alcohol problems may have been perceived as less severe, making NA/CA more compelling than AA. This would help explain why so many newcomers are in the young age group; NESARC did not distinguish NA and CA from AA exposure, while AA's membership surveys only were of AA meetings. Fewer young persons may initiate involvement, more may leave after a brief period of exposure, and many who remain may attend irregularly (and be missed by the 2-week survey period). In contrast, there appear (from NESARC) to be relatively few new members among those over age 50. Continued involvement in AA among the cohort groups that became older in the last decade may reflect loyalty and deep roots in the twelve-step fellowship and program.

4.2. Specialty Treatment and AA

We now move beyond demographics to consider the interplay between formal specialty treatment and AA/NA/CA. Evidence from the general population NESARC sample and the EpiLab treatment sample suggests that treatment and AA are closely linked when viewed concurrently. For example, very few (only 2%) of the disengaged respondents in NESARC had gone to treatment in the past year, while almost half of the newcomers and a quarter of the continued engagement group had done so. Thus, many of those exposed to AA also had been to treatment in the past year, while almost none of those who had not gone to AA had been to treatment in the past year. This interpretation is

consistent with the findings from the EpiLab trajectories, where treatment in the 12 months prior to the 1-, 3-, 5-, or 7-year interviews was reported by between one-quarter and one-half of the AA trajectory groups in which at least half the individuals had been to AA in the past year (the *medium AA* group) or almost all had been to AA in the past year (the *high AA* group). Among the *descending AA* group, rates of past-year treatment were higher for the two time points with high AA exposure rates (years 1 and 3) than for the years that corresponded to nil AA attendance in that group (years 5 and 7). Past-year specialty treatment was low among the *low AA* group at all time points, as were the rates for AA exposure.

This temporal linkage may be due to treatment programs requiring AA attendance while in treatment, although it could also be the other way around, with people first trying AA but finding it insufficient and then going to treatment. The EpiLab treatment data lend support for the latter interpretation, as they demonstrate a fair amount of re-entry in treatment over time, even among the group with high levels of current AA exposure. For example, 39% in the *high AA* group reported specialty treatment at year 3, and 31% did so at year 5. Prior work with the EpiLab sample has found a strong effect for past-year treatment on *drinking* trajectories over time, with the magnitude of the effect especially notable among those whose drinking gradually improves over time (Delucchi, Matzger, & Weisner, 2004). It has been argued eloquently that alcoholism and drug addiction require ongoing treatment regimes (as is the case with diabetes, for instance) (McLellan, Lewis, O'Brien, & Kleber, 2000), but we still know very little about the interplay between treatment and AA attendance over time. This issue will be explored further in this section.

We next take up the important issue of how prior treatment relates to current (or continued) AA exposure, first considering the NESARC general population analysis on AA disengagement. Since similar proportions (around one-half) of the disengaged and continued AA engagement groups had attended specialty treatment prior to the current year, this seems to suggest that prior treatment does not distinguish well between those who stay engaged in AA versus those who do not. However, the perspective taken in Table 3 (of looking within the disengaged and continued engagement groups), together with the very low proportion of current-year treatment among the disengaged group (2%), may have masked differences between those never treated versus treated prior to the current year. In preparing Table 3, we did not report the row percentages (e.g., the proportion within the "never treated" group that had disengaged versus continued their engagement), but doing so provides another valuable perspective on the relationship between treatment exposure and continued AA engagement. We find that 17% of those who had never been to specialty treatment were in the continued engagement group, while 24% of those reporting prior treatment were in the continued engagement group. This modest difference is significant (p = .01) and translates to a greater likelihood of continued AA engagement among those with prior treatment compared to

those never treated (OR=1.59; results not shown). Inclusion of those treated in the current year appears to blur the distinction between no treatment and prior (to past year) treatment.

The AA newcomer group in NESARC and the *low AA* group in the EpiLab also shed light on the relationship between treatment and AA. Thirty-seven percent of those new to AA in the NESARC general population sample had never been to treatment in their lifetime, while 38% of the EpiLab treatment sample had very low AA exposure over a period of 7 years. These markedly similar proportions may reflect a truism about both treatment and AA, which is that neither is for everyone. It also may highlight issues of access, either to specialty treatment or to AA/NA/CA meetings in one's community. For example, among the NESARC AA newcomers, if their problems were sufficient to induce them to go to AA, why did they not also attend treatment that year? On the other hand, the majority of the newcomers had been to treatment, mainly in the last year, suggesting that treatment had indeed been available and compelling to the majority of those with sufficient need to (also) go to AA. Conversely, among the EpiLab treatment sample, if their problems were such that they sought treatment, why did the low AA group (almost two-fifths of the sample) have such low AA exposure? All of the treatment programs in the EpiLab study were 12-step oriented, and the county was fairly saturated with twelve-step meetings offering single and mixed gender settings, wheelchair access, Spanish language, beginner meetings, etc. Many in the low AA group may have been coerced to enter treatment, and/or stayed only a short while and then dropped out, never making it to AA. The issue of low AA exposure in treatment-seeking samples remains an important and open area for future investigation, with implications for the treatment system as well as for gatekeepers, referral agencies, and policymakers.

4.3. Abstinence and AA

We turn next to the issue of AA attendance and long-term abstinence. One-half of the respondents to AA's most recent membership survey reported more than 5 years of abstinence, while only about a quarter of the respondents to the surveys from 1968 to 1983 reported such long-term abstinence. The increase in long-term abstinence that began with the 1986 survey parallels the peak in the proportion under age 31 reported in the 1989 survey, which also signaled the greatest period of growth in AA membership. But by 1996, AA's growth had stabilized, the relative representation among the youngest age group had begun its decline, and AA's membership began to be dominated by those with more than 5 years of abstinence. This suggests that regular attendance at AA retains its appeal even among (some of) those who have been abstinent quite awhile: Survey participants had to have been at a meeting over a 2-week window, so it does not appear that long-term sobriety necessarily translated to a decrease in regular meeting attendance in this group of "old-timers." In fact, the actual percentage of individuals who continue to attend AA and have more than 5 years

of sobriety is probably higher than the membership survey indicates, as irregular attendees (i.e., those going less often than every 2 weeks) would have been missed by the survey (unless by happenstance they were at a meeting during the 2-week survey period).

A different conclusion about the relationship between AA exposure and long-term abstinence comes from NESARC, where one-fifth of the disengaged group reported more than 5 years of abstinence. This would suggest that long-term abstinence does not necessarily require continued AA attendance and that individuals with prior AA exposure can stay sober for more than 5 years without having (at a minimum) attended AA in the past year. It is possible that such individuals remain connected with the fellowship (that is, with the people one meets at AA/NA/CA meetings and events), and/or return to meetings after a break of a year or longer. This is another area for future research. We know very little about how those with long-term abstinence maintain their sobriety over time and the role that various aspects of AA affiliation play in that effort. In that vein, it will be important to assess other aspects of AA involvement other than meeting attendance, such as sponsorship, spiritual development, issues that are taken up elsewhere in this volume.

Regarding the important question of AA engagement and abstinence more generally, findings from NESARC's general population study provide evidence that continued engagement with AA/NA/CA in the past year is associated with higher rates of concurrent abstinence: 62% of those with continued engagement had not had a drink in the past 12 months, whereas a similar proportion (66%) of those who had previously attended AA/NA/CA but did so no longer (disengaged) reported past-year drinking. While these rates of abstinence versus drinking provide compelling data in support of a positive effect of ongoing AA attendance on abstinence, conclusions about causality are limited with cross-sectional data. The follow-up of the NESARC sample will provide invaluable longitudinal data to inform the question of AA effectiveness in the general population.

Meanwhile, the longitudinal data from the EpiLab provides a timely perspective on the value of AA in a treatment sample. In our presentation of the EpiLab data, we offered a cautious comparison between the disengaged group in the general population NESARC sample and the *descending AA* group in the EpiLab treatment sample, noting a higher rate of past-year abstinence among the former (66% versus 50%, respectively). This likely reflects greater problem severity among the treatment sample and suggests that a treatment sample "does worse" without the ongoing support of AA than a general population sample that has disengaged from AA/NA/AA. Another relevant comparison of past-year abstinence rates is within the EpiLab treatment sample, between the *descending AA* group (in which there was a high proportion exposed to AA in the early study years, dropping to no attendance in later years) and the *high AA* group (in which high proportions reported past-year exposure to AA at each follow-up interview). If ongoing AA exposure is key

to abstinence over time, then past-year abstinence rates should be higher for the *high AA* group compared to the *descending AA* group. However, the rates for past-year abstinence between the *descending AA* and *high AA* groups were similar most years, suggesting little apparent advantage, at least in terms of abstinence, for those with continued high levels of AA exposure. We believe that the initial high rates of AA exposure among the descending AA group may help to explain the comparable rates of abstinence for the *descending AA* group (who had disengaged from AA by year 5) and the *high AA* groups (who retained high levels of AA exposure over time).

It is also possible that outcomes other than abstinence might better capture or reflect the benefit of sustained AA exposure and be able to better discriminate between those with initially high levels of AA who disengage versus continue to attend AA. For example, many twelve-step group members use the term "recovery" to signal a sober, productive lifestyle that requires abstinence but encompasses personal growth as well. However, until recently there had been little effort to define the term in a way that can be reliably used by the research community. A consensus panel convened by the Betty Ford Institute has put forward a working definition of recovery that is intended to get at such constructs, using the Who Health Organization Quality of Life (WHO-QOL) scales for physical and psychological health, independence, spirituality, social functioning, and environment (Betty Ford Consensus Panel, 2007). We are encouraged that some of the work presented in this book's section on AA effectiveness has looked beyond abstinence as an outcome, and it is our hope that subsequent research on AA/NA/CA will consider such broader definitions in studying the effect of affiliation in twelve-step programs.

5. Summary

Between 3% and $3\frac{1}{2}$ % of the general population have been exposed to AA/NA/CA in their lifetime. In terms of demographics, 28% of those reporting ever having attended AA are females, 9% are black, and 7% are Hispanic. Representation of women is higher in the membership surveys and is lower for minorities (compared to general population survey data). Minority ethnicities are not more likely to disengage from AA than whites. Representation of youth in AA appears to have been dropping since the 1990s. The proportion of AA members reporting over 5 years of abstinence has grown to about half of those completing the most recent membership surveys. There is more current-year exposure to AA among those who received specialty treatment the same year. Our disengagement analysis tentatively suggests that people are more likely to continue to engage in AA if they were treated at some point in their lifetime, but results are limited and more research is needed on this important topic. Long-term abstinence was more likely among those with continued engagement in AA. Rates of abstinence 7 years following treatment entry are similar for those with sustained high levels of AA exposure versus those with initial

high levels of exposure who later stopped attending AA meetings, suggesting that disengagement from AA does not necessarily translate to a return to drinking.

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Concerns About Dose and Underutilization of Twelve-Step Programs: Models, Scales, and Theory that Inform Treatment Planning

Richard N. Cloud and J. B. Kingree

Abstract: Researchers have observed that a majority of addicted persons who are encouraged and facilitated by treatment providers to attend twelve-step (TS) programs either drop out or sporadically use twelve-step programs following treatment. This is troubling given considerable evidence of TS program benefits associated with regular weekly attendance and ubiquitous reliance by treatment professionals on these programs to provide important support services. This chapter reviews and advances theory of TS utilization and dose that is supported by prior research, multivariate models, and scales that predict risk of TS meeting underutilization. Advancing theory should organize and clarify the process of initial utilization, guide intervention development, and improve adherence of TS program referrals, all of which should lead to improved treatment planning and better outcomes. Three theories are integrated to explain processes that may influence TS program dose: the health belief model, self-determination theory (motivational theory), and a person-in-organization cultural fit theory. Four multidimensional scales developed specifically to predict participation are described. Implications for practice and future research are considered in a final discussion. Information contained in this chapter raises awareness of the need for TS-focused treatments to focus on achieving weekly attendance during and after treatment.

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1. Introduction

Much has been written about twelve-step (TS) program dose and utilization in the past decade (Fiorentine, 1999, 2001; Moos, Schaefer, Andrassy, & Moos, 2001; Fiorentine & Hillhouse, 2000a, 2000b; Cloud, Ziegler, & Blondell, 2004; Cloud et al., 2006). TS program affiliation was a common and highly related term used to describe dose or utilization in prior research literature (Emrick 1987, 1989, 1994; Emrick, Tonigan, Montgomery, & Little, 1993; Tonigan, Toscova, & Miller, 1996). Other terms commonly used to describe dose, utilization, or affiliation include attendance, involvement, or participation. Cloud, Ziegler, and Blondell describe multiple scales (e.g., Humphreys, Kaskutas, & Weisner, 1998a; Tonigan, Connors, & Miller, 1996; Morgenstern, Kahler, Frey, & Labouvie, 1996) that have been developed to operationalize TS program dose in terms of involvement or participation, focusing on the degree of immersion in prescribed TS activities, including attendance, working steps, interacting with TS support networks, studying program literature, experience with spiritual and religious practices, maintaining a sponsor, chairing group meetings. While the involvement scales cited above explain a greater proportion of substance use outcomes than mere attendance, there is no clinical guidance provided on how to interpret composite scores that tend to be highly skewed toward little or no involvement and patterns of responses that can be counterintuitive (Cloud, Ziegler, & Blondell).

More recently, researchers have proposed regular weekly attendance as a minimal dose threshold that may be necessary to derive substantial benefit from TS programs (Fiorentine, 1999, 2001; Moos, Schaefer, Andrassy, & Moos, 2001; Fiorentine & Hillhouse, 2000a, 2000b; Cloud et al., 2004; Cloud et al., 2006). This is an important development, since weekly attendance is a transparent "on-the-fly" clinical benchmark and since regular attendance is likely to be a necessary condition for greater TS program utilization. Unfortunately, researchers observe less than weekly or no attendance as the most common outcome in the year following treatment among subjects who have participated in treatments that emphasize, encourage, and support posttreatment attendance (e.g., Tonigan, Connors, & Miller, 2003; McKellar, Stewart, & Humphreys, 2003; McKay et al., 1998; Ouimette, Finney, & Moos, 1997; Cloud et al., 2006; Kelly & Moos 2003).

To illustrate the large effect of attendance dose levels on abstinence and poor dose compliance among patients receiving TS facilitative treatments, Cloud et al. (2006) summarized data from Project MATCH (PMRG, 1997). Among the TS facilitative treatment group (Nowinski, Baker, & Carroll, 1992; n = 582), (1) 37% of subjects reported zero attendance in the 6 months following treatment and, among this group, 21% reported complete abstinence during the next 6-month period; similarly (2) 26% reported less than weekly attendance on average, and 27% of this group reported complete abstinence in the next 6 months; (3) 19% reported between 1 and 2.6 meetings per week on average with 43% remaining abstinent; and (4) 18% reported more than 2.6 meetings on

average and 62% reported complete abstinence. Summarizing these outcomes still further, those attending more than weekly averaged over two times the rate of abstinence of those attending less than weekly or not at all. Regrettably, despite far superior outcomes among weekly attenders, those attending less than weekly represent a sizeable majority (66%) of those who received TS program treatment content. Weekly attendance may be a good "acid test" to evaluate effectiveness of treatment programs that emphasize TS program utilization.

Emrick (1987, 1989, 1994; Emrick, Tonigan, Montgomery, & Little, 1993) reviewed correlates of TS program affiliation to inform referrals to AA and concluded that providers should encourage participation in AA while avoiding indiscriminant and generalized prescriptions—noting that natural or self-aided recovery and brief and minimal interventions are commonly found effective in helping problem drinkers resolve their problems. Emrick (1994, 1989) and others (e.g., Timko, Finney, Moos, Moos & Steinbaum 1993, Tonigan & Hiller-Sturmhoefe, 1995) have repeatedly acknowledged the lack of theories, models, or screening methods capable of guiding TS referrals or predicting who will or will not attend meetings. Despite an abundance of TS research, nearly two decades after Emrick's (1989) initial work, no accepted theory or model has emerged.

This chapter focuses on theory, models, and clinical strategies to inform TS program referrals. The chapter proceeds by reviewing prior research literature and multidimensional scales that have been developed to assess risk for underutilization, suggests and advances theories, and concludes by summarizing clinical and research implications.

2. Literature Review

Despite considerable effort, TS utilization has not been successfully modeled. This failure is likely attributable to complexity (Cloud, Blondell, & Ziegler, 2004)—created by multiple variables interacting and changing with time. There are numerous publications spanning decades that have sought to identify correlates, interactions, and some that have reported multivariate predictive models of dose.

One thing that has been well established in this literature is that treatment content can influence the level of posttreatment attendance or involvement. Multiple large multi-site experiments have demonstrated that TS facilitative treatment content designed to orient, facilitate, and acculturate clients into TS recovery practices are effective at increasing measures of affiliation during the first year following treatment (e.g., Ouimette, Finney, & Moos, 1997; Tonigan, Connors, & Miller, 2003). In addition, in a smaller randomly controlled trial (n = 90), McCrady, Epstein, and Hirsch (1996) demonstrated that significant gains in attendance during outpatient couples treatment could be produced through the use of therapist encouragement, goal setting, and involvement of the non-alcoholic spouses. Another small, randomly controlled trial (n = 20) by

Sisson and Mallams (1981) demonstrated that introducing clients to a member of AA at the conclusion of outpatient treatment—and arranging for the AA member to escort the newcomer to an initial AA meeting—resulted in significantly higher TS program attendance in the month following treatment. Replicating this finding, Timko, DeBenedetti, and Billow (2006) recently reported results of a randomly controlled trial (n = 345) that introduced outpatient subjects to TS volunteers and encouraged them to meet at a TS program meeting. The report describes a significant interaction with subjects who reported less prior attendance increasing TS program involvement in response to a more intensive form of encouragement and introduction of the TS program volunteer—compared to subjects with higher prior attendance. Schilling and colleagues (2002) reported significantly better 2-month post-detoxification TS program attendance among those who received a three-session motivational intervention at the conclusion of detoxification compared to an as usual detoxification control group. A similar study was recently reported by Kahler and colleagues (2004) in a small comparison group trial (n = 48) in which persons in detoxification received brief advice or a more intensive motivational counseling method directed at improving future involvement in TS program. Similar to the Timko, DeBenedetti, and Billow study, prior TS involvement appeared to interact with treatment condition, wherein those with lesser prior TS program involvement responded more positively to the motivational counseling (although the relationship did not reach statistical significance due to the small sample size). These results generally demonstrate that TS program facilitation and supportive counseling increases posttreatment attendance, and that clients with little prior attendance may benefit more from intensity of TS program treatment content, than those who have considerable prior experience.

Other, suggestive, correlational evidence is commonly reported from treatment outcome studies describing factors that correlate with the extent of posttreatment involvement in TS programs. It should be noted that methodological complications exist in these analyses due to inconsistencies in operationalizing TS program dose (e.g., days of attendance, average weekly attendance, dropout, and different affiliation or involvement scales), varying sample populations (e.g., co-occurring mental disorders, detoxification, inpatient, or outpatient), and differences in operationalization of predictor variables. Nonetheless, there is a parsimonious set of factors that have been reported in multiple studies.

Of note, the extent of TS program dose preceding, during, and immediately after treatment has consistently emerged as the strongest and best predictor of long-term TS program dose (Connors, Tonigan, & Miller, 2001; Fiorentine & Hillhouse, 2000a; Kelly & Moos, 2003; Mankowski, Humphreys, & Moos, 2001; Tonigan, Connors, & Miller, 2003; Cloud, 2004, 2000), whether it was operationalized in some form of attendance, as dropout, or using an involvement scale. This finding is of great clinical value in screening and treatment planning; however, prior utilization is not helpful (circular or tautological) in identifying

theoretical influences that could explain why people initially affiliate. To illustrate the simplicity and predictive validity of attendance during treatment, using the Project MATCH data for persons who were assigned to TS facilitative condition, we were able to accurately predict 79% of those who would or would not average weekly attendance at 6 months following treatment—using the single variable of attendance during treatment (odds ratio 67.97; Nagelkerke R square = 0.33; n = 534).

Of historical note, a prior systematic review and meta-analyses conducted by researchers (Emrick, Tonigan, Montgomery, & Little, 1993; Tonigan et al., 1996) emphasized two variables as primary predictors of TS program dose: greater history of external help seeking for drinking problems and greater severity. External help seeking included AA/NA attendance and is, therefore, a somewhat circular predictor. Greater addiction severity has been repeatedly cited in treatment studies and has sometimes emerged among parsimonious sets of predictor variables in multivariate prediction models (e.g., Tonigan, Bogenschutz, & Miller, 2005; Cloud, 2004). In addition, a recent community sample (n = 167) by Tucker, Vuchinich, and Rippens (2003) reported that greater severity, operationalized in terms of psychosocial consequences and dependence levels, leads to greater help seeking including TS program attendance. This could explain why persons who present for treatment possess prior experience with TS programs.

Despite the suggestive nature of correlational evidence, replicated findings may be converging on a set of predictor variables that can provide clues to underlying theory. Aside from treatment content and prior AA or NA utilization (described above), following is a list of other common predictors: age (Laudet, Magura, Cleland, Vogel, & Knight, 2003; Timko, Billow, & DeBenedetti, 2006), education (Timko et al.; Mankowski, Humphreys, & Moos (2001); Fiorentine & Hillhouse, (2000b), minority race (Mankowski et al.; Kaskutas, Weisner, Lee, & Humphreys, 1999; Tonigan, Miller, & Villanueva. 2002; Kelly & Moos, 2003), addiction severity generally operationalized in terms of greater addiction consequences, Addiction Severity Index scores, or Diagnostic and Statistical Manual symptoms and diagnoses (e.g., Humphreys, Kaskutas, & Weisner, 1998b; Tucker, Vuchinich, & Rippens, 2003; Laudet et al.; Tonigan et al. 1996; Connors, Tonigan, & Miller, 2001; McKay et al., 1998; Weiss et al., 2000; Brown, O'Grady, Farrell, Flechner, & Nurco, 2001; Cloud 2004), religious beliefs or practices (Tonigan, Miller, & Schermer, 2002; Mankowski et al.; Emrick, Tonigan, Montgomery, & Little, 1993; Kelly & Moos; Cloud, Timko et al.), deficits in interpersonal functioning and resources (Humphreys, Finney, & Moos, 1994, Humphreys, Moos, & Finney, 1996; Kelly & Moos; Cloud; Timko et al.), greater number of drugs abused (DiNitto, Webb, Allen, Morrison-Orton, & Wambach, 2002; Brown et al.; Weiss et al.), acceptance of TS program beliefs and principles such as the disease model, need for abstinence, labeling oneself as an alcoholic (Mankowski et al.; Cloud; Kelly & Moos; Kingree, 1995; Fiorentine & Hillhouse, 2000b), and greater motivational readiness related to health

beliefs (e.g., Snow, Prochaska, & Rossi, 1994; Emrick 1994; Morgenstern, LaBouvie, McCrady, Kahler, & Frey, 1997; Kelly & Moos 2003; Cloud, Rowan, Wulf & Golder, 2007).

Discussions and interpretations of results, particularly from multivariate predictive models, provide a source of supported theoretical explanations of affiliation. In this regard, we subjected five recent reports of multivariate models to content analysis (Rubin & Babbie, 1989) in order to compile a list of supported theories of utilization. The multivariate models included (1) Timko, Billow, and DeBenedetti (2006) who predicted posttreatment attendance and involvement among a sample of mostly male veterans (n = 245) entering an outpatient treatment program; (2) Laudet et al. (2003) who predicted affiliation in a dual focus TS group (Double Trouble in Recovery) among a co-occurring disordered treatment sample (n = 276); (3) Mankowski et al. (2001) who developed a model predicting TS program involvement among male veterans (n = 3,018) who received a mix of TS facilitative or cognitive behavioral skills training or both; (4) Kelly and Moos (2003) who modeled TS dropout among 2,778 male patients; and (5) Cloud (2004) who used data from Project MATCH (PMRG, 1997) subjects assigned to the TS facilitative treatment condition (n = 582) to predict average weekly attendance. Content analysis of how results were explained in discussion sections suggests that researchers interpreted their respective multivariate models using similar latent theoretical approaches: (1) persons are threatened by the disorder(s) and seek to improve bio-psychosocial functioning (or health seeking; Timko et al.; Laudet et al.; Kingree, Simpson, Thompson, McCrady, & Tonigan, 2007); (2) attendance is moderated by the degree of person-in-TS organizational cultural fit (Timko et al.; Laudet et al.; Mankowski et al.; Kelly & Moos; Cloud); and (3) higher affiliates are more motivated to change (Kelly & Moos; Cloud). In addition, the variables described in the literature review of commonly cited factors (above) were coded (Rubin & Babbie) to these same latent theoretical domains, as follows: health seeking (severity, interpersonal functioning and resources, multiple drugs of abuse); motivation (motivational readiness and the variables coded to the domain of health seeking); and cultural fit (age, race, education, religiosity, TS program beliefs). These theoretical codings should be interpreted with caution given the limitations of the sample, methodological limitations of content analysis, and bias inherent in latent coding; nonetheless, the results provide some systematic basis for selection of theories.

3. Scales Predicting TS Program Underutilization

This section describes scales that have been developed to aid counselors in predicting and screening for the risk of TS program underutilization. Developers of scales rely upon manifest theory or latent theoretical positions to generate a pool of items for psychometric testing. Thus, psychometric analysis of scales can provide limited research support for underlying theory. Given our

purpose of assessing theory of dose, we included scales that were developed specifically to predict participation and excluded unidimensional scales, which limited richness of theory. The first two scales explained below, were developed based upon explicit a priori theoretical underpinnings; however, the articles describing development of the latter two scales did not provide theoretical underpinnings.

3.1. Survey of Readiness for AA Participation (SYRAAP)

The SYRAAP is a brief (15-item) self-administered instrument based on the Health Belief Model (HBM; described below). The SYRAAP has been developed systematically through a series of six studies (Kingree et al.; 2006; Kingree et al., 2007). Collectively, these studies have resulted in a short, multidimensional clinical and research instrument. Table 1 presents sample items and internal consistency indicators for the SYRAAP.

The predictive validity of the SYRAAP was evaluated over a 6-month period among 268 individuals who enrolled in substance abuse treatment. The sample completed the SYRAAP and a measure of AA involvement during treatment (T1) as well as at 3-month (T2) and 6-month (T3) posttreatment assessments. Multiple regression models revealed that AA involvement at T2 and T3 were predicted more strongly by the SYRAAP than by various measures of sociodemographic characteristics, substance use severity, psychological distress, and readiness to change.

3.2. TS Ambivalence Scale (TSAS)

Guided by both motivational (Miller & Rollnick, 2002) principles and theoretical concepts, Cloud, Rowan, Wulff, and Golder (2007) conducted grounded theory research to advance theory and clinical instruments to aid counselors in understanding the processes of affiliation or dropout. The primary aim was to elicit a comprehensive list of barriers as well as benefits that may shape TS program ambivalence. In turn, these items were used to construct a scale that was initially administered to 330 persons in treatment (Cloud, Golder, Rowan & Van Zyl, 2007) and recovery centers and later validated for predictive

Table 1. SYRAAP S	ample Items a	and Scale P	roperties

		α	
Subscale	Sample Item	Study 3	Study 4
Perceived severity subscale Perceived benefits subscale Perceived barriers subscale Composite	My substance abuse problem is serious I will feel better about myself if I go to AA Going to AA can be embarrassing to me	0.81 0.92 0.71 0.85	0.81 0.86 0.76 0.88

Subscale	Sample Item	α
Spiritual beliefs (8 items)	It is necessary to grow spiritually to remain clean and sober	0.87
Positive expectancies (10 items)	Meetings help me to learn and grow	0.95
Identification and intolerance of members (16 items)	I identify with most of the members	0.91
Other shared beliefs (10 items)	It is important to follow the AA/NA literature	0.85
Social support (10 items)	The meetings are a good place to make friends	0.93
Competing demands for time (15 items)	Meetings interfere with important things	0.92

Table 2. TSAS Sample Items and Internal Consistency

validity with a treatment sample (n = 50) followed up at 6 months following treatment. Factor analysis suggested six theoretical domains or subscales, and other psychometric analysis resulted in 69 related item beliefs that can be used by clinicians to identify TS program ambivalence items and domains related to TS program attendance.

Item reduction was intentionally limited resulting in more items to provide clinicians with a greater range of potential barriers to TS program utilization, which contributed to high internal consistency (Table 2). Convergent validity was confirmed with moderate to large correlations between the TSAS subscales and a TS program involvement scale (Tonigan, Connors, & Miller, 1996) as well as a spiritual beliefs scale (Rowan, Faul, Cloud, & Huber, 2006). The treatment sample is still in process and precludes reporting predictive ability at this time.

3.3. The TS Participation Expectancies Questionnaire (TSPEQ)

TSPEQ is a 39-item, self-administered instrument that is designed to assess "attitudes that patients with alcohol dependence may have about participating in TS mutual help groups" (Kahler, Kelly, Strong, Stuart, & Brown, 2006; p. 542). It includes ten subscales that were developed according to rational criteria. Sample items for the subscales are provided in Table 3.

The structure, internal consistency reliability (Table 3), and validity of the TSPEQ were assessed in a validation study of 48 individuals who were receiving alcohol detoxification treatment. A factor analysis of the ten subscales found that the instrument has a unidimensional structure. In terms of concurrent validity, the total scale score from baseline (in-treatment) responses to the questionnaire correlated highly with prior involvement and goals for future involvement in AA/NA. In terms of predictive validity, the total score from the baseline questionnaire was found to be related to overall differences in post-treatment attendance in AA and NA over a 4-month posttreatment period.

Subscale	Sample Item	α
Social support	People at AA/NA could give me a lot of support	0.83
Structured time	Going to AA/NA can help me use some of my free time	0.82
Increased motivation	Going to AA would motivate me to stay sober	0.82
Skill learning	I could learn a lot by working on the 12 steps of AA/NA	0.80
Positive emotional reactions	I think AA/NA meetings would be uplifting	0.87
Negative emotional reactions	Going to AA or NA would depress me	0.66
Social concerns	I do not think I would like the people I meet at AA/NA	0.64
Spirituality concerns	I like that AA and NA are spiritual programs	0.66
Attendance barriers	I do not have enough time to attend AA/NA meetings	0.60
Social influences	Many people have encouraged me to go to AA or NA	0.70

Table 3. TSPEQ Sample Items and Internal Consistencies

3.4. Negative Aspects of TS Group Scale (NATSGS)

Laudet (2003) developed the NATSGS, a twelve-item, self-administered instrument developed from a sample of 101 individuals who were receiving outpatient treatment for substance abuse problems in New York City. The mostly minority (59% African-American; 26% Hispanic) sample ranged in age from 18 to 59 years (M = 36 years) and comprised of 51 males and 50 females. Approximately one-half of the individuals reported that cocaine was the drug that caused the most problems for them.

A principal components analysis with varimax rotation of the sample's responses indicated that the scale had four interpretable factors: (a) negative consequences of participation; (b) recovery stage limitation; (c) religion and powerlessness; and (d) lack of professionally trained leadership. Collectively, the factors accounted for more than 60% of the total variance in the instrument. Sample items and alpha coefficients for each factor or subscale are presented in Table 4.

Table 4. NATSGS Subscale and Internal Consistencies

Subscale	Sample Item	α
Risks of participation	Twelve step groups can lead to pick up or relapse	0.62
Recovery stage limitation	Twelve step groups are only helpful early in the	0.65
Religion and powerlessness	recovery process The religious aspect of twelve step groups is obstacle	0.63
Lack of professionally trained leadership	to many Twelve step group meeting leaders dominate the rest of the group	0.57
Composite	01	0.74

3.5. Content Analysis of Subscale Domains

Content analysis of the four instrument subscale domains was expected to support a few key theoretical domains influencing utilization. While there was consensus surrounding reactions to spiritual and social experience domains, there is little consensus in other subscale domains across instruments. This disagreement in modeling TS program utilization could suggest greater variation in factors that are not represented in any one of these instruments.

4. Theories Used to Explain Dose

The following section describes theories suggested in the literature review content analysis and generally supported within the four scales reviewed above. This section concludes by proposing a multi-theoretical integrated model of utilization.

4.1. Health Seeking Explained Using the Health Belief Model

The Health Belief Model (HBP) has been widely used to examine psychosocial factors that influence the use of various health-related activities (Strecher & Rosenstock, 1997). The HBM framework has been applied to both preventive (e.g., mammography use) and treatment-related services (e.g., use of anti-psychotic medications; Champion, 1996; Nageotte, Sullivan, Duan, & Camp, 1997). HBM constructs have been shown to predict participation in alcoholism treatment (e.g., Burton & Williamson, 1995) and have much relevance for understanding and predicting participation in AA specifically.

The HBM has an extensive history dating back to the 1950s when it was developed to account for low utilization of certain types of preventive services (Strecher & Rosenstock, 1997). The HBM posits that people will use or participate in a specific health service only if they perceive threat in the condition that the service is designed to prevent or ameliorate. Threat is conceptualized as bidimensional, tied to a person's perceptions of the severity of the condition (i.e., course and consequences) as well as his/her susceptibility to it. Accordingly, use of a specific health service is predicted to be more common when perceived threat is high. The relevance of the HBM for understanding motivation for AA participation has been illuminated in studies showing that various indicators of alcohol problem severity (e.g., frequency and quantity of use, adverse consequences experienced) are robust predictors of AA participation.

The HBM holds that perceived threat of a condition is necessary but not sufficient to motivate use of a specific health service. The model states that people engage in a mental, cost–benefit analysis when deciding whether or not to participate in the service after they perceive threat. Thus, whereas perceived severity and susceptibility relate to a health condition, perceived benefits and barriers relate to a specific service for the condition. In terms of AA, potential participants may perceive benefits and barriers that are physical, social,

psychological, and/or spiritual in nature. The HBM predicts that the use of a service is more likely when perceived benefits outweigh perceived barriers.

Cues to action, or prompts to take action against a condition and/or participate in a service, is a fifth construct in the HBM. Cues to action could be internal or external in nature. In terms of AA participation, an internal cue might be a physical or psychological symptom of alcohol dependence, or the insight or acceptance of having an alcohol problem. An external cue might be a physician's diagnosis or a legal sanction. The HBM predicts that cues to action "trigger" higher service utilization among people who are exposed to them.

Self-efficacy, or the degree of one's confidence to perform a health behavior, is a sixth construct that has been incorporated in some recent applications of the HBM. The relevance of the self-efficacy construct for predicting participation in AA is uncertain; the relevance may be minimal if such participation is perceived as a simple and straightforward behavior that requires little skill. On the other hand, there are some behaviors (e.g., being called on to talk or give testimonials, working the twelve steps, interacting with strangers, arranging child care and transportation, finding meetings, feeling safe with the meeting location, having adequate time) associated with AA participation that may be considered more challenging for some than for others.

4.2. Motivation and Self-Determination Theory

There are considerable similarities between HBM (a motivational theory) and self-determination theory (SDT): both emphasize distinct aspects of motivation. SDT also fits with motivational interviewing (MI) assumptions and principles (Miller & Rollnick, 2002 Markland, Ryan, Tobin, & Rollnick, 2005; Vansteenkiste and Sheldon, 2006). MI is a clinical method, and despite the fact that MI has amassed an impressive body of evidence related to behavior change, little is known about its theoretical mechanisms of action (Moyers & Martin, 2005; Moyers, Miller, & Hendrickson, 2005; Hettema, Steele, & Miller, 2005). Alternatively, SDT theory has been developed across 30 years of experimentation aimed at understanding volitional behaviors (Markland, Ryan, Tobin, & Rollnick, 2005). Vansteenkiste and Sheldon (2006) describe SDT as a "broad based theory of motivation to best explain human thriving," and primary authors Ryan and Deci (2000, p. 70) note that "[SDT] examines the conditions that elicit and sustain, versus subdue and diminish" motivation to engage in behaviors. SDT is remarkably compatible and consistent with MI principles and assumptions and provides theory that has been validated in replicated controlled trials (Vansteenkiste & Sheldon; Markland et al.).

Both MI and SDT endorse the importance of self-efficacy and discrepancy, the persons' recognition of the gap between present reality and goals, values, and preferences, to explain quality of motivation (Vansteenkiste & Sheldon, 2006; Markland, Ryan, Tobin, Rollnick 2005). SDT researchers have expanded on MI with research that has supported much greater likelihood and

consistency of behavior change associated with the quality of motivation. First, a person who lacks confidence (attendance self-efficacy) that he/she can attend (e.g., logistical or physical problems) or participate (e.g., social phobic symptoms) in AA or NA is considered amotivational, and not expected to attend. Beyond this point, a motivational continuum is proposed to describe the nature of motivation—ranging from least to most powerful and enduring, as follows: (1) external expectations, rewards, or punishments produce extrinsic motivation; (2) guilt, shame, anxiety create introjected motivation; (3) congruence and identification with personal values, goals, and internalized and integrated values and goal preferences contribute to identified or integrated motivation; and (4) enjoyment, satisfaction, and pleasure underlie intrinsic motivation. To relate this to AA attendance, a person could be motivated to attend AA or NA due to increasingly more consistent and enduring sources of motivation: from court/employer mandate or monetary rewards to attend (extrinsic), to shame or guilt or fears related to substance abuse (introjected), to recognizing healthier or more responsible values (identified), to integrating these healthier or more responsible values within a conscious concept of self (integrated), to actually enjoying and looking forward to attending meetings (intrinsic).

4.3. Person-in-Organizational Culture Fit Theory

Person-in-organizational fit theory (fit theory) can be integrated with HBM and SDT while better describing cultural assimilation within the TS program culture, an important aspect of TS program affiliation. The basic theoretical notion is simple: the individual's values, goals, preferences, and beliefs interact with an *organizational cultural* environment, which is defined by shared values, beliefs, and norms—to produce a perception of fit or incongruence. Fit theory has been widely applied in predicting the level of employment organizational affiliation (e.g., commitment, involvement, and even success; O'Reilly, Chatman, & Caldwell, 1991; Schneider, Smith, & Paul, 2001). In addition to employment organizations, a fit model has been successfully applied to predicting the level of involvement in organizations more similar to TS programs, for example, selection of a sorority (Burnett, Vaughan, & Moody, 1997) and utilization of support groups (Luke, Roberts, & Rappaport, 1993). A few TS researchers (Mankowski et al. 2001; Cloud, 2004, 2000) have interpreted results of multivariate prediction models in terms of fit theory.

Fit theory aids in conceptualizing complexity that is created by both TS organizations (AA, NA, etc.) and specific meeting group differences. While there is the dominant TS *organizational* culture, there is evidence of considerable heterogeneity of meeting group sub-cultures. Researchers (Majer, Leonard, Ferrari, Venable, & Olson, 2002; Montgomery, Miller, & Tonigan, 1993; Tonigan, Ashcroft, & Miller, 1995) have observed that individual TS groups vary on numerous cultural determinants and dimensions that include group composition of age, gender, race, education, socio-economic status,

marital status, religious beliefs, mean time sober, co-occurring psychiatric conditions, psychiatric prescriptions, sexual orientation, size of meeting and format (i.e., discussion, speaker, literature study, smoking/non-smoking, and open/closed to non-alcoholics), and other latent group differences (e.g., cohesiveness, independence, aggressiveness, expressiveness, and focus on discussion of twelve steps).

4.4. An Integrated Theory of Attendance

The three theories discussed above are compatible. Integrating the theories, with a touch of cognitive theory (e.g., Beck, 1995), should aid counselors in better conceptualizing individual and group factors that combine and interact to influence TS program attendance. The addicted person must first hold a view that his/her condition is a serious threat and that he/she is vulnerable. A high degree of discrepancy (perception that the current reality is incongruent with important goals and values) related to their addiction (abstinence importance) is necessary before the person seriously considers attending a meeting. Consistent with both HBM and SDT theories, the person will make a decision, consciously or unconsciously weighing perceived benefits (pros) and costs (cons), only if he/she (1) is confident that attending AA/NA will aid in alleviating his/her addiction (TS meeting importance); (2) has the capacity to improve his/her addiction condition (abstinence self-efficacy); and (3) is confident that he/she is capable of participating effectively in a meeting (TS meeting self-efficacy). Early attendance or renewal of attendance after a hiatus in meeting attendance is likely to result in a more conscious and deliberate decision-making process as described above (consideration of importance and self-efficacy), whereas repeated and patterned attendance or non-attendance would become more automatic and less conscious. When a person does consider attending a TS meeting, he/she is likely to consider an established TS group expectancy formed from prior meeting experience or information provided by others. These expectancies interact with personal preferences, values, and goals to influence the nature of the motivation (i.e., extrinsic, introjected, identified, intrinsic) to attend, which weights the decisional balance (benefit versus costs). Attendance at TS program group meetings and other informational sources reinforce or modify both TS organization and specific meeting group expectancies across time.

Creating highly predictive clinical expectations or statistical models of posttreatment dose is made more complex given dynamic and temporal changes in expectancies as well as personal preferences, goals, values, and beliefs. The person's values and beliefs are likely to be influenced with exposure to differing views, e.g., views on the need for personal abstinence versus moderation, spirituality or religiosity, self-efficacy related to within-group interpersonal functioning. The individual's TS organizational and specific meeting group expectancies will also change with meeting attendance. Last, the nature

of the motivation to attend is also dynamic and will likely vary with time and experience.

5. Discussion

There are a few established or clinically important research findings related to TS program dose that are worthy of emphasis: (1) there is growing body of evidence suggesting that regular weekly attendance may be a minimum dose threshold necessary for substantial benefit; (2) replicated randomly controlled trials have demonstrated that treatment content that encourages and facilitates TS program involvement can significantly improve mean group posttreatment attendance; however, at least within the Project MATCH study only 37% of TS facilitative treatment subjects reported regular attendance 6 months following treatment; (3) for outpatient counselors interested in a simple method of predicting posttreatment attendance, greater attendance during treatment may be a good predictor of peak attendance following treatment; (4) there is recent evidence demonstrating that clients with greater prior TS attendance and involvement may not respond to TS treatment content as much as those with minimal or no prior involvement; and (5) processes that contribute to TS program utilization appear to be complex and subject to change, possibly involving domains of health-seeking beliefs, motivation, and interaction with organizational cultural fit factors.

The vast majority of clients (66% in the Project MATCH illustration) may attend less than weekly or not at all, thus not reaching a beneficial dose. TS program counselors may wish to systematically monitor weekly attendance during and after treatment as a primary dose outcome that leads to adequate better alcohol and drug use outcomes. Literature and theories described in this text offer counselors and researchers a conceptualization to guide intervention development strategies. In addition, we would offer some more concrete suggestions on commonly observed barriers to TS program utilization, most importantly, the nature and extent of motivation to attend meetings, embarrassment and stigma, negative TS experiences or expectancies, sensitivity to discussions of spirituality or religion, competing demands for time, intolerance of TS program organizational beliefs, sensitivity to specific meeting group members or sub-cultures, or beliefs that are incongruent with the TS program organization culture.

As stated previously, counselors encouraging posttreatment attendance should closely track the risk of TS program underutilization. Several tools have been suggested in this chapter that could be used for screening as well as integrated into a motivational enhancement therapy feedback routine (Cloud et al., 2006). Among the scales reviewed, the TSAS and the TSPEQ represent more voluminous instruments that will suggest more TS program barriers. However, the SYRAAP's extensive psychometric development, brevity (15 items), and superior predictive validity make it the ideal brief risk screening tool.

Regardless of the use of pen and paper scales, clinicians should routinely monitor weekly attendance during treatment and interpret attendance using the common sense rule that attendance during TS supportive treatment will probably exceed attendance following treatment.

An important contribution to research literature is the minimum TS program dose threshold consisting of average weekly meeting attendance. This would seem to be an ideal dose standard for research reporting and a good measure for evaluating TS program outcomes. While composite involvement scores may explain slightly more variance in alcohol and other drug outcomes, they are inherently complex and difficult to interpret (Cloud, Ziegler, & Blondell, 2006). Last, research has customarily used monthly or quarterly follow-up intervals; however, this timing interval may be too infrequent to capture changes in factors that influence TS program utilization. Researchers intent on developing definitive models of TS program utilization may wish to consider weekly, daily, or even hourly data collection intervals.

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Facilitating Involvement in Twelve-Step Programs

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Abstract: Twelve-step programs represent a readily available resource for individuals with substance use disorders. These programs have demonstrated considerable effectiveness in helping substance abusers achieve and maintain abstinence and improve their overall psychosocial functioning and recovery. Despite these positive benefits associated with increased involvement in twelve-step self-help programs, many substance abusers do not affiliate or do so for only a short period of time before dropping out. Because of this, clinicians and researchers have sought ways to increase involvement in such self-help groups by facilitating meeting attendance and engagement in other twelve-step activities. The present chapter reviews the impact of treatment program orientation and specific interventions designed to facilitate twelve-step program involvement, subsequent meeting attendance, engagement in twelve-step activities, and alcohol and drug use. The findings of studies evaluating these approaches indicate that it is possible to increase twelve-step involvement and that doing so results in reduced substance use. The results suggest that incorporating these evidence-based interventions into standard treatment programs may lead to improved outcomes.

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1. Role of Twelve-Step Self-Help Groups in Substance Abuse Treatment and Recovery

Twelve-step and mutual self-help groups represent an important, readily available, and pervasive resource in substance abuse recovery, whether associated with formal treatment or not [1–3]. Substance abusers can become involved with twelve-step groups before entering professional treatment, as part of their professional treatment, as aftercare following professional treatment, or instead of professional treatment [4]. These groups, which include Alcoholics Anonymous (AA), Narcotics Anonymous (NA), Cocaine Anonymous (CA), and a number of others, are highly accessible and are available at no cost in communities throughout the world. For some substance abusers, these meetings are the only resource ever used to resolve a drinking or drug problem [3, 5, 6]. The twelve-step philosophy has had a strong influence on the evolution of formal alcoholism treatment in the United States, primarily in the form of the Minnesota Model [7–9]. Many residential and outpatient substance abuse treatment programs include twelve-step meetings on-site and encourage clients to become involved in community-based twelve-step meetings and activities [4].

2. Effectiveness/Efficacy of Twelve-Step Self-Help Groups

Due to the ubiquity of twelve-step self-help groups, there has been an increased focus by clinicians, policy makers, and researchers over the recent past on their effectiveness and potential for integration within existing treatment systems. Fiscal factors and developments in clinical research have also contributed to this increased attention [1]. Recent cutbacks in funding for professional substance abuse treatment has accentuated twelve-step groups being seen as inexpensive and readily available complements to and as a source of support following formal treatment [1, 10–12]. Also, until recently there have been few well-controlled studies supporting the clinical effectiveness of twelvestep approaches [13]. However, more recent efficacy and effectiveness trials provide support for the effectiveness of twelve-step-oriented approaches [2, 14, 15]. Generally, these studies have found a positive relationship between twelve-step involvement and improvement on substance use outcomes for both alcoholics and drug abusers, even over extended periods of time ranging up to 16 years [16–37]. While the positive relationship between twelve-step involvement and clinical outcomes is encouraging, it is not possible to infer a causal relationship from correlational findings. A number of recent studies, using cross-lagged analyses of longitudinal data or structural equation modeling, have begun to elucidate the nature of this relationship [16, 37–39].

Such multi-wave longitudinal studies demonstrate that increased twelvestep meeting attendance and/or involvement appear to lead to a decrease in subsequent alcohol and drug use and that these reductions are not attributable to the influence of other variables such as level of psychopathology or motivation. Attendance at twelve-step meetings, whether independent of formal treatment or as an adjunct to treatment, has also been found to be associated with reductions in health care costs, particularly those related to subsequent substance abuse treatment [40, 41].

3. Twelve-Step Meeting Attendance vs. Engagement in Twelve-Step Activities

McKellar et al. [39] have questioned whether measures of meeting attendance alone would predict the same substance use outcomes and to the same extent as involvement in twelve-step practices and activities (e.g., reading twelve-step literature, getting a sponsor, "working" the steps, or helping set up meetings). These two variables, though related, appear to have different relationships with subsequent substance use [37]. Involvement, rather than attendance, appears to be the better predictor of substance use outcomes: the greater the level of involvement in twelve-step activities, the better the outcome. This has been found for both alcoholics [25, 42–44] and cocaine abusers [37, 45]. As Emrick, et al. [18] concluded, "mere attendance at meetings may, in fact, be a fairly weak indicator of commitment" (p. 63). Tonigan, Connors, and Miller [46] note that measures of twelve-step attendance are likely to overestimate the extent of twelve-step engagement: More people are attending meetings than are getting actively involved in the program.

However, regular attendance may be a precursor for involvement for many. Individuals who attend AA daily in early recovery are more likely to embrace both the program and fellowship dimensions of AA, while those who have dropped out or who attend meetings infrequently or erratically tend to be less accepting of all aspects of AA [42]. This latter group also appears to do less well than those who have frequent and consistent attendance [17, 22, 26, 45, 47]. Fiorentine [11] found that weekly or more frequent meeting attendance was associated with drug and alcohol abstinence among clients at outpatient drug treatment programs. Kelly, et al. [16] found a dose–response relationship between the extent of twelve-step involvement and the derived benefits: even small amounts of participation were helpful in increasing abstinence but higher doses appeared necessary to reduce relapse intensity. Similarly, Moos [26] found that more frequent participation in AA (e.g., attending two or more meetings per week) during the first year after seeking help was associated with a higher likelihood of subsequent abstinence at 1- and 8-year follow-ups.

Furthermore, the timing of this attendance was crucial. Early involvement was important; individuals who delayed participation for a year or more and then eventually entered AA had outcomes that were no better than those of individuals who never entered AA. Continued attendance and the duration of involvement in twelve-step activities over time were predictive of a broader range of substance use and psychosocial outcomes than was attendance. It also

appears that participation in AA has a positive influence on alcohol-related outcomes over and above the effects attributable to professional treatment [17, 26]. This is consistent with the finding that drug abusers who participated concurrently in both drug treatment and twelve-step programs had higher rates of abstinence than those who participated only in treatment or in twelve-step programs [20].

4. Low Rates of Twelve-Step Attendance and Involvement Following Treatment as Usual

A clinical implication of these findings is that it is important not only to get substance abusers to attend twelve-step meetings but to do so shortly after they have sought treatment and to encourage consistent attendance over time. It is also important to have substance abusers become actively involved in the twelve-step process beyond meeting attendance. However, interventions that are effective in increasing attendance may be insufficient to ensure active involvement. Individuals who are attending AA but are having difficulty embracing key aspects of the program may need professional assistance that focuses more on twelve-step practices, principles, and tenets and less on meeting attendance [42].

Despite the potential benefits associated with twelve-step involvement and attendance, approximately 60%-70% of substance abusers have never attended a twelve-step meeting. Harris, et al. [21] found that while about 75% of alcoholics entering residential treatment reported that they had attended AA meetings previously, only 16% indicated that they had ever worked on any of the twelve steps. Of the 150 patients who were interviewed, only 38% reported a positive attitude toward AA, while 36% were neutral, and 26% held a negative attitude. Even if substance abusers initially attend meetings, there are typically high rates of attrition, which may prevent individuals from receiving the maximum benefit from twelve-step involvement [48]. Approximately 40% of a cohort of nearly 3,000 individuals who had attended twelve-step meetings in the 90 days prior to or during treatment dropped out over the following year [49]. Low rates and unstable patterns of twelve-step meeting attendance have been found among both alcoholics [22] and drug abusers [11, 26, 50, 51]. Individuals who fail to become involved at all, have sporadic and inconsistent attendance, or delay their becoming involved in twelve-step groups tend to have poorer outcomes. Individuals who initiate twelve-step behaviors during the course of formal treatment are significantly less likely to drop out during the subsequent year [49]. Early attrition from attending meetings may, in part, be due to individuals' inability to embrace or utilize other aspects of the twelvestep program [42].

These findings suggest that early engagement during and/or shortly after treatment and sustained involvement in twelve-step groups contribute positively to substance use outcomes. They have prompted treatment providers

and clinical researchers to recommend that treatment programs emphasize the importance of self-help groups and encourage twelve-step group attendance and participation [1, 12, 15, 19, 45, 52, 53]. Such low rates of attendance during or after treatment are found despite the fact that most treatment programs incorporate a twelve-step philosophy and provide orientations to twelve-step groups [54, 55] and that professional staff report a high rate of referral to twelve-step meetings [56, 57]. However, referral by professionals is not always introduced to clients in a manner that fosters acceptance of twelve-step groups [52]. This is of concern since substance abusers appear less likely to become involved in twelve-step activities if left to do so on their own than if more active encouragement and referral are provided in treatment [1, 33, 34, 58].

5. Methods of Facilitating Twelve-Step Involvement

5.1. General Facilitation Through Program Orientation

There has been relatively little focus in the past on the extent to which formal substance abuse treatment may facilitate twelve-step utilization [59]. However, there is evidence that the overall philosophy and orientation of a treatment program is one avenue for increasing twelve-step involvement. In a naturalistic study of substance abuse treatment within the Department of Veterans Affairs (DVA), inpatient programs were categorized into one of three groups based on their underlying philosophy and treatment practices [60]: twelve-step, cognitive-behavioral, and eclectic (eclectic programs blended twelve-step and cognitive-behavioral philosophies and practices). Patients in the twelve-step and eclectic treatment programs had higher rates of subsequent participation in twelve-step self-help groups than did patients treated in cognitive-behavioral programs [61]. There were also a higher percentage of patients from the twelve-step-oriented programs who had sponsors, read twelve-step literature, and had self-help group members as friends. The three treatment approaches had comparable substance use and psychosocial outcomes at a 1-year follow-up, except that individuals treated in the twelvestep-oriented programs had significantly higher rates of substance abstinence at the follow-up than did those in the cognitive-behavioral programs [31]. There were no treatment-by-client attribute matches found [62]. Furthermore, the theoretical orientation of the treatment program moderated the outcome of self-help group participation: the greater a program's emphasis on twelve-step approaches, the stronger the positive relationship between twelve-step participation and better substance use outcomes. Also, twelve-step-oriented programs and those having a higher percentage of staff in recovery were more likely to make referrals to twelve-step groups than were cognitive-behavioral or eclectic programs [56]. Thus, it appears possible to enhance the attendance and effectiveness of twelve-step self-help groups, particularly when involved in a formal treatment program that has a strong twelve-step orientation [19, 20, 61]. This finding is consistent with that in the NIDA Collaborative Cocaine Treatment Study in which the combined effects of participating in a treatment that emphasized twelve-step involvement plus actual engagement in self-help activities were associated with the best outcomes [37].

Many programs and counselors present themselves as "already doing" some form of twelve-step facilitation or referral [41]. The fact that a program indicates that its treatment is guided by twelve-step philosophy does not necessarily mean that twelve-step practices, let alone twelve-step facilitation practices, are actually being employed [63–65]. In practice, efforts are often unsystematic, consisting, for example, of a counselor providing the patient with a list of local self-help groups and suggesting that he or she attend a meeting [34, 41, 58]. Even practitioners who describe themselves as "twelve-step oriented" typically consider only a subset of twelve-step processes important for clients [15, 65]. Typically, when counselors do attempt to support twelve-step self-help group involvement in standard treatment, they rarely use empirically supported methods. When clinicians use empirically validated techniques to support mutual help group involvement, it is far more likely to occur [1].

5.2. Specific Facilitation Through Targeted Interventions

5.2.1. Twelve-Step Facilitation Therapy (TSF) Based on Project MATCH

5.2.1.1. Individually Delivered TSF with Alcohol Dependence. While there have been guidelines published for treatment providers on methods to attempt to facilitate twelve-step involvement for some time [53], this approach was systematized in twelve-step facilitation (TSF) therapy developed by Nowinksi and Baker [66] and evaluated in Project MATCH [32, 67, 68]. A common misconception is that TSF is the *same* as AA. While the content of TSF therapy was designed to be consistent with AA and other twelve-step groups and with treatment programs based on the Minnesota Model, they are not equivalent. TSF is a structured, manual-guided therapy, originally developed to be delivered over 12–15 individual sessions by a trained counselor, designed to facilitate early recovery from alcohol and other drug abuse or dependence.

TSF has a number of goals and objectives related to the first three steps of AA [67, 69, 70]. The primary goal is to promote abstinence by facilitating the client's (1) "acceptance," which includes the realization that substance dependence is a chronic, progressive disease over which one has no control, that life has become unmanageable because of alcohol or drugs, that willpower is insufficient to overcome the problem, and that abstinence is the only alternative; (2) "surrender," which involves giving oneself over to a higher power, accepting the fellowship of other recovering alcoholics, and following the recovery activities laid out by the twelve-step program; and (3) active involvement in twelve-step meetings and related activities. Furthermore, the therapy process attempts to instill hope for recovery. Clients are given an opportunity to examine their thinking patterns (e.g., rationalization, denial), emotions, behaviors,

interpersonal relationships, social activities, and spirituality and to consider how each is related to drinking and how changes in each would enhance their chances of sobriety. In addition to helping the individual incorporate the AA belief system, TSF emphasizes active participation in AA activities and the twelve steps as a primary means to recovery. The person is encouraged to turn to AA to gain support in changing old habits that maintain drinking and to increase social involvement with other AA members.

Project MATCH compared TSF to cognitive behavioral therapy (CBT) and motivational enhancement therapy (MET) in both outpatient (n = 952) and aftercare (n = 774) alcohol dependence treatment settings [32]. Participants in all three Project MATCH therapies demonstrated significant and relatively comparable reductions in the number of drinks per drinking day and increases in the percent days abstinent. In a result consistent with that of the naturalistic DVA study [31], those Project MATCH participants who received TSF had significantly higher rates of continuous abstinence when compared to the other two treatments at a 1-year follow-up, while being comparable to MET and CBT on the other drinking-related outcomes.

This differential benefit for the TSF group appears to have been related to differences in the treatments' ability to engage clients in twelve-step activities [59]. Outpatients in Project MATCH who received TSF as their primary treatment had significantly higher rates of twelve-step attendance overall during the year following treatment compared to the CBT and MET therapies. In contrast, outpatients in CBT showed no increase in AA attendance across the three months of treatment or the subsequent follow-up. Outpatients in MET demonstrated a small increase in attendance during the 3-month treatment phase. Over half of the CBT (55%) and MET (52%) outpatients had no AA attendance over the entire 15-month treatment and follow-up period, while only 19% of those in TSF failed to attend an AA meeting over this same period. Participants in the outpatient TSF also reported significantly more involvement in twelve-step activities than those in either CBT or MET. AA participation, in turn, positively predicted the frequency of abstinent days in the post-treatment period [38]. An examination of the putative active ingredients of TSF [71] indicated that TSF had features unique from CBT and MET. Compared to these other two interventions, TSF resulted in a greater awareness of a higher power, endorsement of total abstinence, and engagement in AA practices. Two of these active ingredients, emphasis on abstinence and commitment to AA practices, were predictive of greater abstinence, and commitment to AA practices mediated TSF clients' significantly higher abstinence rates 6 months after treatment relative to CBT and MET.

5.2.1.2. Individually Delivered TSF with Combined Drug and Alcohol Dependence. Carroll and colleagues [63, 64] extended the use of individually delivered TSF to individuals who were dependent on both cocaine and alcohol. Five groups were involved: TSF (n = 25), TSF plus disulfiram (n = 25), CBT

(n = 19), CBT plus disulfiram (n = 26), and clinical management plus disulfiram (n = 27). The TSF intervention followed a manual adapted from Project MATCH for use with cocaine-dependent clients [72]. The results indicated that TSF treatment was effective in promoting patients' involvement with self-help groups over the twelve-week treatment period [64]. Self-help involvement during treatment was significantly higher for patients assigned to TSF (13.8 days mean days of self-help group attendance) compared to those assigned to CBT (1.1 days) or patients assigned to clinical management (5.4 days). Furthermore, 58% of all participants reported attending at least one AA or self-help meeting over the follow-up period, with a mean of 3.9 days per month in which a self-help meeting was attended. The mean total days of self-help attendance during the 1-year follow-up was higher for participants who had been assigned to TSF compared with participants assigned to clinical management or CBT, but not significantly so (48.7 days vs. 33.2 days vs. 24.2 days, respectively) [63]. Both TSF and CBT were associated with substantial and significant reductions in alcohol and cocaine use over the course of the twelve-week treatment period compared to the clinical management condition; the substance use outcomes for TSF and CBT were comparable. At a 1-year follow-up, while still favoring the TSF and CBT conditions, the differences between these two groups and the clinical management condition were no longer significant, and TSF and CBT had comparable outcomes [63]. Participants who attended any self-help groups, regardless of treatment condition, had significantly better cocaine outcomes during follow-up than those who did not [63, 64].

5.2.1.3. Group-Delivered TSF. While the results of studies evaluating individually administered TSF are quite positive, they may have limited generalizability to many clinical settings where group therapy is the modal method of treatment delivery [73-76]. Brown and colleagues [77, 78] have evaluated a group-delivered twelve-step facilitation aftercare intervention. Substance abusers (22% alcohol dependent; 78% dependent on alcohol and cocaine and/or marijuana) from three community-based treatment programs were randomly assigned to either a structured cognitive-behavioral relapse prevention (n = 61)or a twelve-step facilitation (n = 72) aftercare condition. Both interventions were delivered in a closed-group therapy format, consisting of 10 weekly 90-min group sessions. The twelve-step condition followed the TSF manual developed in Project MATCH [67]. Both interventions were associated with substantial and significant reductions in alcohol and drug use at a 6-month follow-up. The two conditions were comparable, however, with no differences found between the two conditions on any of the substance use outcomes (days of use, ASI Alcohol and Drug Composite Scores, days to first lapse, and days to first relapse). Significant treatment-by-client attribute interaction effects were found. Women, individuals with a multiple substance abuse profile (primarily combined cocaine and alcohol), and those with higher levels of psychiatric severity had better substance use outcomes when treated in the TSF condition than in the relapse prevention condition. iven the findings that the outcomes of TSF were comparable to or better than those seen with relapse prevention, Brown et al. [77, 78] concluded that the adoption of a well-supervised and structured TSF-inspired aftercare program seems a reasonable strategy for most clients.

Maude-Griffin, et al. [79] found that a combined group plus individual TSF intensive outpatient program (n = 69) for crack cocaine addicts modeled after the Project MATCH manual had poorer outcomes overall than a cognitive-behavioral therapy program (n = 59). However, two significant client attribute-by-treatment interactions favored the TSF condition. Those individuals with lower levels of abstract reasoning ability and African American clients with higher levels of religious beliefs did better in the TSF condition than in the CBT condition.

With the exception of the findings of Maude-Griffin, et al., the results from the other trials indicate that interventions designed specifically to facilitate involvement in twelve -step groups, whether delivered as individual or group therapies, achieve this goal and result in significant and substantial reductions in substance use comparable to and often better than the outcomes of more established, evidenced-based treatments such as CBT and relapse prevention.

5.2.2. Briefer Twelve-Step Interventions to Fit Current Clinical Constraints: Issues of Sustainability

Based on these findings, it has been recommended that clinicians use empirically validated approaches such as TSF derived from Project MATCH when seeking to foster self-help group involvement [15]. However, both Humphreys [1] and the DVA-CSAT Workgroup on self-help groups [15] have suggested that it would be appropriate not only to investigate the effectiveness of twelve-step facilitative interventions further but also to consider briefer interventions that may fit better within existing clinical practice and reimbursement models than do previously employed TSF interventions. TSF as developed in Project MATCH is a formal individual psychotherapy approach that is not without costs to incorporate into clinical programs [69, 80], although the system-level cost offsets associated with subsequent reductions in substance abuse treatment services utilization may justify the initial expenses of adopting TSF [41, 81]. Such concerns contributed to Humphreys' [1] argument that in order to make twelve-step facilitative interventions more useful in practice, researchers and clinicians should develop and evaluate briefer forms of such interventions.

5.2.2.1. Motivational Enhancement Targeting Increased Twelve-Step Involvement. One potential approach consistent with this recommendation that has been evaluated recently is brief motivational enhancement therapy targeting twelve-step involvement. Brief motivational interventions, which have the goal of reducing client ambivalence toward therapy and changing and enhancing commitment to and motivation for treatment, have been found to

facilitate alcohol dependence treatment entry and retention [82-86]. Kahler and colleagues [87] felt that such a brief intervention would be especially relevant in alcohol detoxification facilities in which time and resources available to provide treatment are limited. They compared a 60-min motivational enhancement intervention targeting involvement in twelve-step self-help programs (n = 24) to a 5-min brief advice condition (n = 24), both in the context of an inpatient detoxification program. In the brief advice condition, the counselors stressed the severity of participants' alcohol problems and the importance of abstinence as a goal, described twelve-step programs and their potential benefits, recommended active involvement, and provided AA and NA meeting schedules. The motivational intervention consisted of three main components. The first focused on increasing commitment to abstinence, as lack of commitment could be a major barrier to twelve-step involvement. The second component used motivational interviewing techniques to increase commitment to engage in twelve-step activities. The final component consisted of a letter that summarized the session and reinforced the individuals' self-motivational statements and change plan; this was sent to them within 2 days of the session.

No differences overall were found between the standard brief advice to attend AA (which reflected standard practice) and the motivational enhancement condition with respect to either twelve-step group attendance or drinking outcomes over the subsequent 6-month follow-up period. However, a significant interaction was found between the type of intervention received and prior experience in twelve-step groups. The motivational enhancement approach was more effective for individuals with relatively little prior self-help involvement, while the brief advice was better for those who have more twelve-step experience.

5.2.2.2. Intensive Referral and the "Buddy System". Another alternative that is more directly related to the twelve-step recovery model than is motivational enhancement therapy involves the use of twelve-step members serving as the "bridge" between formal treatment and individuals' entrance into the twelve-step program. It has been a common practice in many treatment programs to use AA or NA members who serve as volunteers in a "buddy system" or as temporary sponsors [88–90]. One particular form of this type of intervention recommended by Humphreys [1] and Miller [91] for further study is "systematic encouragement and community access" (SECA), an intensive referral procedure developed by Sisson and Mallams [58]. In one of the first studies to evaluate such a volunteer buddy system, alcoholic outpatients or their significant others were randomly assigned to a "simple" or "enhanced" referral procedure. In the simple condition, a counselor suggested that the patient attend AA or Al-Anon and provided a printed list of meeting times and locations. In the enhanced condition, the counselor supplemented the aforementioned intervention with an in-session telephone call to a current member of AA or Al-Anon, who talked to the patient briefly and arranged to attend a meeting with him or her. The twelve-step group member contacted the patient with a

reminder telephone call the night before the meeting and drove the patient to the meeting. During the month following the intervention, 100% of the participants in the enhanced referral condition attended at least one meeting (average 2.3 meetings), compared with none of the participants in the simple referral condition. Although the study was based on a small sample (n = 20) and followed patients for only 1 month, the results suggested that such a fairly brief intervention can have a significant impact.

Timko and colleagues [34] have recently completed a larger and more thorough evaluation of a manualized intensive twelve-step referral procedure in a two-site randomized trial with individuals entering outpatient substance abuse treatment. Clients were randomized to receive three sessions of either standard referral (n = 164) or intensive referral (n = 181) to twelve-step meetings over a 1-month period. In the first session of the standard referral condition, the counselor gave the client a schedule of AA and NA meetings in the local area and encouraged him/her to attend twelve-step self-help group meetings; subsequent sessions focused on relapse prevention and general educational issues around substance abuse and treatment.

The initial session of the intensive referral condition also included the provision of a schedule of local self-help meetings. In addition, the client was given a handout that provided an introduction to twelve-step philosophy and the structure and terminology of twelve-step groups, addressed common concerns about participation, and encouraged patients to set goals for attending self-help meetings and working the first Steps. It also involved the counselor and client calling a twelve-step volunteer during the session to arrange for the volunteer to meet the client before a twelve-step meeting so that they could attend the meeting together. The second and third sessions served as "check-ins." If the client had met with the volunteer and attended a meeting, the counselor reinforced the individual for attending, explored reactions to the meeting, set goals for future meeting attendance, and encouraged the client to begin seeking out a temporary sponsor. If the client had not met with the volunteer and/or had not attended a meeting, the focus was on the barriers that prevented these events from occurring. The procedure of contacting a volunteer again during the session to arrange a meeting and to accompany the client to a meeting was repeated. A written agreement was also made between counselor and client about the meetings the client committed to attend in the following week.

Individuals assigned to the intensive and standard referral conditions did not differ on measures of twelve-step meeting attendance over the initial 6-month follow-up period; however, those in the intensive referral condition demonstrated greater engagement in twelve-step activities (e.g., doing service work, having experienced a spiritual awakening, and overall involvement). Those in the intensive referral condition also had significantly greater reductions on the alcohol and drug use composite scores of the Addiction Severity Index and had significantly higher rates of abstinence from drugs, although not alcohol, than individuals who received the standard referral. A subsequent

evaluation at the 1-year follow-up [33] indicates that these initial differences in favor of the intensive referral intervention were maintained. Those in the intensive referral, compared to standard referral, were more likely to have attended one meeting per week, had higher levels of involvement in other self-help activities, and had higher rates of abstinence. Furthermore, the increased twelve-step involvement associated with the intensive referral process appeared to account for the improved substance use outcomes.

5.2.2.3. Making AA Easier (MAAEZ). Kaskutas and Oberste [92] have developed a relatively brief group-based intervention aimed at increasing twelve-step meeting attendance and engagement. This intervention, named Making Alcoholics Anonymous Easier (MAAEZ), consists of six sessions – an introductory session, four "core content" sessions (spirituality, principles not personalities, sponsorship, and living sober), and a review/graduation session. Unlike the TSF intervention developed in Project MATCH, which focuses on individuals gaining a cognitive understanding and appreciation of twelve-step tenets such as surrender and acceptance, MAAEZ instead targets active steps toward involvement, focuses on preparing clients to engage in the culture of AA and twelve-step groups, and deals with potential barriers of or ambivalence toward involvement. This focus is consistent with the model of the stages of AA affiliation presented by Rudy [93], which suggests that these activities may be earlier and more basic stages in the affiliation process than is true of the type of cognitive processes involved in the Project MATCH TSF, which are thought to be more advanced stages occurring over a period of 3–4 months.

Initial pilot data have been collected regarding homework completion (assessed at ongoing MAAEZ sessions). Homework compliance was nearly 100% for AA meeting attendance and assignments related to attendance (e.g., talking to someone after the meeting). The proportion of clients completing reading assignments ranged from 25% to 80%, depending largely on whether the client was in a residential or outpatient program. As a preliminary assessment of MAAEZ effectiveness, 6-month AA involvement and outcomes were compared between MAAEZ pilot clients and clients who had participated in a 6-month follow-up survey 18 months earlier in the same program. MAAEZ clients (n = 11) reported deeper AA involvement and higher 30-day total abstinence (both alcohol and drugs) than clients studied before MAAEZ was implemented (n = 67). At the 6-month follow-up, respective proportions (statistical tests not run) were as follows: 100% vs. 71% had attended a meeting; 55% vs. 33% had called someone from AA/NA/CA in the last 30 days; 82% vs. 29% currently had a sponsor; and 100% vs. 67% reported total abstinence in the last month. Thus, MAAEZ appears to be a potentially effective, relatively brief intervention that increases twelve-step meeting attendance and engagement and reduces substance use while being easily integrated into ongoing treatment programs. The 6- and 12-month outcomes from a larger randomized controlled trial evaluating the efficacy of MAAEZ are still in the process of being collected and analyzed, so it is necessary to await the results to determine the potential utility of this intervention.

6. Summary and Conclusions

Miller, serving as a discussant for a symposium on AA involvement and change mechanisms [91], provided the following conclusions about the current status and future direction of research and clinical practice in this area (p. 531):

- 1. AA cannot be ignored in understanding treatment outcomes. At the very least, studies should carefully inquire about AA involvement, to examine its relationship to treatments and outcomes.
- 2. It is possible to facilitate AA attendance. Without question, there are counseling procedures that significantly increase AA attendance, at least during and often after treatment. TSF therapy clearly did this in Project MATCH. Systematic encouragement can significantly increase attendance.
- 3. Treatment is the time to initiate AA attendance. If AA attendance is not initiated during the period of treatment, it is quite unlikely to happen. Treatment, then, is a good time to encourage sampling of the program and meetings of AA.
- 4. Attendance is not involvement. When frequency of AA meeting attendance is measured separately from behavioral indicators of involvement in the program and fellowship of AA, the two measures are moderately correlated. In fact, among more frequent AA attenders during Project MATCH treatment, AA attendance declined over the course of follow-up while AA involvement remained steady or increased. This suggests a gradual process of internalization of the AA program and surely indicates that conclusions cannot be drawn from attendance alone.
- 5. AA involvement predicts better outcomes. Longitudinal studies usually, although not always, find that AA involvement after treatment is associated with higher rates of abstinence regardless of the kind of treatment received. When AA attendance and AA involvement are both measured, the latter tends to be the stronger predictor of outcome.

Twelve-step programs serve as cost-effective resources that complement, support, and extend the cognitive and behavioral changes made in treatment [94]. However, given the low rates of involvement in and high rates of attrition from twelve-step programs, it is necessary to develop and evaluate methods to help substance abusers and treatment programs take full advantage of self-help groups [1]. Implementation of systematic, structured, and manual-guided twelve-step interventions, integrated within treatment, represents one such method to increase engagement and retention in self-help

groups. If successfully implemented, such structured, manual-guided interventions would augment the more general twelve-step orientation characterizing many community-based providers and promote better treatment outcomes.

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Twelve-Step Facilitation in Non-specialty Settings

John F. Kelly and Barbara S. McCrady

Abstract: Participation in the twelve-step mutual-help organization, Alcoholics Anonymous, has proven to be an effective means of helping individuals with alcohol dependence achieve lasting sobriety. Although many patients choose to attend AA of their own accord, clinicians' facilitation of AA involvement ("Twelve-Step Facilitation" [TSF]) has shown to substantially increase the likelihood that patients will become engaged with these freely available resources. Importantly, many individuals with alcohol dependence never seek help from addiction specialists, yet often encounter other health professionals due to alcohol-related physical or psychological problems providing an opportunity for intervention. However, for clinicians who do not specialize in addiction treatment, knowledge about what AA actually is and does is often lacking, and confidence in implementing TSF strategies is low. This chapter provides essential information for clinicians working in non-specialty settings who have little knowledge of, or experience with, AA or TSF, but who may wish to utilize proven strategies to augment existing interventions by helping educate, link, and engage patients with AA. Detailed information on the origins and specific elements of AA is provided along with recommended TSF approaches and strategies to aid the non-specialist in building effective interventions for patients with alcohol dependence.

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1. Introduction

The most well-known resource for helping individuals with alcoholrelated problems in the United States is the mutual-help fellowship, Alcoholics Anonymous (AA). AA's twelve-step recovery program and network of informal meetings are pervasive and the organization has exerted an increasing clinical and public health influence on addressing alcohol-related problems during the past 70 years (Humphreys, Kaskutas, & Weisner, 1998; Institute of Medicine, 1990; Kelly, 2005; Smart & Mann, 1993). Furthermore, the organization has expanded across national boundaries and has been successfully adapted to fit a diverse range of cultural contexts (Mäkela, 1996). In the United States it is the most commonly sought source of help for alcohol-related problems with well over 50,000 meetings per week nationwide (AA, 2001; Room & Greenfield, 1993; SAMHSA, 2006). Furthermore, AA's concepts and related recovery vernacular have imbued the broader American culture and society, and its philosophy, conceptualizations, and twelve-step recovery program have been widely adopted and implemented in the majority of professional treatment settings targeting both adults and youth (Drug Strategies, 2003; Roman & Blum, 1998).

Some perceived advantages of AA include the fact that it is free, widely available, possesses an explicit recovery-focus, and provides access to an abstinence-specific social network that offers flexible support (e.g., by telephone) at times of high risk for relapse, such as evenings and weekends (Kelly & Myers, 2007). In contrast to professional interventions, AA can be attended casually without insurance approval or divulgence of personally identifying information for as long as an individual desires.

Research also indicates that AA participation is helpful. During the past 15 years, there has been a substantial increase in the quantity and quality of empirical investigations examining the effectiveness and cost-benefits of AA participation on the course of alcohol use disorders (e.g., Ferri, Amato, & Davoli, 2006; Humphreys, 2004; Humphreys & Moos, 2001; 2007; Kelly, 2003; Kelly, Stout, Zywiak, & Schneider, 2006; Moos & Moos, 2004; Timko, DeBenedetti, & Billow, 2006; Tonigan, Toscova, & Miller, 1996). This body of empirical research has engendered a growing confidence in the clinical utility of AA both as a stand-alone public health resource and as an adjunct to professional treatment (Room & Greenfield, 1993; Timko, Moos, Finney, & Lesar, 2000). In fact, influential organizations, such as the American Psychiatric Association and the Department of Veterans Affairs Health Care recommend routine referral to these organizations in their clinical practice guidelines (APA, 2006; Veterans Health Administration, 2001). In addition, strategies for making AA referrals have been incorporated in the latest state-of-the-art interventions targeting AUDs, such as those used in the multi-center COMBINE Study (Longabaugh, Zweben, Locatsro, & Miller, 2005; Pettinati et al., 2005). From an intervention dissemination and impact perspective (e.g., Glasgow, Lichtenstein, & Marcus, 2003), AA has reach and effectiveness, appears to be readily adopted and implemented, and has evident staying power (Kelly, 2005). Consequently, because alcohol use disorders are endemic and exact such an extraordinary social and economic burden on our society (Harwood, 2000), AA is seen as a valuable public health resource in an increasingly cost-constricting, managed-care climate (Humphreys & Moos, 2001; 2007; Olmstead, White, & Sindelar, 2004).

However, until relatively recently, there was little formal investigation into developing and evaluating clinical strategies designed to facilitate patients' involvement in AA during and after treatment. It was not until Project MATCH during the 1990s that the term "Twelve-Step Facilitation" (TSF) came into being. The term was coined for an intervention devised to systematically foster and support engagement in AA intended to be delivered by professionals specializing in addiction treatment (Project MATCH Research Group, 1993; Nowinski, Baker & Carroll, 1995). The resulting manual-guided treatment (Nowinski et al., 1995) provided a documented, replicable intervention procedure for addiction clinicians to follow and deliver.

At this juncture it might be useful to clarify some frequent misunder-standings relating to "twelve-step" terminology. "TSF" is often confused with "AA," which is also frequently confused with "twelve-step treatment" (sometimes referred to as the Minnesota Model; McElrath, 1997). To clarify, AA is a free-standing, community-based fellowship that provides help through a network of informal gatherings, convened at rented venues, such as churches and hospitals (AA owns no property; AA, 1953). "TSF" is the name given to the professional intervention designed to facilitate active engagement in this (i.e., AA) community organization. On the other hand, when the phrase "twelve-step treatment" is used, it typically refers to a professional residential treatment program in which patients are educated in depth about the AA fellowship and the twelve steps and often formally work through the first five of the twelve steps during treatment (McElrath, 1997).

While these TSF procedures were developed with the addiction specialist in mind, it is important to note that national surveys indicate many individuals who meet diagnostic criteria for an alcohol use disorder never approach a recognized addiction treatment setting or specialist (SAMHSA, 2006). For example, according to nationally representative survey data, of the approximately 19 million individuals who meet DSM diagnostic criteria for alcohol abuse or dependence in the United States, about 90% do not perceive they need treatment. However, these individuals are more likely to suffer from varying degrees of alcohol-related problems that may bring them into contact with some kind of healthcare provider (e.g., psychologists, psychiatrists, emergency room staff, primary care physicians), providing an opportunity for intervention.

For clinicians without extensive addiction expertise and those who do not work in settings that have a specific focus on addiction or substancerelated problems (e.g., primary care or mental health settings, counseling centers, private practice settings), the level of clinician knowledge about the AA organization itself and the clinician's degree of confidence that TSF can be carried out effectively may be low. Also, many of these providers feel unsure about whether TSF carried out in a non-specialist venue would produce similar benefits. The purpose of the current chapter is to provide concise, essential, information for individuals working in non-specialty healthcare settings who have little knowledge of, or experience with, AA or TSF, but who may wish to utilize proven strategies to augment existing interventions by helping educate, link, and engage patients with these potentially helpful and freely available community resources.

To achieve this, the first part of the chapter provides some historical context by briefly elucidating AA's origins and then presents a detailed description of the major components of AA, as well as its strengths and limitations. In the second section we describe effective TSF strategies and provide an example of a recent attempt to formalize TSF for use in non-specialty settings (e.g., the COMBINE Study). In the last section, we outline some recommendations for clinicians working in non-specialty clinical settings, which we hope will enhance effectiveness as twelve-step facilitators, and describe some common clinician and patient barriers to AA.

2. Alcoholics Anonymous

This section focuses briefly on AA's origins and history and outlines how patients may benefit from AA participation. This historical section is followed by detailed descriptions of eight major components of AA: (1) the twelve steps; (2) the twelve traditions; (3) AA meetings (types, formats); (4) AA sponsorship and fellowship; (5) "higher power"; (6) AA slogans; (7) AA service; and (8) AA literature. This section is intended to provide essential knowledge about the basic elements and structure of AA.

2.1. Brief AA History and Origins

Alcoholics Anonymous (AA), by definition, *is* a "non-specialty" intervention. It has functioned and grown as the prototype for the modern "mutualhelp" movement, which is inherently non-specialist (Humphreys, 2004; Kelly & Yeterian, in press). Since its beginnings in the 1930s, AA's twelve-step program and expanding fellowship have remained popular and been adopted widely throughout North America and in more than 120 countries around the world (AA, 2001; Mäkela, 1996). It owes its format, principles, and many of its traditions largely to the Oxford Groups that AA's co-founders, Bill Wilson ("Bill W.") and Robert Smith ("Dr Bob"), both had joined independently to seek help for their alcohol dependence (Oxford Group, 1933; AA, 1939). The Oxford Group was an eclectic, non-denominational organization, attempting to practice a simple Christianity as it would have been experienced during the first century (Oxford Group, 1933). During the 1930s (and still today), many individuals

with addictions sought refuge and help in religious organizations. In fact it was a former school friend of Bill W., Ebby Thatcher, well known by Bill W. and others for his severe alcohol dependence, who informed Bill W. that he had found sobriety through the Oxford Group program (AA, 1939). Ebby Thatcher informed Bill W. that it was not necessary to believe in a specific "religious" God, but rather he could choose his own conception of God (AA, 1939). This encounter captured Bill W.'s attention as, until that point, he had been resolutely agnostic. This notion would carry over into AA's conceptualization of a personal "higher power" as each individual chose to understand it (expanded below).

One evening in 1935 in Akron, Ohio, Bill Wilson found himself alone and very disappointed after a business deal had fallen through. He had been sober a few months. As he paced the hotel lobby where he was staying, he felt a strong and familiar urge to enter the hotel bar. Realizing he was at very high risk for relapse, he knew he needed to act quickly. He began making telephone calls to try to find another actively drinking alcoholic to try and help. From these phone calls, he was directed to a local physician, Bob Smith (Dr Bob) who like Wilson was known for being a severe case of alcohol dependence. Wilson met with Smith and helped the physician finally break his addiction and begin recovery. Of particular significance for Wilson was that his redirected, recoveryfocused activity enabled him to forget about his earlier disappointment and remain sober. The achievement (Smith) and maintenance (Wilson) of sobriety was attributed principally to the mutual sharing of their struggles and experiences with alcohol and, by Wilson explaining to Smith a proactive method of recovery, later explicated in the twelve steps (Alcoholics Anonymous, 2001). What was particularly important about this meeting was that Wilson realized, and later formally documented, an essential ingredient of mutual help: helping you helps me.

This notion of "carrying the message" of recovery to others suffering from alcohol dependence formed the cornerstone of AA and helped its numbers grow as Bill W. and Dr Bob approached myriad alcohol-dependent individuals being treated in local hospitals and sanitariums of the day. Interested prospects subsequently were guided quickly through the twelve-step process and encouraged to help others achieve sobriety in order to maintain their own recovery (AA, 1939). As the number of AA-influenced alcohol recoveries grew, more formal weekly meetings were started in individual members' homes and then later in rented accommodation as the fellowship expanded further.

The AA twelve-step model has grown in popularity among individuals with alcohol-related problems (Room & Greenfield, 1993). Furthermore, the original alcohol-specific model has been adapted successfully to address myriad other drug problems (e.g., Marijuana Anonymous, Narcotics Anonymous, Cocaine Anonymous), other kinds of compulsive behaviors (e.g., Sex Addicts Anonymous, Overeaters Anonymous, Gamblers Anonymous), mental health conditions (e.g., Schizophrenics Anonymous, Depression Anonymous),

dual-diagnosis issues (e.g., Double Trouble in Recovery, Dual Recovery Anonymous), and to help distraught family members who are trying to cope with the grave and enduring unpredictability of addiction (e.g., Alanon, Families Anonymous, Naranon). In addition, numerous other mutual-help organizations have sprung up either inspired by or as an alternative to AA (e.g., Rational Recovery, Secular Organizations for Sobriety/Save Ourselves, Moderation Management, Women for Sobriety, SMART Recovery; Kelly, 2005; Kelly & Yeterian, in press). Although the focus in this text is AA, we believe the same kinds of professionally delivered facilitation processes we describe are likely to extend effectively to other kinds of mutual-help groups, such as those mentioned above.

2.2. How Are Patients Likely to Benefit from AA Participation?

With millions of members worldwide, its overtly spiritual twelve-step program of recovery appears to appeal to many afflicted with alcohol use disorders. However, although not explicit in most core AA language or literature, AA also possesses other therapeutic elements common to professional group therapy (Kelly, Myers, & Rodolico, in press; Yalom, 1995) and many important cognitive, behavioral, and social elements associated with successful remission of alcohol use disorders (McCrady, 1994; Moos, 2007). From AA's perspective and experience, members achieve recovery through a combination of factors including sponsorship, work on the twelve steps, belief in a "higher power" and service to others. Little is known empirically about exactly why or how twelve-step group participation might aid in the recovery process, but useful explications have been proposed (e.g., Kelly, 2001; McCrady, 1994; Moos, 2007). Ongoing recovery-specific support from organizations like AA may help reduce relapse risk, in part, by providing a social context where sober role-models and friends are available and offer alternative socially rewarding activities (Brown, 2001; Longabaugh, Wirtz, Zweben, & Stout, 1998; Moos, 2007). In addition, the general developmental model of therapeutic change proposed by Howard, Lueger, Maling, and Martinovich (1993) may provide a further transtheoretical framework in that the response to AA participation may follow a sequential process beginning with "remoralization" (the enhancement of subjective well-being), "remediation" (symptomatic relief), and "rehabilitation" (the unlearning of pervasive, maladaptive patterns of functioning and the learning of more adaptive approaches). Studies that have used formal statistical mediational tests to explicitly test how AA exerts beneficial effects have found that AA participation helps maintain motivation for abstinence, enhances sobriety-oriented coping skills and self-efficacy, and facilitates abstinence-reinforcing changes in the social network (Bond, Kaskutas, & Weisner, 2003; Connors & Tonigan, 2001; Humphreys, Mankowski, Moos, & Finney, 1999; Humphreys & Noke, 1997; Kaskutas, Bond, & Humphreys, 2002; Kelly, Myers, & Brown, 2000; Morgenstern & Bates, 1999; Morgenstern, Labouvie, McCrady, Kahler, & Frey, 1997; Owen et al., 2003).

Additional qualitative research suggests that patients may begin to feel better about themselves and their alcohol problems by attending AA meetings and being exposed to supportive fellowship members (Kelly, Myers, & Rodolico, in press). More research is needed to understand how robust such mechanisms are across different samples and through developmental transitions and whether these mechanisms are temporally stable or change over time with the dynamics of the abstention/relapse process (Brown, 1993; Brown & Ramo, 2006; Gorski & Miller, 1992).

Despite AA's widespread societal, public health, and clinical influence, what AA actually is and does remain mysterious to many, including many clinicians. In the next section, we focus more explicitly on these aspects, providing detailed information on eight major components of AA.

2.3. The Twelve Steps

AA's twelve steps are twelve statements that describe a sequence of shifts in beliefs and attitudes, as well as a range of behavioral tasks that the first 100 fledgling AA members had completed in order to achieve sobriety (AA, 1939). This subsequently took hold as the suggested recovery template to achieve recovery. AA itself states that the mechanism of recovery is a "spiritual awakening" or "psychic change" that is brought about by working through these steps (AA, 2001, p. xxix). The program's twelve steps are suggested as a means to achieve not just freedom from alcohol dependence, but a framework for a happy and contented way of life (AA, 2001).

In Table 1, we list AA's twelve steps along with a broader proposed AA theme on which each step is based. In addition, we offer an interpretation of each step and posit a potential therapeutic outcome resulting from successfully completing each step.

Following the realization of personal "powerlessness" over the (alcohol) problem in Step 1 and that the problem's solution lies in finding a "higher power" (Step 2), members are asked to make "a decision" (Step 3) about what to do next. If the decision is made to trust the AA process (i.e., "turn our life and will over to the care of God"), members then complete a self-assessment (Step 4), discuss it with another person (often a sponsor; Step 5), and begin to use Steps 6 and 7 to address the issues, character traits, and maladaptive behaviors uncovered in the self-assessment that may have contributed to, and may still contribute to, ineffective coping and that could result in a return to alcohol use. It is then suggested that members continue the self-assessment process by making a list of people who they feel they have harmed, and then make direct amends to them, except when to do so would actually make things worse. This process is intended to help relieve shame, guilt, and fear and to decrease isolation from others. After completing these first nine steps all the way through once, members are encouraged to use Steps 10 through 12 for maintenance: to continue to take self-inventory, to enhance their relationship with their "higher power" through meditation and prayer, and to help others. The entire process

 Table 1.
 Interpretation and Potential Therapeutic Outcome of AA's Twelve-Step Process

AA Step	AA Theme	Meaning	Therapeutic Outcome
We admitted we were powerless over alcohol—that our lives had become unmanageable	Surrender (honesty)	Acknowledgement of repeated failed attempts to cut down or stop drinking by using one's own ideas and resources (i.e., "powerlessness"). A clear causal connection is realized between alcohol use and presenting problems (unmanageability). "Powerlessness" is specific to alcohol—not a generalized attitude of powerlessness in life	Sense of relief and liberation
2. Came to believe that a power greater than ourselves could restore us to sanity	Open-mindedness	Recovery is possible by keeping an open mind about a "higher power," and that attending AA meetings and taking positive action, embodied in the remaining steps, can lead to a "spiritual awakening" that will facilitate recovery	Instillation of hope
3. Made a decision to turn our will and our lives over to the care of God as we understood him	Willingness	Make a decision to trust the AA process and to begin working through the rest of the steps, beginning with a self-assessment in Step 4	Self-efficacy
4. Made a searching and fearless moral inventory of ourselves	Self-assessment and appraisal	Goal is to uncover underlying problems; to acknowledge and document festering sources of guilt, shame, and anger; and to improve insight into areas of dissatisfaction and of potential relapse risk	Insight/self- awareness
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs	Self-forgiveness	Reduction of shame and guilt, enhanced objectivity of self-appraisal; talking to another human being (in the implicit presence of a higher power) facilitates lessening of burden of guilt and shame and the input of another person helps AA member gain a more balanced and objective view of	Reduced shame and guilt

(continued)

Cognitive	Cognitive consonance	Peace of mind	Peace of mind; self-esteem	Affect self- regulation
A recognition that the problems uncovered and discussed during the self-assessment phase are clearly related to relapse risk and unhappiness so that the AA member becomes willing to tackle these problems	Honest and genuine willingness is expressed to be rid of the problematic attitudes and behaviors that have led, and may again lead to, drinking	A list is constructed of significant individuals from the past where problems may have occurred. If personal harms are perceived, a willingness to forgive the other person is also encouraged so that amends for one's own behavior can be made genuinely	Whenever possible individuals are encouraged to make direct amends to affected others, except when such contact would exacerbate the problem or create new difficulties	Individuals are encouraged to practice self-monitoring and self-appraisal on a day-to-day basis and correct any new problems quickly
Readiness to change	Humility; readiness to change	Taking responsibility (and forgiveness of others first if necessary)	Restitution to others	Emotional balance
6. Were entirely ready to have God remove all these defects of character	7. Humbly asked Him to remove our shortcomings	8. Made a list of all persons we had harmed, and became willing to make amends to them all	9. Made direct amends to such people whenever possible, except when to do so would injure them or others	10. Continued to take personal inventory and when we were wrong promptly admitted it

 Table 1. Interpretation and Potential Therapeutic Outcome of AA's Twelve-Step Process (continued)

AA Step	AA Theme	Meaning	Therapeutic Outcome
11. Sought through prayer and meditation to improve our conscious contact with God, as we understood Him, praying only for knowledge of His will for us and the power to carry it out	Connectedness and emotional balance	The goal is to strengthen faith and spirituality by regular prayer and meditation, loosely defined	Self-awareness; psychological well-being
12. Having had a spiritual awakening as the result of these steps we tried to carry this message to alcoholics and to practice these principles in all our affairs	Helping others achieve recovery	Having experienced the cognitive, affective, and behavioral changes as a function of completing the prior steps (and involvement in AA), it is now time to strengthen and maintain one's own recovery by helping other alcoholics	Enhanced self-esteem and mastery

is designed to produce a "spiritual awakening" or "psychic change" sufficient to overcome dependence on alcohol (AA, 1953; see Table 1 for further details on the twelve-step process).

Some clinicians might find it contradictory that the first AA step emphasizes "powerlessness," yet patients' confidence in their ability to abstain (i.e., abstinence self-efficacy) has proven to be a robust predictor of treatment outcome. However, this apparent incongruity might be resolved if likened to the management of other health conditions. For example, an individual suffering from insulin-dependent, type I, diabetes may admit they are personally incapable of controlling their type I diabetes themselves (i.e., they are "powerless" over it without the additional help of insulin), but feel very confident of a good health trajectory (i.e., they have high self-efficacy in their ability to manage their diabetes) *provided* they take their insulin as recommended. Similarly, AA members may feel powerless over their ability to personally control their alcohol use, but feel confident of a good future *provided* they utilize AA's twelve-step program and fellowship as recommended.

2.4. The Twelve Traditions

Less well known are AA's "twelve traditions," which are a set of guidelines for the organization of AA and the conduct of its members. The formulation and implementation of the twelve traditions have resulted in an organizational template that has provided a successful model for AA's self-supported expansion. It is suggested that AA groups adhere to the principles that are outlined in these traditions. Each tradition is a guideline resulting from the experiences of early AA groups (AA, 1953). For example, early groups had lists of 50 or more criteria as to who was eligible for membership. This was eventually whittled down to one single simple requirement: "a desire to stop drinking" (AA, 1953). Other traditions recommend that all groups should be free to run the meetings with flexibility, as the majority of each group decides, but keeping to the framework and spirit of AA. Also, groups should remain self-supporting and decline all outside contributions. In this regard, monetary collections are taken at meetings to pay for group expenses, such as rent, refreshments, celebrations of abstinence and to maintain the office and phones locally, regionally, and internationally. Early in AA history, the organization decided not to accept any contributions from individuals who are not AA members and to limit the yearly contributions of individual members. It was believed that too much money or property ownership (AA does not own any property) would create internal conflicts and distract the organization from its primary purpose of "helping alcoholics to achieve sobriety" (AA, 1953).

AA's primary purpose is to carry its message of addiction recovery to anyone who suffers from alcohol problems. Despite many individual AA members' endorsement of the disease concept of "alcoholism," the AA organization itself does not endorse this concept (or any other) as it expresses no opinion on outside issues. However, although it is never formally referred to as a medical

disease, AA literature does often refer to alcoholism as an "illness" or "malady" (e.g., AA, 2001). The twelve traditions of AA are important in that they capture AA's self-defined limits (AA, 1952). Many of these are summarized in the AA preamble read out at the beginning of AA meetings:

Alcoholics Anonymous is a fellowship of men and women who share their experience, strength and hope with each other that they may solve their common problem and help others to recover from alcoholism. The only requirement for membership is a desire to stop drinking. There are no dues or fees for AA membership; we are self-supporting through our own contributions. AA is not allied with any sect, denomination, politics, organization or institution; does not wish to engage in any controversy; neither endorses nor opposes any causes. Our primary purpose is to stay sober and help other alcoholics to achieve sobriety.

(AA Grapevine, 1958)

This synopsis highlights the fact that AA is a self-supporting fellowship focused solely on helping individuals with "alcoholism." It has no opinion on other issues (even alcoholism) and does not want to become affiliated with, or endorse, any other entity. AA, as an organization, is particularly unique in that it has an explicit policy of corporate poverty: it does not accept outside monetary or other contributions, does not own any property, and regularly declines large gifts in an effort to remove potential distractions and controversies arising from conflicts surrounding monetary concerns (Tradition 7, AA, 1953). These traditions have enabled AA to grow and function successfully as an influential organization for more than 70 years.

The traditions also provide guidance to behavior as members of AA. Specifically, Tradition 12 emphasizes anonymity as a way to place the principles and welfare of the program above individual personalities. The principle of anonymity states that members should not disclose their identity as AA members in the media to avoid a focus on individual members of the program, and to place the focus on the program itself. The idea relates also to the spiritual principle of humility, wherein individuals are discouraged from taking too much personal credit for recovery (see Section 2.9 on "AA Service" below). Maintaining anonymity about membership to the media may also assure persons considering AA that their privacy will be secure.

2.5. AA Meetings

Depending on the size of the community, the number of available AA meetings ranges from one to hundreds. In the greater metropolitan area of Boston and eastern Massachusetts, for example, there is a concentration of more than 2,200 registered AA meetings each week (AA Boston Central Service, 2007). Meeting locations include churches, hospitals, and recreation centers. The local AA office, whose number can be found in the telephone book or online, can direct people to the nearest and the most appropriate meeting.

Most areas now have listings online via the World Wide Web. These are often searchable by time of day, day of the week, town, and by the type of meeting desired.

In the modern computer network age, AA meetings have also become available online (i.e., virtual meetings). Once again, a quick online search pertaining to one's local area will reveal such online AA meeting resources. Additionally, participants may find themselves connected to AA members around the globe. Some may initially prefer this extra level of anonymity or find such online resources useful as a stepping stone to attending face-to-face meetings. We have not been able to locate any published reports on the value of such resources. However, some patients may find these virtual resources helpful either instead of, or as an adjunct to, face-to-face attendance.

2.5.1. Typical Meeting Format

AA meetings typically last between 60 and 90 min. Nearly all begin with some type of reading from AA literature, such as from the fellowship's main text, Alcoholics Anonymous, more commonly referred to as the "Big Book" (AA, 2001). There is often also a short prayer at the beginning of the meeting (e.g., the Serenity Prayer). From that point, meetings vary greatly in focus and format, but almost always involve some type of verbal account of members' life experiences, past and present. At some meetings, chips or tokens are awarded to individuals who have reached early abstinence milestones, such as 30 days, 60 days, or 90 days, or 6 months. Some members choose to carry such tokens with them as a recovery reminder. Because AA has a distinct tradition of being fully self-supporting and declining outside contributions, a voluntary collection is taken, and members may make announcements of AA-related events. The main portion of the meeting may focus on a recovery topic, an AA reading, aspect of the recovery program (e.g., a particular step), or a speaker's personal story, which often is followed by open discussion. Proceedings are usually brought to a close with a prayer (often the Lord's Prayer), for those who wish to recite it. In some meetings, members join hands in a circle if they wish to do so. Unlike most professionally led psychotherapy groups, interpersonal feedback and crosstalk among members is discouraged.

2.5.2. Types of Meetings

As noted above, larger communities often have AA meetings serving particular subgroups. Listed in many areas, for example, are women's or men's groups, youth groups, and groups for gay and lesbian individuals and for various professions (e.g., lawyers, doctors). AA meetings also vary in level of desired anonymity (e.g., "open" versus "closed" meetings) and format and focus (e.g., "speaker-discussion" or "speaker-only" meetings versus "step meetings").

Only members, or potential members with "a desire to stop drinking" (AA, 1953), may attend AA's closed meetings. Because these meetings are

not accessible to the general public, participants may feel more comfortable attending and disclosing information about themselves. These meetings may take any format and content focus. In contrast, anyone is welcome to attend open meetings. Thus, family members and friends, or other interested people such as students or healthcare professionals, may attend either as support or merely to understand more about the nature of the AA fellowship.

A common type of AA meeting format is the "speaker-discussion" meeting, in which an individual member recounts his/her story of the process of alcohol dependence, its impact, turning points, and ongoing struggles with, adjustments to, and successes with recovery. This narrative often includes how the person practices the twelve steps in daily life and in his/her struggles and successes in recovery. The speaker's narrative may promote identification, universality, and instillation of hope and dynamics also present in professional group therapies (Kelly, Myers, & Rodolico, in press; Yalom, 1995). The presentation is followed by open discussion from other members. In contrast, a "speaker meeting" is a meeting in which only a few (or sometimes just one) individuals speak at length about recovery experiences with no additional discussion by other members.

Other meetings focus on a particular piece of AA literature such as the *AA Grapevine* (a monthly magazine), the *Twelve Steps and Twelve Traditions* (AA, 1953), or the "Big Book," *Alcoholics Anonymous* (AA, 2001), from which the fellowship takes its name. In these meetings a step essay or chapter is read and discussed, and its content related by members to past and current life contexts. These meetings most often are closed to the public.

2.6. Sponsorship and Fellowship

"Sponsors" in the AA sense are mentors who, by virtue of a well-established recovery track record, serve as a model and aid to those they sponsor by relating their own experiences and collective wisdom. They also share and model how they use the tools of the program to help them cope effectively without drinking. The relationship is one of mutual trust that develops over time (AA, 1994).

Newcomers are encouraged to seek out an established member with whom they believe they could feel comfortable and whose sober lifestyle they admire. Newcomers then ask the chosen member to serve as a sponsor. AA recommends that the sponsor and sponsored person be of the same sex: "This custom usually promotes quick understanding and reduces the likelihood of emotional distractions that might take the newcomer's mind off the purpose of AA" (AA, 1994). A possible exception to this may be in cases where members are gay or lesbian. In that instance, a sponsor of the opposite sex may provide less potential romantic distraction.

When a sponsored person has abstained from alcohol for a certain time and worked the twelve steps, the person is often encouraged by his/her sponsor to also become a sponsor in order to pass on what he/she has received.

It is believed in AA that in giving, one receives (AA, 2001). Long-term research studies have validated this premise in people with alcohol and other drug problems: serving as a sponsor appears strongly associated with prolonged abstinence (Crape, Latkin, Laris, & Knowlton, 2002; Cross, Morgan, Mooney, Martin, & Rafter, 1990; Pagano, Friend, Tonigan, & Stout, 2004).

Given the implied commitment of sponsorship, for new AA members the thought of obtaining a sponsor can be quite daunting. Some groups offer "temporary sponsors" or patients can be encouraged by their treatment clinician to obtain a temporary sponsor. In this way, there can be trial period during which this informal helping relationship can be discontinued at any point and the new member can try another sponsor who may be a better match (AA, 1994).

In addition to a formal sponsor, new members are strongly encouraged to use the broader AA fellowship members in order to develop a support network. This is achieved by speaking to other members at, and between, AA meetings. Consequently, newcomers are recommended to obtain other members' telephone numbers to facilitate ongoing telephone contact. This can be invaluable for gaining acute and timely support to talk through a challenging situation in "real time" or to prepare for an upcoming event or situation that poses a threat to sobriety.

2.7. Concept of Higher Power

AA encourages members to develop the concept of a spiritual "higher power." For some members who have difficulty separating a personal spirituality as espoused in AA from prior or current religious preferences and experiences, a higher power can mean the AA group itself or, perhaps, a sponsor (AA, 1953). By definition, this involves an admission that one is not the center of the universe, that is, "not God" (Kurtz, 1979/1991). This notion of spiritual surrender bothers some potential AA members. Some are simply put off by AA's spiritual language and concepts and may be more comfortable in one of the other less spiritually oriented groups (e.g., SOS, SMART Recovery).

Initially for some AA members, the AA group can become their higher power. This is recommended in Step 2 (AA, 1953). Others may prefer that the word "GOD" signify a "Good Orderly Direction" or stand for a "Group Of Drunks." For instance, AA includes many members who are atheists or agnostics (Tonigan, Miller, & Schermer., 2002). In fact, half of AA's original members were in these categories (Chapter 4; AA, 2001). Although less religiously involved people may be more likely to discontinue twelve-step group participation (Kelly & Moos, 2003), those who do continue benefit as much as those who are more religious (Kelly et al., 2006; Winzelberg & Humphreys, 1999). In fact, many AA members benefit from the fellowship of AA while largely ignoring the program's spiritual aspects (Nealon-Woods, Ferrari, & Jason, 1995).

2.8. Slogans

As with all slogans, AA slogans are capsules of condensed information that convey important truths. The more familiar clinicians are with the terminology and vernacular of AA the more comfortable they will be in TSF efforts. Over the years, AA and other twelve-step organizations have coined or adopted a number of sage aphorisms that have stuck and become a part of the AA culture. These are listed in Table 2 along with a brief interpretation.

In addition to these slogans there are some further acronyms that are in common use among AA members. Perhaps the most common of these is the acronym "H.A.L.T." (Hungry, Angry, Lonely, Tired). This acronym serves as a brief, cognitive, self-assessment tool to be employed when one is feeling emotionally upset or stressed in some way. The acronym facilitates a "check-in" with regard to these four possible causes for the current distress: level of hunger, anger, loneliness, and fatigue. Members are encouraged to avoid becoming too hungry, to let go of anger quickly, to watch for feelings of loneliness, and to prevent excessive activity in any area that may lead to fatigue. These are seen as risk factors and warning signs for potential relapse that should be attended to quickly.

Table 2. Common AA Slogans and Interpretation

AA Slogan	Interpretation
First Things First	Remember priories; without a concentrated focus on prioritizing recovery the chances of success are diminished
Easy Does It	Stemming from a potential tendency for some newly sober members to want to make up quickly for lost time or achieve the "perfect sobriety." This slogan is intended to communicate the fact that recovery takes time
Think Think Think	Intended to communicate accurate appraisal of situations, and decrease impulsivity (e.g., "Look before you leap"), notably surrounding drinking
But for the Grace of God	A recognition that things could be much worse—can foster an attitude of gratitude
Let Go and Let God	Intended to help members let go of stress and worries and that their higher power is now the "new Director"
Keep It Simple	Intended to help members be not so overly analytical that they have trouble making important behavioral changes
Live and Let Live	Intended to remind members of the importance of focusing on oneself; to be non-judgmental and tolerant of others
One Day at a Time	Intended to convey the importance of keeping things focused on constructive action in the here and now and not to weigh oneself down with the burden of the past or future

2.9. Service

Alcoholics Anonymous was conceived by its co-founder, Bill Wilson, as having three legacies: recovery (embodied in the twelve steps), unity (embodied in the twelve traditions), and service (derived essentially from the last part of the twelfth step, "...carry this message to other alcoholics"). Service work can, however, take many forms. It can be helping to set up the meeting, making coffee, being responsible for literature, or looking after the group's finances. It can involve serving as the secretary of a meeting or being the group representative at regional events. Becoming involved in AA meetings in a service position (e.g., coffee maker, treasurer, secretary) also helps newly recovering members make and keep commitments that foster responsibility for others and may lead to an enhanced feeling of connection to the group and enhanced self-esteem. From AA's perspective, this kind of service to the group is an indirect way of "carrying the message" by making sure that meetings occur and that they function satisfactorily (Step 12; AA, 1953). Service is also seen as part of a member's recovery, in that it helps members become more responsible for their personal success as well as that of the fellowship. Typically, various lengths of sobriety are required for the various service positions with some, such as the group's treasurer, requiring a longer period of sustained abstinence, whereas others, such as helping with setting up the chairs and tables or making the coffee, requiring very little.

2.10. Literature

The two most commonly used texts in AA are *Alcoholics Anonymous*(2001) and *Twelve-Steps and Twelve Traditions* (1953). *Alcoholics Anonymous*, also known as the "Big Book," is the original AA text first published in 1939 and from which AA took its name. The first 11 chapters of this text have remained unchanged since 1939 (AA, 2001). However, the second half of the book, containing numerous AA members' personal accounts of their struggles with and recovery from dependence on alcohol, has been changed periodically to more accurately reflect the contemporary AA membership. These personal stories cut across age, gender, race, US regions and other countries, levels of severity of dependence, and medical and psychiatric comorbidities.

The first half of the text describes the program as originally practiced and includes additional descriptive information from an informed layman's perspective of the alcohol dependence process. This first section of the book also contains a medical opinion about AA and "alcoholism" (i.e., alcohol dependence), provided by the New York City physician who treated Bill W. on several occasions. The book can be bought or downloaded for free in PDF format from AA's website (http://www.alcoholics-anonymous.org). The website also contains listings of all currently published literature.

The second most common text is the *Twelve Steps and Twelve Traditions* (AA, 1953). This book was an elaboration of the twelve-step process, originally

explicated in the first text, *Alcoholics Anonymous* (1939). This further elaboration was designed to describe each step in much more detail. It also contains the Twelve Traditions, which are suggested largely to guide how AA and its individual members should function.

The organization also publishes numerous other books on AA's history, growth experiences, and various spiritual aspects of the fellowship and also has myriad pamphlets that target various professional communities, such as medical and criminal justice, or special populations (e.g., youth). They also have pamphlets that address various recovery topics, self-assessment tools, and so on. These pamphlets, along with the "Big Book," are downloadable for free from the AA website. There is also a monthly magazine published, known as *The AA Grapevine*, in which AA members continue to share their recovery experiences in print with each other.

Having described the essential elements of AA and its program we now turn our attention to strategies that can help engage patients with AA.

3. Twelve-Step Facilitation (TSF)

As noted, TSF is a professional intervention designed to facilitate active engagement in AA. Importantly, results from several rigorous prospective treatment studies (e.g., Crits-Christoph et al., 1999; Ouimette, Moos, & Finney, 1998; Sisson & Mallams, 1981; Timko et al., 2006; Tonigan, Miller, & Schermer, 2002) confirm that AA involvement is not simply an indicator of patient motivation (as is sometimes claimed), but rather it is a behavior that clinicians can influence (Humphreys, 1999). This section focuses on proven strategies that non-specialist clinicians can implement to increase the likelihood that patients will participate in AA.

One important and unique aspect of a professional TSF intervention is the complete reliance on a free-standing, community mutual-help organization (i.e., AA) as the means through which they are expected to recover from their alcohol dependence. This also means that, in theory, the purported success of TSF is not under direct clinical control. Rather, it is contingent upon AA meetings being available and accessible in the communities in which patients live (Nowinski et al., 1995). There is also considerable variability among meetings in the particular dynamics and social climate (e.g., Horstmann & Tonigan, 2000). However, it should be noted that individuals with alcohol use disorders that received TSF in a large trial of TSF (Project MATCH Research Group, 1993) still benefited from this treatment even if they did not attend AA (Tonigan et al., 2002), suggesting other non-specified factors also affect patients' salutary changes (Miller & Rollnick, 1991). However, non-specialist clinicians may prefer to employ many of the TSF strategies proposed below as a part of, rather than as a replacement for, other kinds of interventions they already practice. In fact, the Medical Management (MM) treatment condition in the recently conducted COMBINE Study was designed to incorporate TSF in this way.

The COMBINE Study was intended to approximate the sort of treatment suitable for delivery by non-specialist medical professionals (e.g., physicians and nurses) in primary care settings (Pettinati et al., 2005). A main focus of this treatment condition was to ensure compliance with study medication (naltrexone and acamprosate) by providing education and support, with the overall treatment goals being abstinence from alcohol and recovery from alcohol dependence. This intervention consisted of a 40–60 minute initial session, in which alcohol dependence, pharmacotherapy, and mutual-support groups, such as AA, were discussed. This initial appointment was followed by eight additional 15-25 minute follow-up sessions that focused on medication compliance, side effects, and drinking status. In the initial session, the provider is guided to describe mutual-support groups, such as AA, as a helpful, long-term way to maintain sobriety and build a social network of abstinent friends, provide the patient with phone numbers, times, and locations of local meetings (with a suggestion for a particular meeting to try), and supply the patient with pamphlets on specific mutual-support groups. The provider makes clear that participation in such groups is voluntary, but encourages patients to try the groups even if they are reluctant or have had a negative experience with such groups in the past (e.g., "Would you be willing to try just one meeting before our next session?"; p. 15). It is recommended that patients try different meetings to find ones that seem like a good match. The provider may continue to recommend mutual-support groups at follow-up sessions, especially for those patients who are still drinking.

3.1. TSF Clinical Strategies

This is one example of TSF completed by a non-specialist in a non-specialty setting. There are other strategies for clinicians, some of which have been supported by research. The following section describes these important strategies and also describes certain clinician attitudes that will be important for the effectiveness of TSF. These are provided below and are adapted from Kelly, Humphreys, and Youngson (2004).

- 1. Keep an open mind. Sometimes preconceived notions or negative anecdotes can make it difficult for the clinician to maintain an open mind with regard to AA. Research continues and new findings may suggest different approaches. Expending too much professional energy defending one treatment approach or one particular AA group may compromise optimal care and put the patient at risk for relapse. It is wise to be sensitive to a patient's reaction to and preferences for AA or other approaches to recovery, while helping the patient to give AA groups a reasonable try.
- Recognize the validity and importance of AA. Most professionals recognize
 that people with substance use problems need support and encouragement if they are to maintain treatment gains. Thus, it is appropriate
 for clinicians to introduce patients to the idea that people with alcohol

- problems benefit from ongoing support. Such support can be found at no cost (apart from voluntary contributions) in AA groups. The clinician can describe groups that exist locally and work with the patient to overcome any resistance to AA participation. Clinicians can help to find AA groups more to the patient's liking or work with patients to find support for abstinence through family, friends, or other groups.
- 3. Visit and become familiar with local AA groups. Though the descriptions in this chapter may be informative, clinicians often feel more confident discussing AA groups with patients if they themselves have attended. In Project MATCH, for example, the TSF clinicians were encouraged to attend a minimum of ten twelve-step meetings to become more familiar with format and process. Former patients may be a good resource to facilitate attendance.

It is a good idea for a clinician to become familiar with the various types and sizes of meetings, so one can help patients make good choices. Some research indicates that patients are good candidates for AA if they have a severe drinking problem, an affective rather than a cognitive focus, concerns about the purpose and meaning of life, good interpersonal skills, and a high need to belong (McCrady & Irvine, 1989). Patients may be more likely to benefit from AA if they join a group with members who are similar to them in age, culture, and occupational status (American Psychiatric Association, 2006; Zweben, 1995; Kelly, Myers, & Brown, 2005).

- 4. Make contacts and actively facilitate attendance. Clinicians can keep in touch with former patients who attend AA groups and develop a list of people who will keep them informed and will take a patient to his/her first meeting. Additionally, clinicians should be willing to actively put patients in contact with AA group members through counseling sessions. One study found that when therapists actively linked patients with members of AA groups, rather than simply giving the patients information and encouraging them to attend, the patients were far more likely to attend (Sisson & Mallams, 1981). Specifically, of the patients who were only encouraged to attend, not one patient attended a single twelve-step meeting during the 4 weeks following referral. By contrast, when the clinician telephoned willing group members and had the patient speak to the member while in the office and make arrangements to attend a specific meeting, every patient attended at least one meeting (2.3 meetings on average).
- 5. Ask patients to become involved in AA groups early in their therapy and to monitor and document their experiences. This strategy is helpful for several reasons. It allows the patient to get used to groups, the members, and the process before they leave therapy. It allows the clinician time to explore the patient's issues about the groups and to deal with any resistance. Some clinicians ask patients to keep a log or journal of their experiences at meetings, including their thoughts and feelings, for discussion at

- counseling sessions as was done in the TSF condition in Project MATCH (Nowinski et al., 1995).
- 6. Try other resources available to complement the clinician's skills. Understanding where a patient is in the behavior change process (e.g., Prochaska & DiClemente, 1982) may help patients consider their readiness for AA participation. The Twelve Step Facilitation Therapy Manual (Nowinski et al., 1995) is a good guide to help patients become involved in AA groups. It contains many ideas that may be generalizable to other mutual-help groups (e.g., SMART Recovery). It is free and available from the U.S. National Institute of Alcohol Abuse and Alcoholism (NIAAA). McCrady and Irvine (1989) and Zweben (1995) also offer an in-depth approach to integrating AA with professional practice.
- 7. Direct patients to suitable meetings and prepare them for what to expect. When recommending meetings to patients, it is best for the clinician to have a sense of which groups may be a good fit. For example, if working with adolescents or young adults, the clinician might suggest meetings where other young people may be present (e.g., AA lists "young persons" meetings). If working with patients with concurrent substance use and psychiatric problems, direct them to meetings where other "dual-diagnosis" patients attend to provide more specific support and meetings that may be more "medication friendly." It is wise to discuss the potential barrier of "poor fit" with patients at the outset. This may include discussing group members' possible resistance to psychotropic medication and exploring ways to cope with it (Tonigan & Kelly, 2004). It may also include assessing and discussing the patient's resistance to "spiritual" issues and certain approaches to change.

Using the above strategies and remaining open to AA as a potentially helpful resource will help maximize the chances that patients will at least give AA a fair try. Next, we discuss some potential common barriers that may arise as clinicians attempt to deliver TSF to patients.

3.2. Possible Patient and Clinician Barriers to TSF

Patients may present a number of reasons not to attend AA meetings. In a preliminary study, Kelly, Humphreys, and Kahler (2006) identified seven common types of patient barriers to AA. These include (a) no perceived need for AA; (b) dislike of AA members; (c) concern about the spiritual aspects of AA; (d) social anxiety about attending and/or participating in meetings; (e) difficulties with the logistics of getting to meetings because of lack of childcare, transportation, etc.; (f) dislike of the format of meetings; and (g) concerns about how their coexisting psychiatric disorder would be perceived or responded to by group members. Patients may also express concerns about smoking at meetings (most meetings nowadays are non-smoking). However, if the clinician draws upon

the strategies outlined above, many of these barriers can be addressed fairly readily.

Equally or perhaps more difficult are clinicians' own negative perceptions of AA and AA members. First, clinicians may view ongoing AA involvement as a form of substitute dependency and a sign of poor psychological health. Research contradicts this view, however, in finding a consistent relationship between AA affiliation and positive psychological functioning (e.g., Emrick, Tonigan, Montgomery, & Little, 1993). A second clinician concern is that AA is not suitable for patients without a religious affiliation or strong religious beliefs. Although some research suggests that clinicians are more likely to refer religious-affiliated patients to AA than those without a religious affiliation, the data also show no differences in affiliation or outcomes between those with and without a religious affiliation (Winzelberg & Humphreys, 1999). A third clinician barrier may be a belief that AA members typically are of lower socioeconomic status, unemployed, or "down and out." Data from AA's own triennial surveys (AA, 2005) contradict this perception, showing that only 6% of survey respondents were unemployed. A fourth barrier may be a perception that AA is an organization primarily for Caucasian, middle-aged males. Again, data from AA's triennial surveys (AA, 2005) show that about 35% of members are women, and, although the proportion of members from ethnic minority groups is lower than in the general population of the United States, 10.9% of members are from ethnic minority groups. However, groups with diverse membership are easier to find in larger metropolitan areas than in some rural areas, and the homogenous nature of groups in some areas creates potential patient barriers. A fifth barrier may be a clinician concern that patients with addiction and psychiatric disorders may be advised to discontinue their necessary psychotropic medications. Although there is a rich folklore about such incidents, a recent survey (Rychtarik, Connors, Derman, & Stasiewicz, 2000) found that a minority (29%) of dually diagnosed patients involved with AA received any negative comments about their medication.

Although clinicians may experience their own discomfort with various aspects of the AA program, further reading, talking with AA members, and attending AA meetings may potentially help eradicate any concerns. As mentioned above, it is important to keep an open mind and to allow empirical findings, rather than personal opinions, to help drive clinical work.

4. Summary and Conclusions

Alcohol use disorders are endemic, chronic disorders that require ongoing extensive interventions to help maintain their remission over time. AA is an established, freely available, community resource that has received increasing empirical support for its utility and effectiveness in helping individuals achieve lasting sobriety. Clinicians' emphasis, encouragement, and facilitation of AA participation has shown to substantially influence the likelihood that patients will utilize and stay engaged with these freely available community resources.

This chapter has provided information on the origins of AA and described its most important elements in some detail. In combination with the TSF strategies described in Section 2, the chapter provides the non-specialist clinician with greater knowledge about AA and creates a more informed foundation on which to build effective TSF interventions.

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Effectiveness and Outcome Research

J. Scott Tonigan, Section Editor

Introduction

J. Scott Tonigan

1. AA Outcomes Overview

Is Alcoholics Anonymous (AA) effective and, if so, for who and under what circumstances? Both clinicians and researchers have voiced this question for some time, and recent economic trends have further heightened interest in determining the effectiveness of this relatively low-cost community-based intervention that is widely available and open to all interested persons. Recent investigations do suggest that AA participation has secondary cost benefits. Humphreys and Moos (2001), for example, reported that persons who initiated behavior change first by attending AA tended to have significantly lower health care-related expenses 3 years later (regardless of whether or not they subsequently sought formal treatment) and that twelve-step focused therapy was associated with 64% lower mental health care costs than cognitive behavioral therapies at 1-year follow-up. But is AA effective in reducing substance use? Authors in this section address this basic question, and they do so from the perspectives of considering patient characteristics that may moderate outcome, the nature and forms that AA participation may take, and whether substance use is regarded in binary (abstinence versus drinking) or continuous terms (e.g., reductions in drinking intensity).

The study of the effectiveness of AA is complex and the authors in this section tackle this issue from a variety of perspectives. Tonigan, for example, approaches the issue of AA-related outcomes from a historical perspective, noting how different eras of AA researchers have applied different criteria and methodologies in determining the effectiveness of AA. This approach provides

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useful nomenthetic statements such as the meta-analytic finding of a positive albeit modest correlation between AA exposure and abstinence (Emrick, Tonigan, Montgomery, & Little, 1993), but does so by sacrificing the reality of idiosyncratic response to AA. In contrast, Moos applies an integrated set of theory-based models including social control, learning, and behavioral economics to understand AA-related participation and benefit. Here, determination of the effectiveness of AA becomes intimately linked with investigating and understanding the active ingredients of AA such as group social dynamics and interpersonal relationships. Well known, substance abusers approach AA with a constellation of problems and personal characteristics and Bogenschutz reviews how such individual variability influences or moderates AA affiliation and outcome. This perspective provides a useful counterpoint to the nomenthetic perspective provided by Tonigan, highlighting the need to evaluate such factors as substance abuser ethnicity, problem severity, comorbidity, and religiosity when considering AA referral. Finally, Timko's chapter on special populations and AA is a natural extension of Bogenschutz's perspective, offering an important view of AA effectiveness with the elderly, adolescents, and the disabled.

Common themes surface across the chapters in spite of the authors' differing perspectives. Most strikingly, in discussing AA-related benefit the authors are in full agreement about the need to distinguish between simple AA exposure—measured most often as AA meeting attendance—and commitment to, and practice of, AA-prescribed behaviors. Tonigan, for instance, provides bivariate correlations demonstrating the superiority of AA commitment over sheer meeting attendance in predicting later positive outcome (Weiss et al., 1996; Montgomery, Miller, & Tonigan, 1995). Likewise, the work by Cloud, Ziegler, and Blondell (2004) is cited by Moos to illustrate how a composite measure reflecting AA meeting attendance, completion of AA steps, and selfdeclared membership in AA was a stronger predictor of abstinence relative to AA meeting attendance alone. While AA attendance may be considered a necessary precursor to assess AA-related benefit, the authors in this section endorse the position that full AA-related benefit is not achieved without engagement in, and practice of, prescribed AA-related behaviors and beliefs, e.g., AA fellowship and program activities. To this end, authors in this section review how improved AA-related outcome is associated with acquiring an AA sponsor (Emrick et al., 1993; Pagano, Friend, Tonigan, & Stout, 2004), engagement in the AA social network (e.g., Kaskutas, Bond, & Humphreys, 2002), and following prescriptions about helping others (Zemore, Kaskutas, & Ammon, 2004).

The authors in this section are also in agreement that the effectiveness of AA ought to be first judged according to changes in alcohol use, most often the achievement of complete abstinence. Thus, outcome constructs in AA research such as *problem severity* focus almost exclusively on alcohol consumption, ignoring the constellation of substance abuse problems (and substances) that individuals bring to AA. This practice may bias conclusions regarding

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both antecedents of AA affiliation and extent of AA-related benefit. A conservative estimate of polysubstance abuse derived from Project MATCH, for instance, suggests that half of the clients with such problems will elect to attend some AA, and rates of AA attendance among male veteran polysubstance users were appreciably higher (Ouimette, Gima, Moos, & Finney, 1999). Most AA-related studies, however, systematically screen out, or at least seriously curtail recruitment of, clients reporting illicit substance abuse and/or dependence. In fact, illicit drug use has been considered to be so unimportant to AA affiliation research that a seminal review in 1981 did not include a discussion of polysubstance abuse at all (Ogborne & Glasner, 1981) and a more recent review excluded the few studies including polysubstance abusers (Emrick et al., 1993). The net effect of ignoring polysubstance abuse is that AA-based outcome studies may lack some ecological validity, especially from a clinical perspective. Fortunately, findings from non-AA twelve-step research (e.g., Weiss et al., 1996; Rawson, Obert, McCann, Castro, & Ling, 1994; Weiss et al., 2000; Brown, O'Grady, Farrell, Flechner, & Nurco, 2001) are generally concordant with AAspecific research.

While considering substance use as the primary indicator of effectiveness is indisputable, there are defensible reasons for considering secondary measures as well. Alluded to earlier, AA participation has been found to be associated with reduced health and mental care-related expenses. Likewise, the core AA literature (1992) clearly states that as a result of working through the program of AA, one will "...know a new freedom and a new happiness. We will not regret the past nor wish to shut the door on it. We will comprehend the word serenity and we will know peace. No matter how far down the scale we have gone, we will see how our experience can benefit others. That feeling of uselessness and self-pity will disappear. We will lose interest in selfish things and gain interest in our fellows. Self-seeking will slip away" (pp 83–84).

There is debate in the chapters in this section about the nature and importance of secondary measures of outcome in evaluating AA effectiveness. In an 8-year study of AA-exposed individuals, for example, Timko, Moos, Finney, and Lesar (2000) noted that while abstinence rates for men and women did not differ, women were less likely to be employed at the 8-year follow-up. They interpreted this finding as potentially resulting from differences in AA social networks for men and women. Moos and Bogenschutz are more restrictive in their definitions of AA-related outcome, the exception being that they do include discussion of lifestyle change and perceived of life purpose (Carroll & Fuller, 1969). Finally, Tonigan offers a more radical view in suggesting that secondary outcomes include psychological well-being, adverse consequences, and tobacco use. Achieving consensus about the scope and importance of secondary measures of AA effectiveness is not likely in the near future, given our current (and limited) understanding of AA-related processes and outcomes. Specifically, at this time it remains unclear whether change trajectories in different domains occur independently as the result of AA participation or are simply

correlated changes, with changes in one dimension, e.g., drinking, producing changes in another domain, e.g., extent of depression. We encourage readers to carefully review the core AA literature and determine for themselves how the AA founders defined AA-related benefit.

Space restrictions in the chapters necessarily led to some omissions, and the implications of three important omissions should be highlighted. First, with the exception of the Moos chapter it is easy to form the impression that AA is a monolithic entity that is structured and expressed in similar ways, regionally and across different populations of problem drinkers. Strong evidence suggests otherwise. Specifically, research indicates that while the prescribed program of AA, most succinctly stated in the twelve steps, is relatively invariant and rarely revised, the practice or fellowship of AA can be very different from meeting to meeting. Pointed out in the Moos chapter, perceived AA group cohesion and supportiveness may be strong curative factors in AA and documented differences between AA groups in cohesiveness suggests that the effectiveness of AA may vary considerably. Such variability in effectiveness is masked in most AA research and may have the net effect of attenuating relationships of interest. Recent statistical advances, e.g., multilevel analysis, permits the modeling of AA group variability and we anticipate that significant gains will be made in the near future regarding the relative contribution of AA social dynamics in predicting AA-related benefit.

Second, alcohol dependence is a chronic disorder and the limited number of long-term AA-based studies indicate that AA affiliation patterns are complex over time (e.g., Moos & Moos, 2006). Most AA outcome research, however, assumes that individuals may or may not engage in AA, and that of those people who do engage in AA some will disaffiliate after some time. By implication, some people choose to engage and stay in AA. This simplistic scenario of AA participation patterns does not reflect our current understanding of the frequent cyclical pattern of AA engagement within the life course of a chronic disorder. How is AA "outcome" to be judged within the context of a chronic disorder and cyclical AA attendance patterns? To date, researchers have not provided a satisfactory answer to this question. Readers should be aware, then, that participants in AA studies often have histories with AA, and that change processes under consideration may be accelerated (or inhibited) because of these life histories. Heterogeneity in AA histories also may attenuate, to an unknown degree, relationships of interest.

And, finally, concerns about self-selection have plagued AA-based outcome research, ranging from concerns that those who choose to partake of AA are systematically different from those who do not, to questions that those who remain in AA are systematically different from those who disaffiliate. Randomization is one method to counter self-selection biases, and considering AA a "treatment" a few studies have randomized to AA versus some alternative (e.g., Ditman, Crawford, Forgy, Moskowitz, & MacAndrew, 1967, Brandsma, Maultsby, & Welsh, 1980). Experience shows, however, that many clients not

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randomized to AA are likely to attend AA anyway (e.g., PMRG 1997a; 1997b; Ouimette et al., 1998; Tonigan, Connors, & Miller, 2003). Clearly, treatment comparisons involving randomization to AA are confounded by a number of factors, many of which are not under the researcher's control. The first concern of AA affiliates having, in general, a better prognosis is probably overstated. A consistent finding in the AA-based research is that alcohol severity is positively related to AA affiliation, leading one to predict poorer rather than more positive outcomes for AA affiliates relative to non-affiliates. In fact, recent work has shown that AA participation and positive outcomes are robust and remain intact, even after controlling for a large number of client characteristics that are predictive of outcome, e.g., Kelly, Stout, Zywiak, and Schneider (2006).

What of systematic differences between individuals who remain in AA and those who physically leave AA? Contemporary AA research indicates that "disaffiliation" is actually something different than just *not* attending AA. At both 3 and 10-year follow-up in Project MATCH, for example, a significant proportion of persons that had discontinued AA meeting attendance nevertheless still practiced AA-related principles. Are these individuals qualitatively different from those AA members that practice AA-related principles and who also continue to attend AA meetings? Many clinicians, researchers, and AA members would answer, yes. Yet, investigations show that persons who had discontinued attendance at AA meetings still report core AA-prescribed behaviors: (1) reading AA-approved literature, (2) helping others with drinking problems, (3) sponsoring active AA members, and (4) practice of prayer and mediation. How, if at all, to grapple with determining on-going AA-related benefit for AA disaffiliates is a thorny issue, one not addressed in this section.

The preceding comments may give the reader the impression that AA outcome research is a tower of Babel and that empirically based statements about the desirability and benefit of AA cannot be made. This impression would be false. Instead, the inference to be drawn from this overview is that AA outcome cannot be studied in isolation from the other sections in this book. General themes in this section do, indeed, stand on firm empirical foundations. We can, for example, confidently assert that AA is beneficial for many problem drinkers and that the commitment to prescribed AA practices is a strong predictor of AA-related benefit. The meaningful interpretation and clinical application of findings in this section, however, rely heavily upon a deep understanding of the content of the preceding chapters.

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Alcoholics Anonymous Outcomes and Benefits

J. Scott Tonigan

1. Introduction

Strong opinions, both pro and con, have been voiced about AA. It has been argued that AA is the most effective method to arrest alcoholism (e.g., Snyder, 1980). In contrast, it has also been argued that AA is helpful to only 5% of the people who choose to affiliate with the organization (Bufe, 1998). McCrady and Miller (1993) suggested that 1 in 10 Americans will attend a twelve-step meeting in their lifetime, but Bufe (1998) asserted that a majority of individuals who seek relief from alcohol-related problems by attending AA are coerced to do so, with fewer than 1 in 30 remaining in AA after 1 year. Finally, a majority of outpatient and inpatient alcohol treatment programs in the United States routinely include referral to AA, with one survey indicating that 79% of all Veteran Affairs substance abuse programs in the United States make such referrals (Humphreys et al., 1999). Mandated AA attendance, however, has been successfully challenged as unconstitutional in the United States because of AA's heavy emphasis upon spirituality although the Supreme Court has demonstrated unusual leniency in upholding this decision, e.g., levied a one-dollar fine. Ironically, then, while AA formally eschews public controversy, it has been a lightening rod for conflict among professionals and laypersons regarding the treatment of alcoholism.

The study of the effectiveness of AA has a long and checkered history, with the first empirical paper on the effectiveness of AA appearing in 1945.

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By the early 1990s there were about 117 empirical papers on AA (Emrick et al., 1993), and today the number of peer-reviewed papers has steadily increased into the hundreds. In spite of this intense empirical focus on AA-related processes and benefits, however, substantial controversy remains about the basic usefulness of the organization to aid problematic drinkers. Not in dispute, however, alcoholics regard AA to be one of the most important and accessible resources for alcohol problems. We know, for example, that a majority of substance abusers who present for treatment will have had some AA exposure (Fiorentine & Hillhouse, 2000) and that between 56% (Humphreys et al., 1999) and 75% (Tonigan, 2001) of adults attending treatment will attend AA afterwards, regardless of the therapeutic orientation of the treatment program.

A fundamental thesis in this chapter is that there have been three eras of AA investigations and that the vast empirical AA literature can be best understood and applied by highlighting the underlying themes and assumptions held by investigators within each era. Figure 1 shows the frequency of empirical AA publications 1950–2000, and it is offered to show the accelerating nature of AA-related research. We anticipate that the number of empirical AA investigations will continue to increase. For this reason, a secondary yet important objective

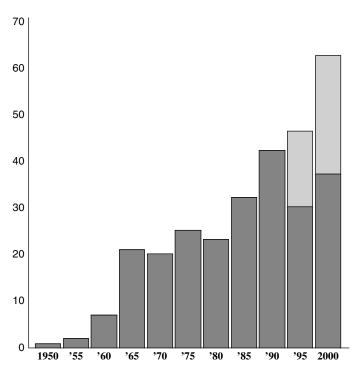


Figure 1. Frequency of empirical AA publications 1950–2000.

of this chapter is to educate readers how to evaluate the credibility and generalizability of past and future published AA investigations.

It is important to distinguish between community-based AA—the focus of this chapter—and formal twelve-step therapy. While these two resources share some common objectives, e.g., endorsing prescribed AA behaviors like attending AA meetings, reading core AA literature, and working the twelve steps, the differences between AA and twelve-step therapy are substantial in content, structure, and process (Emrick et al., 1993). With this said, nearly all studies investigating community-based AA processes and outcomes do so from the perspective of recruiting alcohol-dependent persons entering formal substance abuse treatment. While this self-selection bias appears, at first glance, significant, naturalistic studies are beginning to document that considerable bidirectional migration occurs between twelve-step therapy and community-based AA (Timko et al., 2000; Fiorentine & Hillhouse, 2000; Bogenschutz & Tonigan, 2007). It appears, then, that findings based on treatment-seeking samples may offer more generalizability than originally thought.

This chapter is intended to provide a general overview of the effectiveness of AA. The primary goal is to provide readers with an evidence-based review of what is currently understood about AA-related outcomes and to do so by placing AA-related investigations into historical context. At the outset, it is important to stress that space limitations prevent a full and comprehensive description of the many AA-outcome-related studies. This chapter thus selectively samples from the large pool of AA studies with the intention of providing the clearest exemplars of studies holding specific assumptions about what constitutes AA exposure and AA-related outcome. To achieve this objective, this chapter is organized into four sections. Section 2 defines and describes the themes and assumptions of the three eras of AA research. Emphasis is placed on elucidating how era-specific assumptions influenced answers to the basic question, is AA effective? Section 3 details what is currently known about the effectiveness of AA. Here, findings will be divided according to the time era that generated them and secondary measures of AA-related outcome. The chapter ends with a brief summary of key points in the chapter.

2. Three Eras of AA-Related Outcome Studies

Our assumptions about the nature of a phenomena shape how we frame our research questions about the phenomena. Well understood, then, our assumptions can strongly influence, in advance, the answers to our questions. Shifts in our assumptions (Kuhn, 1962) rarely occur through sudden consensus on a new set of basic assumptions, however. It is important to note, therefore, that while the three eras of AA-outcome studies are placed in temporal sequence, the exact years of each era are arbitrary and probably irrelevant. The first era, 1945 to circa 1988, largely eschewed AA-related processes and defined AA-related outcome in categorical terms, i.e., abstinence versus non-abstinence.

The four underlying research assumptions in this era are as follows: (1) the "dose" of AA was fixed and invariant across meetings regardless of meeting type, size, and membership characteristics; (2) AA group social dynamics or context did not influence the generation, transmission, or the reception of the AA "dose"; (3) AA-related social context itself did not account for drinking outcome, directly or indirectly; and (4) the importance of the AA "dose" was temporally invariant (e.g., "unit benefit" of one AA meeting was the same for AA members regardless of membership longevity). Clearly, the foundational phase of AA investigations considered AA to be a "black box," one that was relatively unimportant to understand when explaining AA outcome and benefit. With some notable exceptions (Vaillant, 1983), studies of AA-related outcome in this era were typically cross-sectional in design, yielding correlational findings that were often (and inappropriately) used to infer causal relationships.

A number of factors converged in the late 1980s to mobilize a re-evaluation of how AA exposure was defined and how AA-related outcome would be measured. Beyond the scope of this chapter, two important factors catalyzing this movement were increased commitment by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to fund AA-related research and the formation of a cadre of investigators disenchanted with the poor fit between assumptions guiding past AA research and observations of AA-related processes. This new era lasted between 1989 and 2001, and its relatively short duration can be traced to its important but limited objectives. Specifically, enlargement of the focus of AA studies to include AA-related processes necessarily involved the development of psychometrically valid measures of new constructs. Black box models of AA relied exclusively on counts of AA meeting attendance. New psychometrically valid measures were therefore required to describe the plethora of prescribed AA-related behaviors, beliefs, and practices. Related, interest turned to how, if at all, constructs representing AA-related processes changed over time, changed in their relationship to one another, and, finally, how AA processes predicted subsequent substance use. Tacitly, then, longitudinal designs became increasingly desirable and feasible with NIAAA support.

While assumptions about AA and its processes were not explicit in this second phase of AA research (and in many ways sustained earlier assumptions), what defined this era was the strong emphasis on scientific rigor and measurement, hence establishing the legitimacy of AA-related research to the larger field of addiction research. While phase 1 established a waster shed of correlational AA-outcome research, it was phase 2 that provided the necessary and firm foundation that established that, for many problem drinkers, AA produced positive outcomes. Here, AA outcome became defined recognizing the multidimensional nature of alcohol use. Measures depicting intensity of drinking, frequency of drinking, days elapsed between drinking, consequences associated with drinking, and so forth all came to be applied in describing how, if at all, AA-related benefit may occur and for whom.

Phase 3, 2002 to present, is taking the next logical step by investigating optimal and suboptimal response profiles to AA exposure and to discern how and why AA-related benefit occurs for some people but not others. This most recent trend in AA-outcome studies offers high clinical yield, and several chapters in this section are devoted to presenting current findings on the moderating and mediating effects surrounding AA participation. For this reason, AA-related studies focusing on these important issues will not be discussed in this chapter. Perhaps most important to this movement is the assumption that behavior change (hence outcome) occurs in a dynamic context and is itself dynamic. This emphasis on ecological validity is an important contribution, one made possible because of advanced statistical techniques such as multilevel analysis (e.g., Raudenbush & Bryk, 2002) and structural equation modeling (e.g., Byrne, 1994) that model the trajectory of individual change over time.

Two additional and related assumptions are beginning to emerge in phase 3 of AA-outcome research. First is the recognition that alcohol abuse and dependence is a chronic disorder that may extend for decades. This perspective necessarily redefines the AA experience in the life of problematic drinkers, thus recognizing that the process of individuals moving into, through, and out of AA may recapitulate itself many times over the course of an individual's lifetime. Second, and related, "outcome" is becoming more broadly defined, including such behaviors as good citizenship and quality of life. While not specifically relevant to substance use, such behaviors, attitudes, and beliefs may offset substance use relapse and hence be important AA-related outcomes.

3. Empirical-Based Review of AA Effectiveness

3.1. Early AA Studies

Figure 2 displays the relationship between AA attendance and abstinence reported in 33 studies, all of which were conducted between 1945 and 1990. Overall, this combined literature indicates that a moderate and positive association was present between frequency of AA attendance and increased abstinence ($r_{\rm w}$ = .21). Importantly, using meta-analytic techniques it is also shown that the variability in the strength of the association reported between the 33 studies was the result of sampling error. Stressing this latter point, the variability in study findings about the association of interest reflected differences in measures, follow-up intervals, sample characteristics, and statistical techniques, not differences in the magnitude of benefit associated with AA exposure.

Some caution should be exercised in the interpretation of the overall positive relationship between AA exposure and increased abstinence shown in Figure 2. Described by Emrick et al. (1993), nearly half of the studies (47.9%) in this initial period of AA investigations did not report any reliability information, for example, and about 65% used a cross-sectional or posttest only design. Generally, intact groups were studied (68%), and the use of collaterals to verify self-report was uncommon (31%) and the use of biological markers of substance

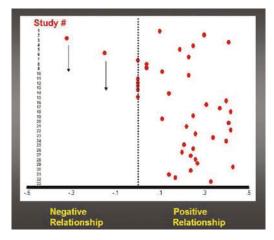


Figure 2. Correlations between frequency of AA meeting attendance and measures of abstinence in 33 studies.

use was even rarer (13%). Finally, the finding of a positive relationship between AA and abstinence for many, but not all, of the studies in Figure 2 was made within the context of posttreatment functioning. How, if at all, the association may be moderated by formal treatment was largely ignored during this era.

It is instructive to review a typical AA study from this genre. McCown (1989) investigated the relationship between impulsivity, empathy, AA exposure, and abstinence. Here, mutual-help exposure was defined by a composite measure reflecting number of hours per week attending meetings, working with others, sponsoring and being sponsored, and involvement in "community outreach" activities. The study used a cross-sectional design wherein 150 questionnaires were distributed at three twelve-step clubs. Sampling procedures were not described, although it appeared that two twelve-step members distributed and collected the surveys. Only 65% of the questionnaires included sufficient data to be included in the analyses, and no effort was made to corroborate self-reported abstinence. The author reported that empathy and hours per week in mutual-help activities was significantly and positively related, r = .24, p < .01. McCown concluded that either people who are more empathic get involved in prescribed twelve-step activities or getting involved in twelve-step activities produces increased empathy. No sample information, however, was reported in the article about the average length of abstinence of the AA members, their longevity in twelve-step programs, or even basic demographics, e.g., gender. As a result, the extent of sample self-selection cannot be determined, and it is also problematic to discern which alternative provided by McCown for the positive relationship between twelve-step exposure and empathy is the more likely.

A few randomized studies including direct assignment to AA were conducted in the early phase of AA research (e.g., Ditman et al., 1967, Brandsma,

Maultsby, & Welsh, 1980). Ditman et al., for example, randomized 301 adults to one of three groups: no treatment, Alcoholics Anonymous, and "alcoholic" treatment. All participants were chronic alcohol offenders defined as two drunken arrests in the past three months or three arrests for drunken behavior in the past year. A bench warrant was issued for non-compliant participants, and they reported to the court 6 months after randomization. Recidivism, not drinking, was the primary outcome measure to assess between-group differences. Recidivism rates did not differ at 12 months between the three groups, and Ditman et al. concluded that forced referral to AA or treatment was ineffective relative to the no-treatment control group. This study, one of the few that randomized to AA, is often cited as demonstrating that AA is ineffective. Strengths of the study include the RCT design, an 80% follow-up rate, and an outcome measure that was verifiable through court records. Obvious weaknesses include an insensitive outcome measure and poor monitoring of treatment compliance and AA attendance (for all groups). For a review of 21 RCT studies that included AA referral—in all cases coerced—see Kownacki and Shadish (1999).

3.2. Maturing AA Studies 1989–2001

Numerous longitudinal and well-designed studies using psychometrically strong measures approached the question of AA-related outcome in the second generation of AA research (e.g., PMRG, 1997, 1998; Ouimette, Moos, & Finney, 1998; Humphreys, Huebsch, Finney, & Moos, 1999; McKeller, Stewart, & Humphreys, 2003 Timko et al., 2000; Fiorentine & Hillhouse, 2000; Tonigan, 2001; Connors, Tonigan, & Miller, 2001). Generally, but not always, these investigations were conducted within the context of larger clinical trials investigating the effectiveness of twelve-step therapy in relation to other, more research supported, therapeutic orientations, e.g., cognitive behavioral therapy. Noteworthy especially, more elaborate and reliable measures of AA exposure, drinking behavior, and secondary outcomes began to be used in this era. Measurement of AA exposure, for instance, now routinely included AA program, e.g., reading core literature and progress in working the twelve steps (e.g., Tonigan et al., 2001; Gilbert, 1991), and AA fellowship dimensions, e.g., seeking support from other AA members and having and being a sponsor (Kaskutas, Bond, & Humphreys, 2002; Tonigan, Connors, & Miller, 1996; Morgenstern et al., 19XX). In tandem, interviewer-based and self-report measures of daily drinking behavior became more detailed and critically evaluated, now taking into account frequency, intensity, and duration of abstinent and drinking days (Sobell & Sobell, 2004). Secondary measures of outcome also gained momentum in application and included such dimensions as adverse alcohol-related consequences (e.g., Miller et al., 1995), ordinal measures of clinical outcomes (e.g., Zweben & Cisler, 1996), and purpose in life (Crumbaugh, & Henrion, 1988). Combined, the foundation was rapidly established to identify what AA practices, if any, produced changes, if any, in specific dimensions of drinking and life functioning.

Two thorny issues remained in declaring causal relationships between AA exposure and drinking, issues only partially addressed in earlier AA research. First, AA exposure was, by definition, self-selective. This aspect of "voting with the feet" plagued causal inferences about AA-related benefit. In response, in phase 2, AA-outcome studies began to statistically control for individual state and trait variables that may confound the study of AA-related benefit, e.g., motivation for change (McKeller et al., 2003; Kelly, Stout, Zywiak, & Schneider, 2006), alcohol impairment (Timko et al., 2000), and psychiatric problem severity (e.g., Connors et al., 2001). Second, the demonstration of causality required, at a minimum, appropriate temporal ordering of AA exposure and drinking. For this reason, studies during this era increasingly adopted longitudinal designs with frequent and extended follow-ups (Moos & Moos, 2006; Tonigan et al., 2001; Fiorentine & Hillhouse, 2000; Ouimette, Moos, & Finney, 1998).

With this background, what was concluded about outcomes associated with AA exposure? Looking first at AA meeting attendance alone, Tonigan (2001) reported in a multisite clinical trial with 1,726 outpatient and aftercare clients that AA attendance for the first 3 months after treatment was correlated, on average, with percent days abstinent for months 9–12 posttreatment, r = .25. With correction for measurement attenuation, this overall relationship increased to r = .31. Variability in the magnitude of this relationship between the 11 sites ranged from .14 to .33, but such variation reflected sampling error and not differences in the magnitude of AA benefit.

Ouimette et al. (1998), this time after statistically controlling for the effects of prior inpatient substance abuse treatment and Axis I diagnosis, reported similar findings about the benefit of AA attendance. Specifically, among 3,018 patients recruited at 15 VA inpatient treatment programs, frequency of AA meetings attended during and after treatment and 12-month abstinence was significantly and positively correlated, r = .34. What of AA outcome without prior or concomitant treatment? Timko et al. (2000) conducted an 8-year naturalistic study that monitored the help-seeking behaviors of 466 problem drinkers. Focusing on those individuals who sought no help (n = 78)or sought help only from AA (n = 66), strong evidence was provided about AA benefit. Specifically, at 1-year follow-up, 47.5% of the AA group reported total abstinence while 19.6% of the no-help-seeking group reported complete abstinence. This advantage was manifest at all follow-ups, and at the 8-year follow-up, 48.5% of the AA only group reported abstinence while only 25.6% of the no-help group reported complete abstinence. While the three studies reviewed had very different aims and sampled from different populations of substance abusers, they consistently demonstrated that AA is beneficial when outcome is defined using measures reflecting abstinence, as either a continuous or a categorical measure.

Replicated in several studies, measures of AA commitment and participation are stronger predictors of later abstinence relative to counting prior

AA meeting attendance. Clearly, attending and becoming involved in AA are distinct, and engagement in the AA program and fellowship has been found to be associated with the strongest associations with later abstinence. In an early study evaluating the posttreatment drinking status of a sample of inpatients, for example, Montgomery et al. (1995) reported that AA attendance and a composite measure reflecting AA involvement predicted total alcohol consumed at 7-month follow-up to be r = -.23, n.s. and r = -.44, p < .05, respectively. Of some import, extent of involvement in AA remained significantly and negatively associated with total amount of alcohol consumed even after statistically controlling for frequency of AA meeting attendance. This finding is clinically important, and it appears to replicate across twelve-step sister programs. Weiss et al. (2005), for example, recruited and investigated the mutual-help activities of 336 cocaine-dependent adults. Here, twelve-step meeting attendance (AA and NA) for months 1-3 was not predictive of days cocaine use or the ASI drug composite score collected months 4-6. In contrast, extent of investment in twelve-step prescribed activities, e.g., reading twelve-step literature, speaking with a sponsor, step work, and speaking at meetings, was significantly related with later reductions in days cocaine use and ASI drug use scores, with more investment being associated with more positive outcomes. Interestingly, the distinction between the twelve-step investors and non-investors was stark, and readily and clinically observable. In particular, the high investors (52.9% of the sample) reported 5.5 days per week of twelve-step-related activities while low investors reported 0.5 days per week of twelve-step activities.

More recently, using structural equation modeling to reflect AA participation as a latent construct that included multiple dimensions, e.g., meeting attendance, reading AA literature, number of AA friends, working the twelve steps, Connors et al. (2001) and McKeller et al. (2003) arrived at similar conclusions. First, to the surprise of few, both investigative teams found that the experiencing of AA is multidimensional and that there were strong statistical justifications to depict the experience as such, e.g., both teams found empirically good measurement models reflecting AA participation. Second, both teams reported that the latent construct representing AA participation was a strong and significant predictor of positive AA outcome. Specifically, in the McKeller study, AA participation at 1 year was significantly predictive of reductions in alcohol-related problems at the 2-year follow-up, while Connors et al. (2001) reported that AA participation at 9-month follow-up was significantly predictive of increased abstinence at 12 months posttreatment and that this positive benefit was similar for clients who had previously attended outpatient and aftercare treatments.

At this point, it would be easy to infer that AA attendance is, in relative terms, unimportant in predicting positive outcome. This impression would be erroneous. The relationship between attendance and investment in AA is complex, and the nature of this relationship appears to vary according to one's current trajectory of AA exposure. Specifically, contrary to conventional wisdom,

it seems that attendance and commitment to AA are not linearly related during early AA affiliation (Tonigan, Connors, & Miller, 2003). Among aftercare and outpatient clients, for example, immediately after treatment, AA attendance and commitment were strongly and positively related to a threshold of meeting attendance, after which increased attendance was not associated with parallel increases in doing prescribed AA-related behaviors. In this particular study, diminishing returns on AA investment occurred when AA attendance occurred on more than 66% of the available days. Evidence also suggests that the relationship between AA attendance and commitment may be moderated by AA member characteristics. Unlike adults, for instance, frequency of AA meeting attendance among a large number of adolescent substance abusers (n = 2, 317) receiving treatment was a significant, strong, and positive predictor of complete abstinence at 6- and 12-month follow-ups (Hsieh et al., 1998). In yet another adolescent inpatient sample (n = 74), Kelly et al. (2000) reported that frequency of twelve-step meeting attendance actually outperformed a composite measure of twelve-step participation in predicting days abstinence 4–6 months after treatment.

3.3. Secondary Measures of AA Outcome

The benefits of AA are less clear (or dramatic) when measures other than increased abstinence are considered the outcome index. Tonigan (2001) found that frequency of AA meeting attendance immediately after treatment was unrelated to later changes in alcohol-related problems at 12-month follow-up. The opposite finding was reported by McKeller et al. (2003) when, using a composite measure of AA participation, AA exposure did predict reductions in alcohol-related consequences at 2-year follow-up. It is not clear whether differences in these findings reflect the higher predictive value of a comprehensive measure of AA exposure or, alternatively, whether differences in declaring AA benefit were the result of different follow-up intervals.

Another secondary outcome measure of interest among AA researchers is psychological well-being. Core AA literature supports the prediction that emotional distress, fear of economic insecurity, and anxiety will fade as one proceeds through the prescribed twelve steps (e.g., AA promises). In fact, AA members make a clear distinction between abstinence and sobriety, with the basic belief being that sobriety is the higher objective and includes spiritual growth, serenity, and emotional well-being. In combing the results from 13 studies, all of which were completed before 1990, Emrick et al. (1993) concluded that frequency of AA attendance and psychological adjustment were modestly yet positively related, r = .25. Noteworthy, combining the results across these (mostly) cross-sectional studies involved collapsing measures of depression, anxiety, and so forth and thus may have underestimated the relationship of interest.

More recent longitudinal studies suggest that AA attendance and participation may have a more modest effect on psychological well-being than

originally thought. In particular, as part of a larger study comparing older (age 55-77) and younger male alcohol inpatient treatment outcomes, Lemke and Moos (2003) reported that number of AA meetings in the first year after treatment was significantly albeit modestly related with psychological distress, r = -.11. Having an AA sponsor likewise was negatively and significantly related with 1-year self-reported psychological distress, r = -.12. If AA produces changes in psychological adjustment, then alcohol-dependent patients who attend both formal treatment and AA should report larger gains in psychological adjustment relative to problem drinkers attending formal treatment alone. Humphreys et al. (1994) tested this prediction using a sample of African American alcohol-dependent adults seeking public substance abuse treatment. Both groups reported significant and large reductions in psychological severity symptoms on the ASI at 1-year follow-up, but this reduction was unrelated to whether or not participants attended AA. Better drinking outcomes were, however, found for those participants who attended AA in addition to formal treatment relative to those participants who did not attend AA after treatment.

Related, investigators have also focused on whether, as a result of sustained AA exposure, one experiences an enhanced sense of life purpose. In a cross-sectional design that sampled 20 AA meetings, for example, Carroll (1993) concluded that life purpose increases with working step 11 (e.g., the practice of prayer and meditation) and longevity in AA or length of sobriety. The selfselective nature of this study, however, renders these findings suspect. Two longitudinal studies came to different conclusions about changes in life meaning among AA-exposed drinkers, and they used the same measure of life purpose developed by Crumbaugh and Henrion (1988). Montgomery et al. (1995) reported that a composite measure of AA involvement collected at 3 months predicted self-reported purpose in life at the 7-month follow-up (r = .48). This finding was based on the posttreatment functioning of an inpatient sample of alcoholics, and findings were derived from an admirable 82% follow-up rate. In contrast, Tonigan (2001) reported that purpose in life collected at a 12-month interview and frequency of AA attendance for the first 3 months after outpatient (N = 952) and aftercare (N = 774) treatment were not related (r = .04) and that this finding was consistent across 11 treatment sites in Project MATCH.

A secondary measure of tremendous importance for both the individual and the society is the influence, if any, of AA participation on tobacco use. Well known, tobacco use is three times higher among substance abuses relative to the general population, and substance abusers are significantly less likely to be successful in their quit efforts relative to non-substance abusing quitters (Bobo & Davis, 1993). Ironically, however, tobacco use probably presents a higher fatality risk factor for alcoholics than does alcohol use. Sadly, there are only a handful of investigations that focus on changes in tobacco use among AA members. Conceptually, the strong emphasis in AA on abstinence from mindaltering chemicals would lead one to predict large reductions in tobacco use among AA members (although, ironically, this insistence may also work against

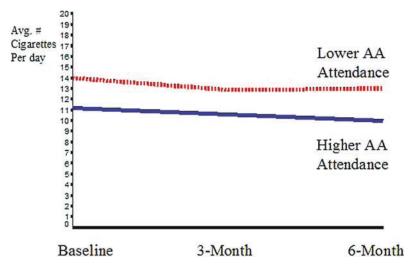


Figure 3. Cigarette use over time by two self-selected groups of AA attendees.

the use of effective nicotine replacement methods). Practically, however, the insistence on abstinence from alcohol may trump the use of tobacco, with some AA members arguing that efforts at smoking cessation would jeopardize abstinence from alcohol.

What does the research have to say? As background, Figure 3 shows the average number of cigarettes used per day over a 6-month period by two AA-exposed groups (Tonigan, R01AA014197, NIAAA). To magnify the potential benefits of AA exposure, this sample was divided into high and low AA exposure groups, with high AA exposure defined as attending AA at least once every 5 days for 6 months. All study participants had minimal prior AA and treatment exposure. On average, the high AA group reported lower levels of tobacco use at baseline and the two follow-ups, but the rate of change in tobacco use over the 6 months of assessment did not differ between the two AA-exposed groups. In a naturalistic setting, then, it appears that the use of tobacco may not change during early AA affiliation.

While tobacco cessation may not be a normative behavior among AA members, there is some evidence that the prescribed program and practices of AA can be useful in reducing tobacco use. Bobo and Davis (1993), for example, reported that 31% of the recovering alcoholics working in treatment facilities in the Midwest applied the principles of AA in their successful quit efforts. Likewise, Patten, Martin, Calfas, Lento, & Wolter (2001) reported that having an active relationship with an AA sponsor was predictive of increased tobacco abstinence, but not under all kinds of smoking inventions. In particular, Patten et al. found that the sponsorship relationship was beneficial when combined with a standard smoking cessation program that did not include nicotine gum replacement (40% not smoking). Of the three interventions under consideration,

the standard 20-day quit program was least beneficial for those participants without a sponsor (10% not smoking). Finally, in a study of recovering alcoholics (96% AA members), Hughes et al. (2003) reported that use of the nicotine patch was efficacious relative to a placebo patch, and importantly this positive effect occurred regardless of length of sobriety.

AA exposure appears beneficial regardless of treatment orientation when abstinence is the measure of outcome. Two independent studies, however, have reported that the intensity of a relapse was stronger for AA-exposed people after they have received cognitive behavioral therapy (relative to twelve-step or motivational enhancement therapies). In particular, in the Project MATCH outpatient sample, Tonigan et al. (2003) reported that there was a strong negative association between AA attendance and number of drinks consumed when drinking occurred among twelve-step clients at both the proximal (months 1–6) and distal (months 7–12) follow-ups. To a lesser degree, this relationship was also found among clients assigned to the motivational enhancement condition. In contrast, clients assigned to the cognitive behavioral group reported a positive relationship between drinking intensity and AA attendance during proximal follow-up (i.e., those attending more AA meetings were actually drinking more). This relationship did not persist into distal follow-up.

Humphreys et al. (1999) reported similar findings based on a large VA alcohol-dependent sample, with clients attending cognitive behavior-based inpatient treatment programs drinking more intensely when attending AA in early follow-up. Interpretation of this finding is difficult because the data in these studies does not permit ascertainment of the temporal order between drinking and AA attendance. Although conflicting cognitive behavioral and AA ideologies may have resulted in more drinking, it is equally plausible that clients who were faring poorly (drinking heavily) in cognitive behavioral therapy elected to attend AA as another attempt to alter their drinking—that is, they sought out AA because they continued to drink more heavily.

4. Conclusions

AA is beneficial for many, but not all, problematic drinkers. Described in this chapter, the findings of early correlation-based AA studies have been largely replicated using more sophisticated, prospective longitudinal studies. It is important to stress that the magnitude of benefit is modest and that such benefit is most clearly evidenced in measures of alcohol abstinence. Arguably, our estimates of the magnitude of AA benefit may be conservative. Several moderators of AA-related benefit have been identified (e.g., Tonigan et al., 2002), for instance, and our pooling of optimal and suboptimal responders to AA in order to derive global estimates of benefit provides biased estimates of drinking reduction.

The weight of evidence indicates that facilitating AA attendance is important for sustaining abstinence but that such attendance ought not be considered

an end in itself. Rather, AA attendance ought to be viewed as a bridge to the practice and internalization of prescribed AA-related behaviors and beliefs. With a few exceptions, AA-focused studies show that commitment to, and practice of, prescribed AA behaviors is a stronger predictor of later abstinence than sheer frequency of AA meeting attendance. Little is known, however, about the factors that may influence readiness for engagement into AA-related practices and beliefs. Investigation of these factors offers an important step to understanding how and why AA is beneficial.

Core AA literature suggests that deep psychological transformations will occur as problem drinkers progress through the prescribed program of AA. Investigations of secondary AA-related benefit only partially support this claim. Clearly, drinking reduction (with or without AA exposure) is associated with improvement in a number of psychological measures, e.g., reduction in depression. Furthermore, members of AA do report positive albeit very modest improvements in quality of life and purpose in life. Whether these changes are the result of AA participation and/or simply increased abstinence is unclear and certainly warrants investigation. Currently, there is little research on AA participation and tobacco use. The few studies that have been conducted suggest that AA-related practices may support quit efforts and, equally important, that formal smoking interventions can be successfully integrated into the larger gestalt of the AA experience.

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Outcomes of AA for Special Populations

Christine Timko

This chapter reviews research examining outcomes of Alcoholics Anonymous (AA) for special populations. It begins by discussing what is meant by the term "special populations" and why the question of if and how AA is beneficial for special populations needs to be considered. The chapter then examines studies of outcomes of AA participation among women, adolescents, and the elderly, racial and ethnic minority groups, disabled individuals, and people with co-occurring substance abuse and mental illness. It concludes by summarizing what existing research shows about the outcomes of AA among special populations and issues that future studies should address.

1. What Are Special Populations?

Special populations are groups whose needs may not be fully addressed by traditional approaches or who feel they may not comfortably or safely access and use the standard approaches. Generally, special populations include women, adolescent, or elderly individuals, different racial and ethnic groups, and people with disabilities. Special populations may also be defined more broadly such as by sexual orientation, current living situation (e.g., homeless,

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institutionalized such as in a psychiatric hospital or prison), or geographical area (urban or rural).

2. Why Should We Study AA Outcomes in Special Populations?

We need to study outcomes of AA participation in special populations because the benefits of AA and its active ingredients that have been found for the mainstream population may not hold for these subgroups. Possibly, AA participation is not associated with positive outcomes among special populations. Or, AA participation may be associated with positive outcomes, but AA's mechanisms of action may differ across special populations. That is, twelve-step self-help groups may benefit different subgroups in different ways.

There are at least two main reasons why AA participation may not be associated with positive outcomes or may be associated with unique mechanisms of change, for special populations. The first involves the fact that AA's origins were not targeted toward special populations and the second is that in AA groups, special populations are often small proportions of the attendees. AA was developed by adult, White men from a middle class, Christian background. The question for special populations is whether AA, used by and beneficial to such men, is accepted by and helpful to subgroups who do not share the founders' background, such as older, African-American women, for example. A somewhat different issue is that, if the twelve-step approach achieves positive outcomes for special populations, is it effective in mixed groups, in which most participants may be White, middle class adult men, or is it more effective in groups specific to the special population, such as women-, elder-, or African-American-specific groups.

Tonigan, Connors, and Miller (1998) raised the question of whether AA, a mutual help program with strong Protestant roots that was started by White, middle class Americans, can appeal to clients with diverse backgrounds based on culture, ethnicity, and other characteristics. They hypothesized that the answer is yes. This is because the twelve-step philosophy is intentionally broad and open to divergent interpretations. AA's ideological flexibility permits wide application across diverse special populations holding different beliefs and values.

However, generally, people are more likely to join and benefit from groups that are composed of members with similar characteristics and who have goals and values that are consistent with their own (Mankowski, Humphreys, & Moos, 2001). The degree of correspondence or compatibility between potential members' own beliefs and understandings and those in a given AA group may be especially important in determining an individual's level of attraction to, attendance of, and involvement in the group. That is, the degree of similarity or compatibility between personal and group belief systems may influence how active the person becomes in the group and how much benefit he/she derives from it. The broad question we are in part addressing here is whether

the assumptions and values of AA are compatible with the beliefs and interests of special populations in our society. AA's only requirement for membership—a desire to stop drinking—may not be enough of a common bond in AA groups to attract, retain, and benefit special populations.

In the next sections, AA participation among women, youth, older people, individuals of different ethnic and racial groups, people with disabilities, and those with psychiatric problems is discussed. We examine studies of why these special populations may or may not be attracted to AA and whether they benefit from AA when they do attend and become involved. We also suggest areas in which research on AA in these special populations is lacking.

3. Outcomes of AA for Women

Women have consistently made up about one-third of AA members. As noted by Kelly (2003), some researchers have speculated that women who participate in AA may not benefit as much as men do. This is because the focus on powerlessness espoused in the first step of the twelve-step program may serve to reinforce low self-esteem and a diminished societal role among women. In addition, the minority status of women in twelve-step groups may make women-specific issues more difficult to discuss.

In contrast, others hypothesized that women may be more likely than men to attend and benefit from AA because AA's philosophy, involving acknowledgment of powerlessness over alcohol, lack of control over one's behavior, and one's dependence on a higher power to attain sobriety, is easier for women to accept. Women's characteristics of lower self-esteem, more frequent drinking when feeling powerless or inadequate, and having stable attributions for failure and a more external locus of control than men or nonalcoholic women are congruent with AA steps that ask the alcoholic to admit past wrongdoing and the inability to control alcohol use and to trust a greater power to achieve recovery. In addition, AA is free, eliminating financial barriers to help that are more common among women than men, and anonymous, so friends and family do not need to know about it; anonymity may be important for women due to historically greater social stigma of alcoholism for women than for men (Beckman, 1993; Timko, Moos, Finney, & Connell, 2002).

Furthermore, as pointed out by Forcehimes and Tonigan (2003), AA group processes and prescribed behaviors may be better aligned with women's distinguishing characteristics. AA processes are based on trust, consensus building, and cooperation, features associated with women more so than with men. Because women tend to have a stronger need for affiliation than men, women may, relative to men, experience increased alliances to AA groups that provide a social support network and fulfill the need for affiliation.

Research has shown that women often attend and become more involved in AA than do men. This finding held in Project MATCH, which was a multisite clinical trial designed to test how patient-treatment interactions related to outcomes for alcohol problems; two independent but parallel matching studies were conducted, one with clients recruited from outpatient settings, the other with patients receiving aftercare treatment following inpatient care. In Project MATCH, women attended AA meetings as frequently as men did in the outpatient arm. Among aftercare clients, women attended more AA meetings and were more involved in AA than were men (DelBoca & Mattson, 2001). In a sample of outpatients in a chemical dependency recovery program, women attended more twelve-step meetings than did men at 6-month and 5-year follow-ups (Weisner, Ray, Mertens, Satre, & Moore, 2003). A separate analysis of the older, alcohol-dependent patients in this sample also found that older women had more AA attendance than did older men at the 6-month follow-up (Satre et al., 2004b).

Two studies have examined outcomes of AA affiliation among women in comparison to those of men. A study of previously untreated problem drinkers found that women were generally worse off than men at baseline on drinking and functioning indices. In keeping with their poorer baseline status, women were more likely to participate in AA during the first follow-up year. In addition, women benefitted more than men from more AA attendance during Years 2–8 of follow-up; that is, positive associations between more AA attendance and favorable drinking outcomes at 8 years were stronger for women. However, for women, the positive association between more AA attendance and being employed at 8 years was weaker than it was for men, perhaps because social networks developed in AA are less likely to lead to job referrals for women (Timko et al., 2002).

A 3-year study of alcohol-dependent outpatients enrolled in a randomized controlled telephone case monitoring trial found that more self-help meeting attendance was associated with abstinence and fewer drinks per drinking day. However, the relationship between attendance and drinking outcome was not influenced by gender. That is, AA attendance was as beneficial for women as it was for men (Kelly, Stout, Zywiak, & Schneider, 2006).

These findings suggest that women may integrate more easily into AA than do men and benefit just as much. However, there is still a scarcity of information about attendance at and effects from AA participation among women. It is not clear to what extent women attend women-only AA meetings, which are increasingly available and may moderate the likelihood of attendance and involvement as well as AA outcomes for women. Further, it is not clear whether other organizations specific to women and women's needs such as Women For Sobriety may be more beneficial for women (Kaskutas, 1996).

4. Outcomes of AA for Youth

Only 2% of AA members are under age 21, and nonattendance and dropout from twelve-step groups among youth with alcohol and other substance use problems are high (Kelly, Myers, & Brown, 2000). As also noted by

Kelly (2003), possibly, the twelve-step program of AA as created for adults may not be optimal for youth, and the predominantly adult composition of most AA groups may hinder teens' identification with the group and present a barrier to initial and continued attendance and affiliation, as well as positive outcomes. Youth may have trouble identifying with issues related to adult recovery such as employment, marriage, and children. Teenagers may have more logistical barriers to attending self-help group meetings than do adults, such as difficulties with transportation, finances, and obtaining parental permission (Kelly, Myers, & Brown, 2002).

Adolescents' AA or Narcotics Anonymous (NA) attendance posttreatment was related to higher abstinence rates and better social functioning at a 2-year follow-up (Alford, Koehler, & Leonard, 1991). In a study of 91 adolescents in inpatient substance use disorder treatment, those who attended AA and/or NA were almost four times less likely to relapse over the follow-up year than were those who did not attend. AA/NA attendance was the best predictor of abstinence at 1 year. The authors suggested that twelve-step group attendance has a therapeutic effect for adolescents by providing support and reinforcing the message of the treatment program (Kennedy & Minami, 1993). Among 2,317 adolescents who received inpatient treatment for substance use problems, twelve-step meeting attendance (mainly AA and NA) was again the most powerful predictor of abstinence at 6 and 12 months posttreatment (Hsieh, Hoffmann, & Hollister, 1998).

Analyses of data by Kelly et al. (2002) on adolescent inpatients interviewed during treatment and at 3 and 6 months post-discharge found that severely substance-involved youth were more motivated for abstinence and more likely to attend and affiliate with twelve-step groups. A higher frequency of twelve-step meeting attendance and, to a lesser extent, greater involvement with twelve-step groups (i.e., perceived importance of attending groups, having a sponsor, working the steps, engaging in twelve-step social activities) were associated with better posttreatment substance use outcomes. There was a high degree of collinearity between twelve-step attendance and involvement such that involvement did not predict outcomes over and above the frequency of attendance. Kelly et al. (2002) suggested that the association of attendance with involvement among adolescents may be higher than it is among adults. That is, given the logistical barriers facing adolescents in getting to twelve-step meetings, those who do attend more are likely those who place value on attendance and follow suggestions regarding aspects of involvement such as sponsorship and working the steps. Kelly et al. (2002) also found that twelve-step involvement mediated between twelve-step attendance and motivation for abstinence; that is, twelve-step involvement was the mechanism through which attendance maintained and enhanced adolescents' motivation.

Kelly et al. (2002) summarized their full, empirically supported model as follows. Adolescents in treatment with more severe substance use problems are more motivated to cease using substances. Motivation for abstinence is related

to increased likelihood of attendance at twelve-step meetings. Regular attendance is associated with more involvement in the twelve-step program, which in turn increases motivation to abstain, which reduces future use. In contrast to studies with adults (e.g., Morgenstern, Labouvie, McCrady, Kahler, & Frey, 1997; Snow, Prochaska, & Rossi, 1994), coping and self-efficacy did not mediate between twelve-step attendance and substance use outcomes in this adolescent sample. Accordingly, Kelly et al. (2002) suggested that the mechanisms through which benefits from AA are derived may differ depending on life stage. Adults may derive more benefit through increases in coping skills and related self-efficacy, whereas adolescents may benefit more through maintenance of motivation and an ongoing commitment to abstain.

The widespread recommendations that adolescents attend and become involved in twelve-step groups appear to be supported by existing research. Kelly (2003) emphasized the need for analyses examining explanations of how AA participation benefits outcomes among adolescents. In light of the marked heterogeneity of adolescents' substance use disorders and developmental stages, there is a need for further explication and testing of both intrinsic (e.g., substance use severity, age) and environmental-contextual (e.g., family composition, resources, characteristics of peers) mediators and moderators of effects from youths' self-help attendance and involvement. Because the attendance of self-help groups has been found to be highly influential on positive outcomes, attracting more substance abusing adolescents to attend and stay in these groups is an important issue (Hsieh et al., 1998). Accordingly, Kelly (2003) also emphasized the need for more qualitative data regarding youths' perceptions of and experiences in twelve-step groups to benefit clinical twelve-step facilitation efforts.

5. Outcomes of AA for Older People

Satre et al. (2004a) hypothesized that older people may experience practical barriers to attending twelve-step meetings such as lack of transportation, physical disabilities that make getting from one place to another more difficult, or reluctance to go out in the evening. Older people may also experience developmental changes that make them less interested in expanding their social networks or rely more exclusively on their spouse for support. Both of these changes would discourage AA participation and lessen AA's benefits.

In fact, at intake to chemical dependency treatment, older patients were less likely than middle-aged adults to have ever attended AA (Satre, Mertens, Arean, & Weisner, 2003). At a 5-year follow-up (Satre et al., 2004a), older people were similar to younger patients on the amount of AA participation overall, but older adults were less likely than middle-aged adults to have ever considered themselves a member of a twelve-step group or called a twelve-step member for help in recovery. That is, on items signifying a greater depth of AA involvement, older adults scored lower than did younger adults. Satre et al. (2004a) suggested

that older adults may benefit from smaller AA groups or AA groups that focus on older adult issues.

Lemke and Moos (2003) compared older male veterans with alcohol use disorders in residential care to matched (on demographic variables and dual diagnosis status) young and middle-aged male veterans in these programs. As in Satre et al.'s (2004a) study, older people participated in twelve-step groups as much as younger people did overall (attendance and involvement were combined into one index), during treatment and at the 1-year follow-up. For each age group, including the group of older patients specifically, twelve-step group participation during Year 1 of follow-up was related to better drinking outcomes at 1-year and 4-year follow-ups. Using similar methods on a different sample of male veteran inpatients with alcohol use disorders, Lemke and Moos (2003) found that older patients had similar overall twelve-step group participation as younger patients did at 1 and 2 years posttreatment and that more participation during Years 1 and 2 was associated with better drinking outcomes at 5 years.

Together, the results of these studies suggest that older people as a group may be reluctant to join AA and so are especially in need of efforts during treatment to facilitate their entry into and involvement with AA. They may also need help from treatment staff to locate a home group composed of members similar to themselves. Once older people participate in AA, they appear to benefit from that participation in terms of drinking-related outcomes.

6. AA Outcomes for Racial and Ethnic Groups

The vast majority of AA members in the United States are White (Tonigan et al., 1998). However, help for the substance use problems of individuals of a specific race or ethnicity may be more effective when the individual's race, ethnicity, and culture are considered (Durant, 2005). As noted, AA is primarily Euro-American in origin. Possibly, to be helpful to racial and ethnic groups with different cultures, AA groups must be modified by participants to fit with the culture.

6.1. African-Americans

In 1993, Humphreys and Woods argued that research on African-American twelve-step group participation must recognize that African- and White Americans are still largely segregated both culturally and geographically. Self-help group participation has different meanings, predictors, and outcomes for African-Americans than for Whites. African-Americans were more likely to attend self-help groups if they lived in a predominantly African-American rather than predominantly White area. In short, people abusing substances may prefer meetings in which their own race and ethnicity are well represented.

Recent estimates are that about 2 million African-Americans are alcoholics (Durant, 2005). Possible resistance to twelve-step groups by African-Americans is based on their perception that the groups are racist and exclusive (they have only White, mainstream, middle class members who will not understand African-American dialects) and their dislike of AA's references to the need for surrender and powerlessness (Smith, Buxton, Bilal, & Seymour, 1993). Specifically, surrender and powerlessness may be viewed negatively because, as a group, African-Americans have been denied power in American society. Furthermore, many African-Americans do not accept the AA premise that alcoholism is a disease (Durant, 2005).

Kaskutas, Weisner, Lee, and Humphreys (1999) examined the possibility that AA is seen as a White, middle class organization and is unlikely to appeal to African-Americans, by interviewing clients entering treatment. Whites were more likely to attend AA independent of treatment, whereas African-Americans attended AA as part of treatment. Although African-Americans entering treatment were less likely to attend AA on their own without referrals from treatment providers, once they were introduced to AA, African-Americans were as inclined as Whites toward active involvement in AA. Even so, African-Americans and Whites participated differently. African-Americans were more likely to self-identify as an AA member, to report a spiritual awakening due to AA, and to perform service at a meeting. Whites were more likely to have a sponsor and to read AA literature.

6.2. American Indians

In its original formation, AA was explicitly rooted in Western theism and European-American cultural values and so may not be suitable for many American Indian individuals and tribes. AA has been criticized as inappropriate for American Indian populations because it entails the confession-like disclosure of personal problems, has a Western religious emphasis, and excludes nonalcoholics. AA's philosophy of powerlessness over alcohol runs counter to the mores of many tribes emphasizing self-reliance and stoicism (Smith et al., 1993). The AA approach could be highly offensive to a Native American who maintains a traditional self-identification, and forcing such a person to attend twelve-step groups could lead to further trauma and harm (Szlemko, Wood, & Thurman, 2006). A study of alcohol problems in an urban American Indian community revealed divided opinions about AA. Some saw AA as more appropriate for Anglo-Americans, given its Christian overtones. Others reported having felt uncomfortable at AA meetings until they found Indian AA groups where they did not experience discrimination or the burden of having to explain themselves to non-Indians. Still others saw AA as congruent with Indian spiritual traditions (Spicer, 2001).

As highlighted by Spicer's (2001) study, although AA cannot be universally appropriate for all American Indian tribes, due to the tribes' cultural diversity, it can be appropriate for some. For example, whereas the Hopi and

Alaska Natives have made little use of AA, the Salish of British Columbia have modified and adapted AA to fit their needs. The confession-like nature of AA meetings, which is precisely what is disliked and criticized by some tribes, appeals to the Salish (Abbott, 1998).

Native American modifications of AA incorporate elements of the medicine wheel, purification sweat, and sacred pipe as healing devices. Within this milieu, alcoholism and other substance abuse is viewed as a broken hoop or broken circle issue. The values enshrined in Indian AA are vested in the traditional Harmony Ethos (cooperation and shared responsibility) rather than practices rooted in Western culture (competition and ownership). For example, Step 2 (We came to believe that a power greater than ourselves can restore us to sanity) is restated as: We came to believe that the power of the Pipe is greater than ourselves and can restore us to our Culture and Heritage. Step 6 (We are ready to have God remove all our defects of character) is restated as: Be entirely ready for the Great Spirit to remove all the defects of an alien culture (French, 2004).

The twelve steps of AA have been blended with the medicine wheel in the Wellbriety Movement, a culture-specific recovery approach for Native Americans. To help Native Americans take advantage of AA, each of the steps is associated with a principle of positive character development. This program created possibly the first culture-specific adaptation of the *Big Book* of AA, *The Red Road to Wellbriety: In the Native American Way* (White Bison, 2002). An African-American group is working on their own culture-specific book inspired by the Native American version (Coyhis & Simonelli, 2005).

6.3. Hispanics

A study of clients of an alcohol treatment center found that Hispanics attended fewer AA meetings than did Whites over 6 months of follow-up. Nonetheless, attendance at AA was associated with decreased intensity and quantity of alcohol use for both groups (Arroyo, Westerberg, & Tonigan, 1998). Analyses of Project MATCH data yielded similar results. Specifically, Hispanic clients were less likely to attend AA and attended AA less frequently after treatment than did White clients. However, involvement with and commitment to AA were similar or even higher among Hispanic clients who attended meetings, in comparison to White attendees. And, for both Hispanics and Whites, AA involvement predicted increased abstinence at 1 year (Tonigan et al., 1998; Tonigan, Miller, Juarez, & Villanueva, 2002). Although Hispanic clients report a lower likelihood of AA attendance, they have equal involvement with and benefit from AA as Whites do when they do attend.

Unfortunately, there are no studies of outcomes of AA for African-Americans or Native Americans. In addition, studies are lacking as to how Asian-Americans perceive twelve-step programs. Such perceptions influence the extent to which this special population is attracted to attending and becoming involved in AA. There is an absence of research on outcomes of AA

among Asian-Americans generally and specific Asian-American subgroups (e.g., Chinese, Filipino, Vietnamese, Korean, Japanese) as well as other racial/ethnic groups, such as individuals whose origins are in the Middle East. Furthermore, mechanisms of action that explain why AA may be effective for these special populations have not yet begun to be examined in research on twelve-step groups.

7. AA Outcomes for Disabled Groups

For people with cognitive, sensory, and/or physical disabilities, less attendance at and benefit from AA parallels their inability to obtain adequate substance use disorder treatment. That is, people with disabilities may not be able to access AA meetings in the first place or may attend AA but perceive groups to not be tailored to their needs and therefore fail to sustain attendance at AA, become involved in AA, and experience AA's benefits. The nature of these access and tailoring problems includes physical and architectural barriers (buildings where meetings are located do not have a wheelchair ramp or elevator) and other problems such as barriers to communication (lack of program materials in large print, Braille, or audiotape formats; lack of sign language interpreters). In addition, there may be a perception of rigid no-medication rules that do not allow for needed pain or other medications. Furthermore, AA groups may be seen as having "one size fits all" program materials and meeting styles that do not accommodate different types and levels of disabilities. To date, research on AA among disabled special populations has focused on cognitively impaired individuals.

7.1. Cognitive Impairment

A study of people with traumatic brain injury who had alcohol problems found that less than 20% were interested in getting help from AA or treatment (Bombardier, Rimmele, & Zintel, 2002). Another study of alcohol use among people with recent traumatic brain or spinal cord injury found that the most severe problem drinkers expressed the most interest in participating in AA; even so, only 29% of this group was interested in AA (Turner, Bombardier, & Rimmele, 2003).

Another investigation found that cognitive impairment moderated the relation of AA affiliation with substance use outcomes at 6 months following addiction treatment. AA affiliation was a robust predictor of better outcomes in unimpaired individuals, but only a weak predictor in persons with clinically significant impairment. Possibly, the processes of AA attendance and involvement supporting positive outcomes in unimpaired persons may operate with less potency in clients who are cognitively impaired (Morgenstern & Bates, 1999).

In Project MATCH, in the outpatient arm, higher cognitive impairment at treatment entry predicted greater AA involvement during, and for 6 months (Donovan, Kivlahan, Kadden, & Hill, 2001) and 15 months (Bates, Pawlak, Tonigan, & Buckman, 2006) following, treatment. Greater AA attendance and involvement were associated more strongly with better 15-month alcohol outcomes among more impaired clients than among less impaired ones.

The Project MATCH result appears to contradict that of Morgenstern and Bates (1999). In the Morgenstern and Bates (1999) study, individuals classified as cognitively impaired had significant clinical disability, but this was not necessarily true in Project MATCH. Possibly, severely cognitively disabled individuals benefit less from AA participation, whereas moderately disabled individuals are able to benefit more. If and how severity of cognitive impairment moderates associations of AA attendance and involvement with substance use and other outcomes remains to be settled by additional research, as do mechanisms that explain any positive effects of AA participation on outcomes in the cognitively disabled special population. In addition, research is needed examining AA—how it is perceived and experienced—among people with co-occurring substance use disorders and sensory and physical disabilities.

8. AA Outcomes for Individuals with Dual Substance Use and Psychiatric Disorders

Individuals treated for dual substance use and psychiatric disorders have very high rates of posttreatment relapse and additional episodes of treatment (Chen, Barnett, Sempel, & Timko, 2006). AA may provide an element of continuing care that reduces relapse rates and use of services. The American Psychiatric Association recommends that dual diagnosis patients be referred to self-help groups, especially those in which psychiatric medications and therapies are recognized and encouraged as useful (APA, 1995). A systemwide study in the Department of Veterans Affairs reported that most formally treated substance use disorder patients are referred to AA or NA (Humphreys, 1997). However, dual diagnosis patients are less likely to be referred to twelve-step groups than are substance use disorder-only patients (Humphreys, 1997).

Studies indicate that although the majority of individuals treated for dual disorders try self-help groups, only a minority of these patients become closely linked to self-help groups by using them consistently over time (Noordsy, Schwab, Fox, & Drake, 1996). When dual diagnosis patients become linked to AA or NA, they benefit from participation. For example, in a study of acute care for dual diagnosis patients, those who attended more meetings during and following treatment had better 6-month and 1-year substance use and psychiatric outcomes (Timko & Sempel, 2004).

A subset of studies related to AA outcomes of dually diagnosed individuals has focused on substance use disorder patients with post-traumatic stress disorder (PTSD) (Ouimette, Moos, & Finney, 2003). Many of the issues raised by

this subset of studies apply generally to dually diagnosed individuals. Namely, there is debate about whether substance abuse–PTSD patients should participate in and will benefit from twelve-step groups. Some clinicians have advocated for patient involvement in twelve-step groups as an adjunct to substance abuse–PTSD treatment (Evans & Sullivan, 1995). Persuading these patients to participate in AA may be one way to offset their poor prognoses. Substance abuse co-occurring with PTSD is often a chronic disorder that requires long-term help, which AA may provide. Establishing AA membership, with its positive association with abstinence, good psychological functioning, and supportive social networks, may encourage positive growth that helps with long-term remission for people experiencing PTSD.

Several aspects of twelve-step activities may address core issues of trauma-related symptoms and enhance treatment outcomes. AA group membership may be helpful for substance abuse remission because it reduces PTSD and its associated symptoms that trigger relapse. The spiritual aspect of the AA fellowship may help to lessen the hopelessness about the future often expressed by trauma survivors and enhance feelings of having a purpose in life. AA's disease model approach to addiction may decrease the shame often associated with PTSD. Because substance abuse–PTSD patients may be stigmatized, the support of peers may be especially helpful to them. Seeking and experiencing similarity between oneself and AA group members may improve self-image and increase optimism about the future.

In contrast to those advocating AA for dually diagnosed individuals, some have raised concerns about AA for substance abuse–PTSD clients (Satel, Becker, & Dan, 1993). These concerns involve contrasting views of what problem is primary; PTSD may be seen as primary by those who have been diagnosed with it, whereas substance abuse may be seen as primary by AA group members. Being in AA groups that emphasize the primacy of addictions may invalidate patients' perceptions of PTSD as the primary problem and increase their distress. The self-medication of PTSD symptoms often underlies and contributes to alcohol use. AA suggests that life is manageable if sobriety is maintained. However, PTSD often worsens in newly abstinent patients. AA groups may be perceived as objecting to psychotropic medications to help manage PTSD's symptoms.

Trauma, and PTSD-specific symptoms of loss of faith and hope for the future, may deter individuals from embracing the concept of a higher power and the directive to surrender. PTSD often leads to a crisis of faith, the painful disruption of ingrained belief systems, and doubts about the basic goodness of human beings and the existence of God in light of the tragedies that have occurred. Trust is shattered such that a benevolent spiritual force is hard to imagine, and so surrender to a higher power may be seen as impossible. Further, hypervigilence and the need to maintain control are integral parts of a traumatic stress reaction, creating hardships in turning over one's will and life to God.

PTSD-associated interpersonal avoidance may also make the fellowship of twelve-step groups problematic. Discomfort with crowds, strangers, noise, and emotional closeness is common in PTSD. Because PTSD may create difficulties in getting close to people in general, it may be hard to trust a sponsor. Those diagnosed with PTSD may be reluctant to tell their story at AA meetings for fear of alienating other members. They feel guilt and doubt about decisions they made and acts they committed. The requirement of taking a fearless moral inventory and making amends may also be threatening to those with PTSD. These activities require confronting painful memories, which may exacerbate anxiety and depression and lead to relapse.

In this view, AA is engaging and effective only for the minority of PTSD patients who identify primarily as substance abusers, are comfortable with social situations, and have less severe psychological symptoms. These individuals are able to separate alcohol- or drug-related problems and solutions from their PTSD symptoms and treatment, reflecting an understanding that they suffer from two distinct but interrelated entities. Individuals who exhibit these characteristics should have relatively better outcomes following AA participation than those whose problems are more entrenched. Individuals with substance abuse–PTSD who do successfully affiliate with AA may respond to and benefit from many of the same therapeutic elements of AA that others respond to: empowerment through acknowledgment of alcoholism or other drug addiction, installation of hope through contact with others, encouragement of openness, repeated emphasis on shared experiences, and development of a social network (Satel et al., 1993).

The recommendation is that clinicians should assess substance abuse–PTSD patients' identities regarding addictions and PTSD before referring them to AA. If patients are more identified with PTSD, providers should explore whether AA could still be beneficial and monitor patients' distress as participation goes along. Even those whose substance abuse–PTSD still allows relatively good functioning may need higher and more sustained "doses" of AA for attendance and involvement to be helpful (Ritsher, McKellar, Finney, Otilingam, & Moos, 2002). Substance abuse–PTSD patients should be prepared for AA during treatment by previewing AA's philosophy and the twelve steps and identifying potential areas of difficulty (Mueser, Noordsy, Drake, & Fox, 2003). Some of the twelve steps may need to be reframed; for example, making amends need not involve a formal apology but may entail an internal process of absolution.

Studies support the view that AA may be helpful to individuals having the dual problems of substance abuse and PTSD. Among substance abuse–PTSD patients receiving substance use disorder treatment, involvement in twelve-step activities during treatment was associated with more adaptive coping (specifically, more approach coping involving positive reappraisal and problem-solving) and improved psychological symptoms at discharge. In addition, AA/NA attendance during 2 years posttreatment was related to remission from substance abuse at the 2-year follow-up (Ouimette et al., 2001).

Ouimette et al. (2001) also examined predictors of participation in twelvestep groups during the two posttreatment years as well as client characteristics that moderated associations between participation and positive outcomes. Substance abuse–PTSD clients who, at baseline, were more religious and endorsed a disease model of addiction were more involved in AA/NA activities. Endorsement of the disease model of addiction was a moderator between AA/NA participation and psychological distress. That is, AA/NA participation was associated with less psychological distress only among substance abuse–PTSD patients who self-identified as an alcoholic or addict.

Although dually diagnosed individuals benefit from participation in AA/NA, they may benefit more from participation in dual-focused self-help groups (e.g., Dual Recovery Anonymous, Double Trouble in Recovery), which are designed specifically for persons who have both substance use disorders and mental illness (Hazelden Foundation, 1993; Humphreys, 2004; Ortman, 2001). Dual diagnosis patients who sought help from AA or NA to achieve sobriety before addressing their psychiatric disorders often reduced substance use while deteriorating on psychiatric symptoms (Hamilton & Samples, 1994). Laudet found that most attendees of dual-focused meetings also attended AA or NA meetings (Laudet, Magura, Vogel, & Knight, 2000; Laudet et al., 2004). However, more frequent and sustained attendance at dual-focused groups was of more benefit to dually diagnosed individuals over 2 years than was attendance at AA or NA in terms of abstinence, amount of substance use, psychiatric symptoms, and personal functioning. Similarly, Magura found that consistent attendance at dual-focused meetings among dually diagnosed individuals was associated with better adherence to psychiatric medication, whereas attendance at AA/NA meetings was not (Magura et al., 2002). A 2-year study of dually diagnosed clients in outpatient treatment who attended dual-focused meetings found improvements in global functioning and housing and decreases in hospitalizations (Hensley, 2004).

Studies have explained that AA/NA may not be as helpful to treated dually diagnosed patients for a number of reasons. As noted above for PTSD specifically, members of some of these groups may view taking psychiatric medication as a form of substance use or reject the stigma of having members who are labeled mentally ill (Hazelden Foundation, 1993; Mowbray et al., 1995; Ortman, 2001). Additional barriers to benefitting from AA/NA include dual diagnosis patients' tendency to deny their substance use problems, their greater difficulty obtaining and maintaining social support in groups (Jordan, Davidson, Herman, & Bootsmiller, 2002), and their experience of the use of AA/NA's specialized philosophy and language as alienating and unempathic (Noordsy et al., 1996). For example, dual diagnosis patients saw the traditional approach as minimizing problems of suffering from and living with psychiatric disabilities. Furthermore, dual diagnosis patients may not benefit as much from AA/NA because their psychiatric symptoms (e.g., fear of large groups, feelings that people are watching them, suspiciousness, delusional significance of

references to God), medication side effects (e.g., difficulty sitting still), inability to relate to other members' stories of "hitting bottom" (e.g., they never had a spouse, job, or car to lose in the first place), and social deficits are not considered, are misunderstood, or are even responded to in a confrontational manner.

Dual diagnosis patients' primary self-reported reasons for not attending AA/NA were that these groups did not meet their needs or make them feel comfortable, and they had difficulty finding people they felt similar to (Laudet, Magura, Vogel, & Knight, 2003). Dual diagnosis patients' most frequent statements about what dual-focused groups offer that AA does not involved freedom to talk about their psychiatric illness and to gain new information about psychiatric problems. Dually diagnosed patients were more likely to share personal stories at dual-focused meetings than they were at AA meetings; they were more likely to just listen at AA. Individuals with co-morbid psychiatric problems who attend AA/NA groups often refrain from taking on active roles or responsibilities in the group, although such service to the group is seen as increasing the likelihood of recovery (Kurtz et al., 1995).

The extent to which dual diagnosis patients participate in and benefit from AA may depend on their psychiatric diagnosis. More specifically, dually diagnosed individuals with nonpsychotic disorders may receive more benefits from AA attendance and involvement than do patients with psychotic disorders. Findings are consistent from a number of studies that dual diagnosis patients with schizophrenia as well as with other psychoses (e.g., affective, paranoid) reported less attendance at AA/NA than did patients with nonpsychotic anxiety, depression, adjustment, or personality disorders (Bartles & Drake, 1996; Jordan et al., 2002; Noordsy et al., 1996; Ouimette, Gima, Moos, & Finney, 1999; Tomasson & Vaglum, 1998). Dual diagnosis patients with schizophrenia were less likely to identify themselves as addicted and to agree with twelve-step philosophy that people with addictions should be considered responsible for their alcohol and drug use or their own recovery. These patients were also more likely to believe that addiction is a chronic disease that does not get better; that alcohol and drugs are useful for coping with stressful life events, interpersonal problems, and psychiatric symptoms; and that addicted individuals can regulate their alcohol and drug use for social purposes (Handymaker, Packard, & Comforti, 2002). Thus, as dual-focused groups become more plentiful and known to providers and patients, treatment staff may consider referring substance abuse-schizophrenia patients to those groups rather than to AA or NA.

9. Summary and Directions for Future Research

Does AA attendance and involvement benefit special populations? The studies reviewed here suggest that some special populations, such as women, may participate more in, and benefit more from, AA than do their male counterparts who represent the mainstream population. More commonly, special populations may affiliate less with AA in comparison to mainstream societal

groups, but when they do affiliate, they benefit just as much or even more. This latter finding may apply to older people and to some racial/ethnic groups such as Hispanics. As yet, research has not revealed special populations that may actually suffer negative outcomes as a result of AA participation. (A possible exception, suggested by descriptive observations rather than empirical findings, may pertain to some Native American tribe members.) Because AA attendance and involvement has been associated with positive outcomes across the special populations of women, youth, older people, Hispanics, and dually diagnosed patients with nonpsychotic disorders, how to attract more special population members to attend and stay in AA is an important issue for additional research. It will be helpful to develop and empirically validate approaches that effectively promote special populations' attendance and involvement in AA.

There are other gaps in the research on outcomes of AA in special populations. For example, we have yet to study the outcomes of some racial and ethnic groups (i.e., African-American, American Indian). We have yet to examine even rates of AA attendance and involvement in other racial/ethnic groups (e.g., Asian-Americans) or groups with medical disabilities. Accordingly, we have far to go to answer the questions of if and how special populations use AA, if and how AA practices vary because of differences across populations, and how characteristics of special populations influence the benefits associated with AA attendance and involvement (Tonigan et al., 1998).

We still know only little about the mechanisms of change in AA for special populations. Research is needed to examine explanations of how AA participation benefits outcomes among subgroups. In this regard, Moos and Timko (2008) suggested that the effectiveness of AA in curtailing use of alcohol and other substances is based largely on four key ingredients: (1) support, goal direction, and structure that emphasize abstinence and the importance of strong bonds with family, friends, work, and religion; (2) participation in substance-free social activities; (3) identification with abstinence-oriented role models and a consistent belief system that espouses a substance-free lifestyle; and (4) an emphasis on bolstering members' self-efficacy and coping skills and helping others overcome substance use problems. Possibly, some of these key ingredients apply more to selected special populations than to others (e.g., self-efficacy and coping may derive more benefits for adults than for adolescents), and there may be additional mechanisms that are not covered within these four.

Although studies indicate that special populations consider AA less attractive when it is practiced within the dominant culture (Humphreys & Woods, 1993; Tonigan et al., 1998), we are still lacking the answer to whether homogeneous groups composed of members of a special population (or at least groups dominated by the special population) achieve better outcomes than groups that are heterogeneous (or in which the special population is not dominant). In this regard, one complication in conducting research on special populations is the marked heterogeneity within each subgroup. Special populations are themselves heterogeneous. For example, Hispanic-Americans are

from different countries with different cultures, and women and the elderly vary by education, income, health status, ethnicity, race, and religion. Kelly's (2003) suggestion of the need for more qualitative data regarding special populations' perceptions of and experiences in AA may be especially helpful in terms of understanding differences among sub-populations and their experiences in groups with different mixes of members. Such data may inform efforts of treatment programs to effectively refer patients to AA and other twelve-step groups (Timko & DeBenedetti, 2007).

To date, studies of AA in special populations have focused mainly, although not exclusively, on alcohol- or drug use-related outcomes. The field needs more consideration of other outcomes such as those related to employment or school, family and social functioning, psychological symptoms, coping strategies, and legal outcomes. In addition, it would be useful to examine the extent to which health-risk behaviors and harm to self and others are reduced in concert with AA participation among special populations as well as mainstream groups. Possibly, encouragement of AA participation in health care and other systems and AA utilization by special populations will reduce reliance on costly health care services for addictions.

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How and Why Twelve-Step Self-Help Groups Are Effective

Rudolf H. Moos

Self-help and mutual support groups are a key component of the system of informal care for individuals with substance use and psychiatric disorders. In fact, almost 80% of adults who seek help for alcohol dependence participate in Alcoholics Anonymous (AA) (Dawson, Grant, Stinson, & Chou, 2006); such participation appears to improve the likelihood of achieving and maintaining remission and reduce the need for further professional care. Moreover, many providers of substance use disorder (SUD) services have adopted twelve-step techniques in treatment, and most of them refer patients to self-help groups (SHGs) (Magura, 2007).

Accordingly, more information is needed about the association between participation in twelve-step SHGs and SUD outcomes and the active ingredients or social processes that may account for the effects of twelve-step SHGs. These issues are addressed here by reviewing some evidence for the effectiveness of twelve-step SHGs, describing four theories that specify social processes involved in the development of and remission from SUDs, and, guided by these theories, considering research that identifies likely active ingredients of SHGs. These theories are then employed to focus on the probable active ingredients involved in selected psychosocial treatments for SUDs and to propose the idea

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that these ingredients are conceptually comparable to those that underlie the effectiveness of twelve-step SHGs in general, and AA in particular.

1. Participation in Self-Help Groups and Substance Use Outcomes

Individuals with SUDs who participate in twelve-step SHGs tend to experience better alcohol and drug use outcomes than do individuals who do not participate in these groups. The most common index of participation has been attendance at group meetings; however, recent attention has focused on aspects of involvement that reflect some active ingredients of SHGs, such as the support and structure obtained from interacting with a sponsor, the goal direction involved in reading twelve-step literature and working the steps, and the rewards that accrue from doing service work, becoming a sponsor, and helping other individuals in need.

1.1. Attendance and Substance Use Outcomes

Several prospective studies have shown that SHG attendance is associated with good substance use outcomes. Project MATCH was a large clinical trial that compared the outcome of twelve-step facilitation, cognitive-behavioral, and motivational enhancement treatment for patients with alcohol use disorders. Patients who attended AA more often in each 3-month interval after treatment were more likely to maintain abstinence from alcohol in that interval. In addition, more frequent AA attendance in the first 3 months after treatment was related to a higher likelihood of abstinence and fewer alcohol-related consequences in the subsequent 3 months; these findings held for patients in each of the three types of treatment (Tonigan, Connors, & Miller, 2003).

Comparable results have been obtained in several other studies. The findings hold for patients with alcohol use disorders after inpatient treatment, day hospital treatment, and outpatient treatment, as well as for patients in continuing telephone care (for a review, see Moos & Timko, 2008). In a study of patients who were treated in inpatient and/or outpatient care, more SHG attendance in months 1–6, 13–18, 19–24, and 25–30 consistently predicted less frequent alcohol use in the subsequent 6 months (McKay et al., 2005).

1.1.1. Patients with Different SUD Diagnoses

The association between SHG attendance and better outcomes holds for patients with different SUD diagnoses. Among patients with alcohol and/or drug use disorders, those who attended more twelve-step SHGs in the 3 months prior to a 1-year follow-up were more likely to be abstinent than were those who attended fewer meetings or did not attend at all (Moos, Schaefer, Andrassy, & Moos, 2001). The association between SHG attendance and better substance use outcomes has also been noted among patients with cocaine use disorders

(Etheridge, Craddock, Hubbard, & Rounds-Bryant, 1999; McKay, Merikle, Mulvaney, Weiss, & Koppenhaver, 2001).

According to Witbrodt and Kaskutas (2005), individuals who attended more twelve-step group meetings in the first 6 months after seeking treatment were more likely to be abstinent at a 6-month follow-up; those who attended more meetings in the subsequent 6 months were more likely to be abstinent at a 12-month follow-up. Comparable findings were obtained for patients with alcohol use disorder diagnoses only, patients with drug use disorder diagnoses only, and patients with both drug and alcohol use disorder diagnoses.

1.1.2. Sustained Participation

Individuals who continue to attend SHGs over a longer interval are more likely to maintain abstinence than are individuals who stop attending. For example, patients with drug use disorders who participated in twelve-step groups at least weekly at 6-month and 24-month follow-ups were more likely to maintain abstinence from drugs and alcohol than were those who attended less frequently or not at all (Fiorentine, 1999). In another study, continuous SHG attendance, as reflected by participation in 6 or more meetings in the prior 6 months, was associated with better concurrent alcohol and drug use outcomes at both 6-month and 30-month follow-ups. In addition, 6-month attendance was associated with better 30-month outcomes. Individuals who discontinued group attendance or who attended intermittently reported substance use levels that were similar to those of individuals who reported no regular attendance (Kissin, McLeod, & McKay, 2003).

In a 5-year follow-up of individuals with alcohol use disorders, Kaskutas and colleagues (2005) found that 43% of those who limited their attendance at AA mainly to the year after treatment entry were abstinent, compared to about 75% of those who maintained stable annual attendance for at least 3 years after treatment entry. Moreover, a prospective study of individuals with alcohol use disorders showed that a longer duration of AA attendance in the first year after seeking help was associated with a higher likelihood of 1-year, 8-year, and 16-year abstinence. After controlling for the duration of AA attendance in year 1, the duration of attendance in years 2–3 and 4–8 was related to a higher likelihood of 16-year abstinence. Thus, individuals who continued to attend AA regularly over the long term experienced better substance use outcomes than those who did not (Moos & Moos, 2006).

1.2. Involvement and Substance Use Outcomes

Attendance is an important indicator of participation, but it may not adequately reflect an individual's level of group involvement, as shown by such indices as number of steps completed, acceptance of twelve-step ideology, and obtaining and becoming a sponsor. These and related aspects of involvement

may reflect some of the active ingredients that are responsible for positive SHG outcomes.

In support of this idea, individuals who were more accepting of twelve-step ideology, especially belief in the value of lifelong attendance at twelve-step meetings and the need to surrender to a "higher power," were more likely to attend twelve-step meetings at least weekly. Belief in twelve-step ideology, specifically the idea that non-problematic drug use was not possible, was associated with abstinence independent of twelve-step group attendance (Fiorentine & Hillhouse, 2000b). In Project MATCH, AA attendance, the number of steps completed, and self-identification as an AA member were most closely associated with abstinence. The composite of these three items was more highly related to abstinence than was attendance by itself (Cloud, Ziegler, & Blondell, 2004).

In a study of treatment for individuals with cocaine use disorders, active twelve-step involvement in a given month predicted less cocaine use in the next month. Moreover, patients who increased their twelve-step involvement in the first 3 months of treatment had better cocaine and other drug use outcomes in the next 3 months. Patients who regularly engaged in twelve-step activities but attended meetings inconsistently had better drug use outcomes than patients who attended consistently but did not regularly engage in twelve-step activities (Weiss et al., 2005). Because involvement in SHGs may reflect key active ingredients that enhance behavior change, it may be more closely associated with substance use outcomes than is attendance per se.

2. Theory-Based Explanations of Self-Help Group Outcomes

There is remarkable generality in the association between participation in twelve-step SHGs and better substance use outcomes, which holds for individuals with alcohol and/or drug use disorders; individuals who have both substance use and psychiatric disorders; and women, youth, and older adults (Moos & Timko, in press). This compelling evidence highlights the need to identify active ingredients that may account for the effects of twelve-step SHGs. We turn to this issue here by describing four theories that identify social processes that may protect individuals against the initiation and development of substance use problems and facilitate their resolution. These theories specify protective social processes in several life domains, such as families and friendship networks (Moos, 2006); these processes may encompass the key reasons for the effectiveness of SHGs.

2.1. Social Control Theory

According to social control theory, strong bonds with family, friends, work, religion, and other aspects of traditional society motivate individuals to engage in responsible behavior and refrain from substance misuse and

other deviant pursuits. These bonds encompass monitoring or supervision and directing behavior toward acceptable goals and pursuits. When such social bonds are weak or absent, individuals are less likely to adhere to conventional standards and tend to engage in undesirable behavior, such as the misuse of alcohol and drugs. The main cause of weak attachments to existing social standards is inadequate monitoring and goal direction, including families that lack cohesion and structure, friends who espouse deviant values, and lack of supervision and vigilance in work and social settings (Hirschi, 1969).

2.2. Social Learning Theory

According to social learning theory, substance use originates in the substance-specific attitudes and behaviors of the adults and peers who serve as an individual's role models. Modeling effects begin with observation and imitation of substance-specific behaviors, continue with social reinforcement for and expectations of positive consequences from substance use, and culminate in substance use and misuse (Maisto, Carey, & Bradizza, 1999). In essence, this theory proposes that substance use is a function of positive norms and expectations about substances and family members and friends who engage in and model substance use. Observing parents and peers use alcohol and drugs can instill positive expectancies for the effects of these substances and provide models that show how to obtain and use them.

2.3. Behavioral Economics or Behavioral Choice Theory

Behavioral economics or behavioral choice theory focuses specifically on involvement in protective activities. The key element of the social context in behavioral choice theory is the alternative rewards provided by activities other than substance use. These rewards can protect individuals from exposure to substances and opportunities to use them, as well as from maintaining and escalating substance use. The theory posits that effective access to rewards through engagement in educational, work, religious, and social/recreational pursuits lessens the likelihood of choosing an alternative rewarding behavior, such as substance use (Bickel & Vuchinich, 2000). For example, physical activity and substance use may both elevate mood and decrease anxiety, which may make them functionally similar and substitutable. Involvement in physical activities also encompasses social affiliation with individuals who do not use alcohol or drugs and reinforces the decision to refrain from using these substances.

2.4. Stress and Coping Theory

Stress and coping theory posits that stressful life circumstances emanating from family members and friends, work, and financial and other problems lead to distress and alienation and eventually to substance misuse (Kaplan, 1996). Family stressors, such as physical and sexual abuse, continual conflict, and

Theory	Processes
1. Social Control	Bonding or cohesion/support
	Goal direction (from family, friends, work, religion)
	Structure or monitoring
2. Social Learning	Observation and imitation of family/peer/community norms and models
	Expectations of positive and negative consequences
3. Behavioral Choice	Involvement in protective activities (effective rewards from family, friends, work, religion, physical activity)
4. Stress and Coping	Identifying high-risk situations and stressors
	Building self-efficacy and self-confidence
	Developing effective coping skills

Table 1. Key Processes of Social Control, Social Learning, Behavioral Choice, and Stress and Coping Theories

lack of cohesion and structure, create alienation and distress. Life stressors may also generate anxiety by challenging an individual's desired self-image, such as when problems in the family or at work arouse doubts about self-competence. The theory assumes that stressors are most likely to impel substance use among impulsive individuals who lack self-confidence and coping skills and try to avoid facing their problems. For these individuals, substance use is a form of avoidance coping that involves self-medication to reduce alienation and depression, which, if successful, reinforces substance use.

The key elements of social control theory involve bonding or support and the provision of goal direction and structure or monitoring (Table 1). The most important aspects of social learning theory are observation and imitation of family and social norms and models and the formation of expectations about substance use. The salient elements of behavioral choice theory are fostering involvement in traditional activities that provide relevant rewards and protect individuals from temptation to use and misuse substances. Stress and coping theory focuses heavily on the development of self-confidence and coping skills to manage high-risk situations and general life stressors. In the following section, we consider the extent to which effective SHGs rely on the social processes associated with these four theories.

3. Probable Active Ingredients of Self-Help Groups

Consistent with social control theory, SHGs provide support, goal direction, and structure by espousing positive social values and the importance of strong bonds with family, friends, work, and religion. Following social learning and stress and coping theories, these groups highlight the importance of identifying with abstinence-oriented role models and bolstering members'

self-efficacy and coping skills. Consistent with behavioral economics, they focus on engagement in rewarding pursuits, such as substance-free social activities and helping others overcome substance use problems.

3.1. Support, Goal Direction, and Structure

SHGs can be characterized by three sets of underlying dimensions. Relationship dimensions reflect the quality of interpersonal relationships and encompass the level of group cohesion and support. Goal orientation dimensions reflect the key areas in which a group encourages personal growth, such as responsibility and independence, self-discovery, and spirituality. System maintenance dimensions cover the extent to which a group embodies clear expectations and provides effective structure or monitoring of individual beliefs and behavior. These three sets of dimensions reflect active ingredients that can bolster a group's influence on members' outcomes (Moos, 1994).

Given their goals and traditions, well-implemented twelve-step SHGs should promote cohesion and support by their emphasis on bonding among members, building community, and members' common welfare. Moreover, such groups have a specific sense of purpose provided by the twelve steps and traditions; thus, well-implemented groups should be relatively goal-directed and well organized. Because members relate their personal stories, there should be an emphasis on self-discovery; however, since members seldom discuss their feelings about one another (cross-talk is discouraged), expressiveness and the open display of anger should be played down.

In the only study that directly assessed these aspects of twelve-step groups, Montgomery, Miller, and Tonigan (1993) found that four AA groups had moderate to high emphasis on the relationship dimensions (cohesion and expressiveness), specific aspects of goal direction (independence, self-discovery, and spirituality), and organization. Recovery groups for individuals with psychiatric disorders tend to establish a supportive, goal-directed, and well-organized social climate oriented toward members' personal growth. In general, members of groups with these active ingredients tend to report more satisfaction and well-being and to experience better outcomes (Moos, 1994).

Group cohesion and goal direction tend to strengthen group members' social networks and overall support. Accordingly, individuals who are more involved in twelve-step groups often have a larger number of close friends and more support from their friends. For example, patients with SUDs who were more involved in twelve-step groups reported sharper increases between baseline and a 1-year follow-up in the size and frequency of contact with friends, and better relationships with their friends. Compared to social networks composed mostly of non-twelve-step members, social networks composed mostly of twelve-step group members were larger, better integrated, and more supportive (Humphreys & Noke, 1997).

Individuals with both substance use and psychiatric disorders confront multiple challenges during recovery. Accordingly, social support may be a more

important active ingredient in groups for dually diagnosed individuals than in traditional twelve-step groups. In a study of Double Trouble in Recovery, members who participated in the group more regularly enjoyed higher levels of social support and were less likely to use substances during the following year. More social support was associated with less substance use in the following year. Moreover, higher levels of group support explained part of the association between participation in the group and less subsequent substance use (Laudet, Cleland, Magura, Vogel, & Knight, 2004)

3.2. Abstinence-Oriented Norms and Role Models

Social control and social learning theories merge in their emphasis on the importance of abstinence orientation, which reflects a dominant goal direction and key active ingredient of twelve-step groups. Thus, as expected, individuals who are more involved in twelve-step groups tend to have more friends who abstain from alcohol and drugs and provide abstinence-specific support. Compared to baseline, at a 1-year follow-up, patients with SUDs who were more involved in twelve-step groups after acute treatment reported more friends who refrained from alcohol or drugs and friends who were more likely to support abstinence and recovery. Friends' support for abstinence explained part of the relationship between twelve-step group involvement and reduced substance use (Humphreys, Mankowski, Moos, & Finney, 1999; Humphreys & Noke, 1997). Moreover, more contact with a sponsor and more twelve-step friends have been associated with a higher likelihood of SUD patients' abstinence 2 years after discharge from an acute episode of care (Kelly, McKellar, & Moos, 2003).

One key active ingredient of SHGs is abstinence-oriented support, which tends to shield individuals from the potential negative influence of their substance using friends. In this vein, clients whose social networks were highly supportive of drinking at treatment entry, but who attended AA regularly, were more likely to be abstinent and to drink less heavily on drinking days at a 3-year follow-up (Longabaugh, Wirtz, Zweben, & Stout, 2001). Similarly, Kaskutas and colleagues (2005) identified a group of individuals who attended AA frequently and were able to maintain abstinence, even though they had several heavy drinkers and drug users in their social network.

In a 3-year longitudinal study, more AA-based support for reducing drinking, a higher percentage of friends who encouraged reduced drinking, and a lower percentage who were heavy or problem drinkers predicted abstinence at both 1-year and 3-year follow-ups. Compared to individuals who did not have AA-based support, those who obtained such support between the two follow-ups were more likely to be abstinent at 3 years. In contrast, individuals who moved from AA-based support at the 1-year follow-up to non-AA-based support or no support for reducing drinking at 3 years were less likely to be abstinent than were individuals who had AA-based support on both occasions.

AA-based support mediated or explained part of the relationship between AA involvement and abstinence (Bond, Kaskutas, & Weisner, 2003).

In a 5-year follow-up of this sample, Kaskutas and colleagues (2005) found that individuals who maintained stable AA attendance were more likely to have a sponsor, read AA literature, and report a spiritual awakening than were individuals with low or declining attendance. In addition, individuals with stable AA attendance had about twice the number of friends who supported cutting down or quitting drinking than did individuals with low and declining attendance. Consistent with this finding, individuals in the medium and high affiliation groups had the highest abstinence rates at the 5-year follow-up. Importantly, some individuals who had AA-based support were likely to be abstinent even when they had substance users in their social network, indicating that such support may counter long-standing friends' pro-use social influences.

3.3. Engagement in Rewarding Activities

Another active ingredient of SHGs involves their role in engaging members in rewarding substance-free social pursuits, such as varied types of group meetings, parties, and community activities. Members who are more involved in meetings and other group-related activities, such as doing service and becoming a sponsor, are more likely to achieve and maintain abstinence (e.g., Bond et al., 2003). Involvement in rewarding community organizations, such as religious groups, veterans' groups, and educational organizations, has also been associated with a higher likelihood of successful abstinence. In fact, community involvement predicted 1-year abstinence among drug-dependent individuals independent of attendance at SHGs and being a sponsor (Crape, Latkin, Laris, & Knowlton, 2002).

SHGs also provide members an opportunity to help other individuals in need, which tends to increase the helper's sense of purpose and personal responsibility, rewards for remaining sober, and commitment to recovery. Individuals who engage in more helping during treatment by providing moral support and sharing experiences about keeping sober and other problems are more likely to become involved in twelve-step groups and to achieve abstinence. Helping others during treatment and involvement in twelve-step groups after treatment may also play a role in preventing binge drinking among individuals who continue to drink (Zemore, Kaskutas, & Ammon, 2004).

In a prospective study based on data drawn from Project MATCH, Pagano and colleagues (2004) found that recovering individuals who became sponsors or were otherwise engaged in helping other alcoholics were less likely to relapse in the following year. A total of 40% of individuals who were helping others remained abstinent in the year after treatment, whereas this was true of only 22% of those not engaged in helping. Similarly, compared to dually diagnosed individuals who were less involved in sharing at group meetings and helping

other members, those who were more involved in these activities were more likely to attain abstinence (Magura, et al., 2003).

Sponsors provide other members with support and direction, twelve-step instruction, tips to help promote abstinence and improve relationships, and peer counseling and crisis intervention. Engaging in these helping activities can improve the sponsor's self-esteem and social standing, strengthen the sponsor's social network, and provide a model of successful commitment to live a sober lifestyle. Accordingly, SHG members who become sponsors are more likely to maintain abstinence than those who do not (Crape, Latkin, Laris, & Knowlton, 2002). Thus, the rewards obtained from becoming a sponsor and helping other members appear to be important active ingredients of SHGs.

3.4. Building Self-Efficacy and Coping Skills

The active ingredients of SHGs reviewed thus far tend to enhance motivation for recovery, self-efficacy to resist substance use, and effective coping skills. In addition, SHGs encompass a direct emphasis on building members' commitment and competence in these areas.

3.4.1. Self-Efficacy and Motivation

Affiliation with AA tends to be associated with increases in members' self-efficacy and motivation for abstinence. For example, in a 16-year follow-up of initially untreated individuals with alcohol use disorders, a longer duration of participation in AA in the zfirst year after initiating help-seeking was associated with more self-efficacy to resist drinking in high-risk situations at 8-year and 16-year follow-ups. In turn, self-efficacy at 1 year was associated with less alcohol consumption and fewer drinking problems at 16 years (Moos & Moos, 2006, 2007).

Similarly, an analysis of data from Project MATCH showed that participation in AA was positively related to self-efficacy to avoid drinking. Self-efficacy predicted a higher likelihood of abstinence and explained part of the association between participation in AA and abstinence (Connors, Tonigan, & Miller, 2001). In addition, AA attendance at 6 months post-treatment predicted self-efficacy at 9 months, which predicted abstinence at 15 months. Self-efficacy to avoid drinking explained part of the effect of AA attendance on abstinence for both less severe (Type A) and more severe (Type B) alcoholic individuals (Bogenschutz, Tonigan, & Miller, 2006).

In a study that assessed patients in twelve-step treatment during treatment and at 1-month and 6-month follow-ups, Morgenstern and colleagues (1997) focused on several common change factors, including self-efficacy, commitment to abstinence, the appraisal of harm due to substance use, and active cognitive and behavioral coping. More affiliation with AA in the month after treatment was associated with increases in each of these common change factors and with better 1-month and 6-month substance use outcomes. In addition,

these common change factors appeared to explain all of the effect of AA affiliation on 6-month substance use outcomes. These findings are consistent with the idea that AA contributes to better substance use outcomes by enhancing commitment to and self-efficacy for abstinence, sustaining belief in the harm caused by substance use, and promoting reliance on problem-solving coping.

3.4.2. Coping Skills

Affiliation with twelve-step SHGs strengthens reliance on specific coping responses directed toward reducing substance use. For example, individuals who are more involved in AA are more likely to rely on coping skills directed toward controlling substance use, such as spending time with non-drinking friends, seeking advice about how to resolve their drinking problems, and rewarding themselves for trying to stop drinking (Snow, Prochaska, & Rossi, 1994). The active ingredients of SHGs that foster improvement in coping skills likely include modeling of substance use refusal skills, ideas about how to manage relapse-inducing situations, and practical advice for coping with craving.

Participation in SHGs is also associated with improvements in general coping skills, that is, increases in approach coping and declines in avoidance coping (Morgenstern, Labouvie, McCrady, Kahler, & Frey, 1997). In a 3-year follow-up of individuals who sought help for alcohol-related problems, Humphreys, Finney, and Moos (1994) found that those who attended AA tended to rely more on approach and less on avoidance coping. In another study, individuals who were more involved in twelve-step groups increased more in positive reappraisal and problem-solving coping; these approach coping responses explained part of the effect of involvement in these groups on the reduction of substance use (Humphreys, Mankowski, Moos, & Finney, 1999).

SHGs also bolster dually diagnosed individuals' coping skills, in part by providing an opportunity to share information, engage in reciprocal learning, and acquire new attitudes and skills from role models. For example, patients with SUDs and PTSD who were more involved in twelve-step groups during treatment relied more on positive reappraisal and problem-solving coping and less on emotional discharge coping at discharge (Ouimette, Ahrens, Moos, & Finney, 1998). In a study that focused on the active ingredients of Double Trouble in Recovery, members who engaged more in mutual learning and modeling by sharing information and developing new attitudes and skills were more likely to be abstinent at a 1-year follow-up (Magura, et al., 2003).

4. Probable Active Ingredients of Effective Psychosocial Treatments

We turn now to consider the idea that the probable active ingredients of effective psychosocial treatments for SUDs are associated with the four theories reviewed earlier and are conceptually comparable to the active ingredients that underlie the effectiveness of twelve-step SHGs. In this regard, twelve-step facilitation treatment (TSF), motivational enhancement therapy (MET),

cognitive—behavioral treatment (CBT), and community reinforcement approaches (CRA) appear to be effective treatments for SUDs (Finney, Wilbourne, & Moos, 2007). The likely active ingredients of these treatments include (a) support, structure, and goal direction; (b) abstinence-oriented norms and models; (c) engagement in rewarding activities that can replace substance use; and (d) building self-efficacy and coping skills (Moos, 2007a).

4.1. Support, Goal Direction, and Structure

Consistent with social control theory, effective treatment is characterized by counselor–client cohesion and support, moderate structure, and goal-directedness oriented toward achieving clients' objectives. The quality of the alliance or bonding between client and counselor is consistently associated with treatment outcome. When a stronger helping relationship is established, clients are more likely to complete treatment, actively explore problems, experience less distress and more pleasant mood, abstain from alcohol and drugs during treatment, and achieve better long-term substance use outcomes (Lebow, Kelly, Knobloch-Fedders, & Moos, 2006).

With respect to goal direction and structure, patients of therapists who adhere more closely to a theory of treatment—be it TSF, CBT, or a supportive- expressive orientation—tend to experience better treatment outcome (Luborsky, McLellan, Woody, O'Brien, & Auerbach, 1985). In residential and group treatment, more emphasis on goals, such as enhancing patients' independence and self-understanding, and greater clarity and organization are associated with more positive reactions to treatment and better outcomes (Moos, 1997; Moos, Moos, & Andrassy, 1999).

The most prevalent psychosocial models of effective treatment emphasize these three sets of active ingredients (McCrady & Nathan, 2006). TSF provides support, structure, and goal direction by, for example, focusing on helping clients admit that they have a substance use problem and accept an alcoholic or addict identity and emphasizing the importance of reading twelve-step materials, working the steps, and choosing abstinence as a treatment goal. In addition, TSF focuses on the value of strong bonds with family, friends, work, and religion.

MET emphasizes the development of an empathic client–counselor relationship; structured, goal-directed attempts to activate clients' motivation and commitment for change; and clarifying and rewarding clients' pro-social values. CBT and CRA emphasize these aspects of social control theory by noting that the counselor needs to be supportive, structured, and goal-directed. These treatments also focus on teaching communication skills to increase family cohesion and resolve marital and family conflicts and on ongoing monitoring with behavioral change agreements and/or sobriety contracts that provide supervision to deter substance use.

4.2. Abstinence-Oriented Norms and Role Models

TSF focuses heavily on accepting abstinence-oriented norms, identifying with individuals in recovery, and learning from role models in an abstinence-oriented social network. CBT and CRA are based primarily on social learning theory, especially the idea that substance misuse is influenced by positive expectancies about the effects of substances and by family members' and friends' norms and behavior. Accordingly, these treatments focus on reducing clients' positive expectancies for substance use and on role models who serve as monitors to help affected family members maintain sobriety. MET incorporates these ingredients by providing clients with feedback about the risk and consequences of substance misuse and about clients' behavior in relation to personal and social norms (Miller & Rollnick, 2002).

4.3. Engagement in Rewarding Activities

Consistent with behavioral choice theory, TSF highlights the value of lifestyle changes and the alternative rewards that flow from involvement in SHGs and remaining abstinent, from participation in substance-free social activities, and from helping others overcome their substance use problems. Similarly, MET uses selective reinforcement to activate and capitalize on clients' motivation and commitment for change, affirm clients' strengths and help them resolve their ambivalence about change, and promote behavior consistent with clients' values.

CBT and CRA reflect elements of behavioral choice theory by including interventions to help plan enjoyable substance-free social pursuits and to teach non-affected family members how to reward harm reduction and abstention. CRA focuses most directly on changing clients' life contexts to provide rewards to compete with substance use by, for example, involvement in positive family relationships, activities with individuals who encourage sobriety, and placement in challenging jobs.

4.4. Building Self-Efficacy and Coping Skills

Consistent with stress and coping theory, TSF emphasizes enhancing clients' sense of self-efficacy and skills to cope with relapse-inducing situations and enabling clients to practice sober behavior (Morgenstern & McCrady, 1992). These aspects of TSF result in improvements in coping and self-efficacy that are comparable to those that occur with CBT (Finney, Noyes, Coutts, & Moos, 1998). One of the fundamental goals of MET is to enhance clients' self-efficacy and coping skills. By grounding the intervention in the client's perspective, affirming clients' strengths, and eliciting their ideas about change, MET supports clients' autonomy and responsibility for change.

CBT and CRA are heavily based on stress and coping theory and the idea that life stressors are likely to impel substance use among individuals

who have low self-efficacy and poor coping skills and who try to avoid experiencing distress and alienation. These treatments focus primarily on building clients' self-confidence to resist substance misuse, improve their skills to manage high-risk situations and life stressors, and develop communication and problem-solving abilities. Overall, patients' coping skills and self-efficacy tend to improve during treatment and to be associated with better treatment outcomes (Chung, Langenbucher, Labouvie, Pandina, & Moos, 2001; Moggi, Ouimette, Finney, & Moos, 1999).

5. Conclusions and Future Directions

After reviewing selected studies that support the effectiveness of twelve-step SHGs, we described four related theories that specify common social processes that appear to underlie the probable active ingredients of SHGs and effective psychosocial treatments for SUDs. These active ingredients are bonding, goal direction, and structure; abstinence-oriented models and norms; involvement in rewarding activities other than substance use; and building self-efficacy and effective coping skills. In addition to the need to formulate integrated measures of these active ingredients and to monitor their stability and change over time, a number of other issues remain to be addressed. Four such issues are described here.

5.1. Personal Factors that Moderate Active Ingredients

Some individuals may be especially open to the influence of the active ingredients, whereas others may either resist or not benefit from them. For example, compared to men, women may be more responsive to the support, goal direction, and structure involved in SHGs, and they may benefit more from abstinent role models and an emphasis on rewarding social activities and building self-esteem and coping skills.

Spirituality/religiosity may also be associated with enhanced involvement in and amenability to the active ingredients of twelve-step groups, perhaps because more spiritual/religious individuals are better able to acknowledge their internal experiences and to engage in adaptive behavior when they confront cravings. In fact, there is some evidence that spirituality/religiosity predicts this type of acceptance-based responding, which, in turn, is associated with increased twelve-step group involvement (Carrico, Gifford, & Moos, 2007).

More information is needed about the extent to which substance-related and psychiatric impairment is associated with differential response to the active ingredients. For example, more impaired Type B alcoholic individuals may affiliate and benefit more from the support and structure of SHGs than less impaired Type As, perhaps because this provides them with the personal and social resources they need to sustain remission. Less impaired Type A alcoholic individuals have more resources and may be less dependent on external

SHG support and structure to sustain good outcomes (Morgenstern, Kahler, & Epstein, 1998). In contrast, depressed individuals may have interpersonal problems that make it harder to acquire and relate to a sponsor who will provide support, goal direction, and structure and to participate in rewarding social activities (Kelly, McKellar, & Moos, 2003).

5.2. Active Ingredients of SHGs and Treatment

Many individuals who participate in SHGs have also been in treatment. These two sources of help may provide independent contributions to better outcomes (Dawson et al., 2006; Fiorentine & Hillhouse, 2000a; Magura, 2007); however, they could sometimes inhibit or detract from each other. Participation in professional treatment, especially TSF, tends to increase the likelihood that individuals will affiliate with twelve-step SHGs and obtain benefits from them (Humphreys, Huebsch, Finney, & Moos, 1999). Do these findings hold as strongly for patients who have been in MET or CBT (Tonigan, Connors, & Miller, 2003)? Do they hold for patients who affiliate with SHGs that espouse different principles than those of AA, such as Women For Sobriety or Moderation Management? Are patients treated in more supportive programs or in programs that emphasize a spiritual orientation more likely to affiliate with and benefit from twelve-step groups, as some preliminary findings have suggested (Kelly & Moos, 2003; Mankowski, Humphreys, & Moos, 2001)?

The active ingredients of effective psychosocial treatments for SUDs appear to be comparable to those that underlie the benefits of SHGs. Does participation in treatment models that emphasize the same active ingredients as SHGs bolster the benefit of both of these modalities of help? When treatment does not emphasize these active ingredients, can participation in SHGs compensate for the lack of effective treatment? Can participation in twelve-step groups compensate for low-intensity treatment, as suggested by the finding that group attendance during treatment was associated with better substance use outcomes among patients treated in low service intensity programs but not among patients treated in high service intensity programs (Timko & Sempel, 2004)?

5.3. Potential Detrimental Effects of Active Ingredients

Most of the literature in this area has focused on the benefits of SHGs, but there also are some criticisms of these groups, especially AA. Issues that have been raised include the potential for coerced meeting attendance, enforced group cohesion that restricts independence and encourages conformity, psychological harm due to the emotional intensity of group discussions, encouragement of a sick-role identity by convincing individuals that they have a disease and lifelong addiction, and problems associated with the emphasis on powerlessness, especially for women (Granfield & Cloud, 1996; Kaskutas, 1994; Laudet, 2003).

These points highlight the possibility of negative effects of group participation; however, it appears that only one study has noted such effects. According to Ouimette and colleagues (2001), among PTSD patients who assumed an alcoholic/addict identity, SHG participation was associated with less subsequent distress. In contrast, for patients who did not self-identify as an alcoholic/addict, SHG participation was associated with more subsequent distress. More generally, if we believe that SHGs have curative power and contribute to individuals' improvement, we must consider the idea that, at times, SHGs also have detrimental effects and may contribute to the exacerbation of substance use and/or psychiatric symptoms.

In this vein, between 7% and 15% of patients who participate in psychosocial treatment for SUDs may be worse off subsequent to treatment than before. In addition, several controlled trials of substance use prevention have shown apparent iatrogenic effects, including more positive expectations about substance use and a rise in substance use and substance-related problems. Probable intervention-related predictors of deterioration include lack of emphasis on the active ingredients described earlier, that is, lack of bonding and monitoring, lack of goal direction as reflected in low or inappropriate expectations, and lack of challenge; confrontation and criticism rather than support; modeling deviant or problem behavior rather than abstinence; and the expression of stigma rather than building self-confidence (Moos, 2005). We need to specify the prevalence of comparable problems in SHGs.

5.4. Active Ingredients and Other Aspects of the Recovery Milieu

The active ingredients that characterize SHGs are closely related to active ingredients in other social contexts in the recovery environment, such as family, friends, and the workplace. One example cited earlier is that exposure to SHGs and their abstinence-oriented norms and models may counteract the potential negative effects of friends who use substances. More broadly, the active ingredients associated with the benefits of SHGs and treatment may also be largely responsible for the long-term process of remission and relapse.

In this vein, four sets of social processes enhance the development of personal and social resources that protect individuals against the re-emergence of substance use and abuse. These processes involve social bonding and monitoring, modeling and abstinence orientation, involvement in fulfilling activities, and building self-esteem and coping skills. Family members who strengthen social bonds, goal direction, and monitoring by maintaining a cohesive and well-organized family, bolster abstinence-oriented norms and models, promote engagement in traditional social and recreational pursuits, and build recovering individuals' self-efficacy and coping skills raise the likelihood of stable remission. Similarly, friends and peers who employ assertive guidance and monitoring, communicate traditional social values, and engage individuals in rewarding activities tend to have a positive influence on recovery (Moos, 2007b).

These ideas point to the need for integrative studies to find out how much the influence of SHGs on remission depends on the same social processes that underlie the beneficial effects of families and social networks. How much synergy and added value is there when recovering individuals obtain support and structure from both SHGs and family members? Alternatively, how well can support and structure obtained in SHGs compensate for a lack of cohesion and monitoring in other aspects of an individual's social network? Comparable questions arise with respect to abstinence-oriented norms and models, engagement in rewarding activities, and building self-confidence and coping skills. We need to understand the extent to which the curative social processes and protective factors that underlie the resolution of addictive problems are common to SHGs, formal treatment, and relationships with family members and friends.

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Individual and Contextual Factors That Influence AA Affiliation and Outcomes

Michael P. Bogenschutz

1. Introduction

1.1. Scope of the Chapter

This chapter addresses the role of various factors moderating (1) affiliation with AA and (2) the effects of AA on substance use and other outcomes. These may include personal characteristics as well as environmental and situational factors. Meta-analyses indicate that there is substantial variation in twelve-step involvement and outcomes among studies, depending at least in part on characteristics of the sample (Tonigan, Toscova, & Miller, 1996). To some extent, the relevant personal characteristics may overlap with those discussed in the preceding chapter on special populations. It is important to note that the factors that affect AA affiliation, and the effects of these factors, are not necessarily the same as those that influence the effect of AA affiliation on distal outcomes.

1.2. Methodological Issues

Rigor is required in the definitions of key constructs such as "AA involvement" and "AA affiliation" (Cloud, Ziegler, & Blondell, 2004). A number of studies have shown that measures of AA involvement are stronger predictors of

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abstinence than simple AA attendance (Montgomery, Miller, & Tonigan, 1995). There are multiple measures of involvement that may not be equivalent. To put it another way, the magnitude of the effect of AA participation may vary depending on the measure of participation that is used.

Because AA attendance is essentially voluntary under most circumstances, self-selection bias is a potential for most prospective studies looking at the effects of AA attendance. Attendees and non-attendees may differ not only with respect to observed characteristics, which can be statistically controlled for in principle but may also with respect to non-observed characteristics which could potentially account for the apparent effects of AA attendance (Fortney, Booth, Zhang, Humphrey, & Wiseman, 1998).

A wide range of study designs have been used to investigate the effects of AA. While early studies of AA were mostly cross-sectional, recent years have seen an increase in the number of longitudinal studies. Cross-sectional data are of significant value, particularly with respect to examining trait correlates of AA involvement (e.g., ethnicity, gender, lifetime severity, cognitive impairment), as such fixed attributes can usually be assumed to pre-date AA attendance, implying the possibility of a causal relationship. Although correlations between AA involvement and state attributes (current abstinence, mood) are of interest, less can be said about possible causal relationships because the temporal ordering is unclear. In order to examine effects of AA involvement and potential moderators of these effects, longitudinal studies are essential. In this literature, close attention must be paid to temporal ordering of data and analytic strategies so that the strength of evidence for causality can be assessed (McKellar, Stewart, & Humphreys, 2003). Finally, randomized designs, so useful in studies of pharmacologic and psychosocial treatment modalities, are of more limited value in AA research because AA is by definition a voluntary program and is a form of mutual support rather than professional treatment. However, randomized trails exist of treatment models that emphasize or do not emphasize AA participation (e.g., Project MATCH (Project_Match_Research_Group, 1993)). This allows testing of whether these differing treatment modalities in fact differentially facilitate AA participation and, secondarily, to examine the extent to which AA involvement predicts abstinence across treatments and with respect to other candidate moderating variables.

Large differences exist among samples in the various studies reviewed in this chapter. Types of samples include community samples (representative or non-representative), treatment samples from various forms of treatment (residential, detoxification, psychiatric inpatient, partial hospitalization, day treatment, intensive outpatient, regular outpatient, medical outpatient, etc.), samples recruited from AA meeting attendees, clinical trials of AA-related interventions, and trials of non-twelve-step interventions. These samples also differ considerably with respect to demographic factors such as age, ethnicity, gender, and socioeconomic status, as well as clinical factors such as severity, psychiatric comorbidity, and co-occurring substance use disorders. Because

it may not be valid to generalize across the differing populations that these samples represent, this chapter provides as much details as possible about the samples in the studies reviewed, within the space limitations of the chapter. Some studies do not distinguish between AA and other twelve-step programs. In general, we have included such studies in this review unless the sample in the study was primarily individuals with drug use disorders rather than alcoholics.

2. Factors Affecting AA Affiliation and Outcomes Related to AA Affiliation

2.1. Religiosity and Spirituality

Because the core AA literature defines "recovery" primarily in terms of spiritual change, and because this perspective matches that of many AA members, there has accumulated a large body of work aimed at establishing what relationships exist among dimensions of spirituality and religiousness, measures of AA involvement, and changes in substance use as well as other aspects of recovery outcome (Geppert, Bogenschutz, & Miller, 2007; Tonigan, 2007). Many studies have documented a positive relationship between spirituality/religiosity and twelve-step participation (Emrick et al., 1993). However, the field has been slow to elucidate the causal pathways accounting for this relationship, as well as the significance of this relationship to the beneficial effects of AA. AA exposure is associated with increases in spirituality (Tonigan, 2007), but spiritual experiences and religious beliefs are not necessary to benefit from twelve-step programs (Nealon-Woods, Ferrari, & Jason, 1995). Among AA attendees, length of sobriety and practice of steps 11 and 12 were associated with higher Purpose in Life scores (Carroll, 1993). There is little support for a direct causal role of spiritual or religious change in the beneficial effects of twelve-step participation. In fact, during the first 6 months of treatment, increased spirituality is related to decreased drinking, independent of the effects of AA involvement (Robinson, Cranford, Webb, & Brower, 2007). However, there is some evidence that increases in spirituality may be associated with retention in AA, which in turn is associated with good drinking outcomes (Tonigan, 2007). One recent study in a large VA cohort demonstrated that the effect of spirituality on twelve-step participation was mediated by "acceptancebased responding" (Carrico, Gifford, & Moos, 2007), suggesting that these coping strategies play a role in the decision to attend AA. In Project MATCH, no support was found for the hypothesis that those who are more religious would benefit more from TSF (Connors, Tonigan, & Miller, 2001a).

The primary question concerning spirituality that is relevant to the present chapter is the following: What dimensions of spirituality/religiosity (if any) predict degree of AA involvement and/or the magnitude of benefit associated with AA involvement? With respect to religious belief, atheists and agnostics

are less likely to initiate and sustain AA attendance, but derive similar benefit from AA attendance (Tonigan, Miller, & Schermer, 2002b). Timko et al. examined predictors of AA involvement and moderators of the relationship between AA involvement and abstinence in a sample of 345 outpatients at treatment intake, 281 of whom were followed up to 6 months (Timko, Billow, & DeBenedetti, 2006). In this study, twelve-step involvement was positively correlated with religiosity, but the magnitude of the association between abstinence and AA involvement was greater in those who were less religiously involved at baseline. In another large study of male veterans (n = 3,018), although belief in God as a single item was not a significant predictor of AA involvement, religious beliefs, measured by a six-item scale (Connors, Tonigan, & Miller, 1996), were significantly correlated (r = .24) with twelve-step involvement posttreatment. Thus, the existing data suggest that although religiosity is a predictor of initial AA engagement, independent of treatment, the magnitude of AA benefit is equal or greater in those who are less religious. Little can be said about the effect of other dimensions of spirituality on AA involvement or benefit.

2.2. *Age*

The quantity of data regarding adolescents' engagement in and benefit from AA is quite limited relative to the adult literature. Adolescents are clearly under-represented in AA, with only 1.5% of AA members under age 21 according to the most recent membership survey (Alcoholics Anonymous, 2005). However, the existing data indicate similarities more than differences between adolescents and adults regarding the dynamics of AA involvement and benefit. Post-treatment AA was the strongest predictor of abstinence in a large (n = 2,317) sample of adolescents 6 and 12 months after inpatient treatment (Hsieh, Hoffmann, & Hollister, 1998). Kelly et al. found that greater substance abuse was associated with greater AA attendance and affiliation by adolescents (n = 74) 3 months following inpatient treatment and that AA attendance was positively correlated with abstinence (Kelly, Myers, & Brown, 2002). Timko et al. reported a stronger association between AA attendance and abstinence among younger adult outpatients relative to older adults (Timko et al., 2006). A small study (n=70) comparing adolescents who affiliated with AA post-treatment vs. those who did not found that predictors included previous treatment, nondrug-using friends, less family involvement in treatment, and more feelings of hopelessness (Hohman & LeCroy, 1996). Winters et al. completed a treatment study of a Minnesota model residential or outpatient program in a sample of 245 adolescent drug users (77% of whom were alcohol dependent) (Winters, Stinchfield, Opland, Weller, & Latimer, 2000). Sixty-six of these patients were non-randomly assigned to a wait list, but the wait list patients were not significantly different from those assigned to treatment with respect to age, gender, SES, education, or problem severity. At twelve-month follow-up, abstinent outcomes were reported for 23.4% of the 140 treatment completers, 2.6% of the 39 treatment dropouts, and 3.0% of the wait list patients. In a sample of adolescents in a therapeutic community (n=181), three measures of spirituality were correlated with positive attitudes toward inclusion of twelve-step approaches in the therapeutic community program (Aromin, Galanter, Solhkhah, Bunt, & Dermatis, 2006). Overall, the adolescents endorsed twelve-step approaches less strongly than did adults in therapeutic community in a parallel study.

2.3. Gender

It has been argued that some twelve-step concepts (e.g., powerlessness, making amends) are potentially problematic for women alcoholics who have frequently been traumatized, often by alcoholic men (Downs, Miller, & Gondoli, 1987). AA has been characterized as sexist and reinforcing of the "traditional" subordinate role of women to such an extent that male-dominated AA may actually be harmful (Wilke, 1994). With this background it is critical to examine the empirical literature regarding women's participation in and benefit from AA.

Several publications have described gender-specific results of a large (n=466) study of initially untreated persons with alcohol use disorders, for which follow-up has now extended to 16 years (Moos, Moos, & Timko, 2006; Timko, Moos, Finney, & Connell, 2002). At 8 years, women both participated in AA to a greater extent than did men and also benefited more from AA attendance. At 16 years, women in this study were more likely to participate in AA and benefited more from long-term participation in AA.

In a follow-up study of 212 patients who were stably employed entering treatment, AA attendance during the 12 months after treatment was found not do differ between women and men (Slaymaker & Owen, 2006). Similarly, there were no gender effects on the frequency of having or being an AA sponsor. On the other hand, in a large late-middle-aged community cohort (n = 1,291), a protective effect of AA with respect to alcohol problems was apparently limited to men (Moos, Schutte, Brennan, & Moos, 2004). In a sample of 63 men and 29 women aged 55 and greater, women were found to have non-significantly greater AA attendance during 6 months of follow-up and significantly greater decreases in alcohol use (Satre, Mertens, & Weisner, 2004). Regarding gender effects on efficacy of twelve-step-based treatment, Project MATCH found no significant gender matching effect, but women in the TSF condition in the aftercare arm were *more* likely to attend AA meetings at all time points after 6 months (Del Boca & Mattson, 2001).

Overall, then, there is no consistent pattern of differences in AA participation or benefit that can be attributed to gender.

2.4. Sexual Orientation

It is reasonable to ask whether there are special issues pertaining to AA that have to do with sexual orientation. Issues of inclusion/exclusion, stigma/

homophobia, dynamics of AA sponsorship, patterns of substance use, social networks, and HIV could all potentially have an impact on AA involvement. An ethnographic study of 35 lesbian AA members identified three areas of tension related to AA membership (Hall, 1994). These involved conflict around assimilation, submission to authority, and degree of political consciousness and activity. Issues for gay men have also been discussed (Kus, 1987). At this point, there do not seem to be empirical data that speak to these issues.

2.5. History, Type, and Setting of Treatment

Given that twelve-step involvement is associated with improved drinking outcomes, it is important to know whether treatment in general or particular forms of treatment are associated with greater rates of twelve-step engagement. One of the primary hypothesized mechanisms of action of twelve-step-oriented treatments is the facilitation of such engagement. Data from Project MATCH confirm that there was greater AA involvement in patients receiving twelvestep facilitation therapy (Carroll et al., 1998). Although TSF participants continued to have greater AA involvement at 3-year follow-up, MET and CBT participants also showed significant rates of AA involvement, with 90-day AA attendance rates of 58%, 45%, and 39% for TSF, MET, and CBT, respectively (Owen et al., 2003). In an outcome study of 3018 veterans in various forms of substance abuse treatment, patients treated in twelve-step-oriented and eclectic programs had greater rates of twelve-step participation after treatment than those participating in cognitive behavioral programs (Humphreys, Huebsch, Finney, & Moos, 1999). Furthermore, the strength of the relationship between twelve-step participation and clinical outcomes was stronger in patients who attended programs with a stronger twelve-step orientation. McCrady et al. reported similar findings in a three-arm randomized trial of alcohol behavioral couples therapy alone and in combination with relapse prevention or an AA facilitation intervention (McCrady, Epstein, & Hirsch, 1996; McCrady, Epstein, & Kahler, 2004). Over 18-month follow-up, the group that received AA facilitation attended more meetings, and meeting attendance was more strongly related to alcohol outcomes than in the other groups (although this association was positive in all groups). Process analyses support the notion that TSF benefit is partially (and differentially) mediated by increased twelve-step behaviors (Brown, Seraganian, Tremblay, & Annis, 2002).

There are considerable data speaking to the influence of treatment status on the dynamics of AA involvement. In their landmark meta-analysis, Emrick et al. reported that the single strongest correlate of AA affiliation was a history of using external support to stop drinking (Emrick et al., 1993). "External support" in this analysis included both formal treatment and non-professional help such as AA. Furthermore, in AA members who received treatment for alcoholism, AA attendance during or after treatment was positively associated with outcome (*r* ranging from .20 to .22), but AA before treatment did not appear to have a significant influence on outcome. This may be because patients who

enter treatment after trying AA by definition did not have an adequate response to AA alone—those who got and stayed sober with AA alone would not have needed treatment. In a large study validating the Alcoholics Anonymous Affiliation Scale (Humphreys, Kaskutas, & Weisner, 1998a), greater levels of AA affiliation were found in alcoholics in treatment than those not in treatment, and in inpatients than in outpatients (perhaps due to greater severity among inpatients). In a sample of 515 problem drinkers who were initially not participating in treatment, AA attendance was associated with abstinence in those who subsequently attended AA only, outpatient treatment, and inpatient treatment (Timko, Moos, Finney, & Moos, 1994). A meta-analysis of the effect of AA on abstinence found stronger average associations between AA participation and abstinence in outpatient samples (Tonigan et al., 1996). Patients who initiate twelve-step behaviors during treatment are less likely to drop out of AA, and those at high risk for dropout may be at less risk if the treatment environment is more supportive (Kelly & Moos, 2003). These findings suggest that treatment can have a beneficial effect on both engagement in and benefit from AA.

2.6. Legal Status

Another special treatment population is patients in the criminal justice system, either incarcerated or on probation, parole, or pretrial agreement. Mandated AA attendance is a common modality in the criminal justice system. Concerns have been raised about the ethics of mandating a spiritual program, the lack of empirical support for this approach, and the potential for adverse effects on AA (Gallas, 2004; Speiglman, 1997). However, there is a remarkable paucity of data on the effectiveness of AA in this population. In a sample of 100 inmates, the more severe alcoholics attended more AA while in prison, but AA attendance did not predict follow-up outcome (Seixas, Washburn, & Eisen, 1988). A study of DUI outcomes in a large (n = 2,734) sample from New Jersey showed that AA referral or referral for formal treatment was more effective (in terms of recidivism rates) than DUI education for repeat offenders (Green, French, Haberman, & Holland, 1991). Kownacki and Shadish noted in a 1999 meta-analysis that the three then-published randomized trials of AA used samples that were coerced into treatment through criminal justice system involvement (Kownacki & Shadish, 1999). In the three studies reviewed (Brandsma, Maultsby, & Welsh, 1980; Ditman, Crawford, Forgy, Moskowitz, & MacAndrew, 1967; Walsh et al., 1991), patients assigned to AA did no better or worse than several alternative treatments. This suggests that mandated AA may not be effective, at least as a stand-alone treatment.

2.7. Ethnicity

AA originated in white, Protestant culture in the United States, and many authors have questioned the generalizability of the AA model across different

ethnic groups and cultures. While the empirical literature provides some limited support for differences in AA attendance and benefit across ethnicities, it also suggests that the similarities outweigh the differences. Timko et al. reported a stronger association between AA attendance and abstinence in white patients relative to non-whites (Timko et al., 2006). In a large (n = 2,234) 8-year longitudinal study of a community sample in which heavy drinkers and minorities were oversampled, Hispanics had elevated rates of help-seeking for alcohol problems relative to whites, but blacks did not (Kaskutas, Weisner, & Caetano, 1997). AA was by far the most common form of help-seeking, but rates of AA participation by ethnicity were not presented in this publication. Roland and Kaskutas reported rates of AA involvement and the effects of AA involvement on abstinence in a treatment-seeking sample of African-Americans (n = 253), Hispanics (n = 60), and Caucasians (n = 538) (Roland & Kaskutas, 2002). Prior to treatment, overall AA involvement was greatest among African-Americans, but post-treatment differences were small, with greatest post-treatment involvement among Hispanics. High AA involvement was strongly associated with 30-day abstinence post-treatment in all three ethnic groups.

Tonigan et al. compared AA involvement across different ethnic groups in Project MATCH (Tonigan, Connors, & Miller, 1998). They found differences by ethnicity only in the aftercare sample. Although Hispanics attended fewer AA meetings, their commitment and involvement in AA was paradoxically higher than among whites. Meeting attendance was associated with less drinking across ethnic groups. Relative to non-Hispanic whites, Hispanics receiving TSF attended fewer meetings but engaged equally in other twelve-step behaviors (Tonigan, Miller, Juarez, & Villanueva, 2002a). TSF was apparently less effective in Hispanics than in non-Hispanic whites (Arroyo, Miller, & Tonigan, 2003). In another study of 108 individuals entering treatment at an outpatient treatment center in New Mexico, Hispanics again attended fewer AA meetings than whites in the 6 months after entering treatment (Arroyo, Westerberg, & Tonigan, 1998).

In a large survey of patients entering treatment, blacks were more likely than whites to have attended AA as part of prior treatment, were more likely to report that they felt like a member of AA, more likely to report having had a spiritual awakening as part of AA, and more likely to report having had a spiritual awakening through AA (Kaskutas, Weisner, Lee, & Humphreys, 1999). Whites, on the other hand, were more likely to have had an AA sponsor and were more likely to have read program literature. Ethnographic work suggests that African-Americans are less willing to accept the view of alcoholism as a disease and that African-Americans tend to modify the steps and traditions of AA in order to affiliate with AA (Durant, 2005).

Little is known about the extent and benefit of AA participation in Native American populations. The Wellbriety model is an example of an attempt to blend the twelve steps of AA with traditional Native American culture and beliefs (Coyhis & Simonelli, 2005).

2.8. Severity

One of the most consistent findings in the AA literature is the positive association between alcoholism severity and AA affiliation. In the 1993 meta-analysis by Emrick et al., several characteristics that could be considered markers of severity were significantly correlated with AA affiliation: loss of control, daily quantity of alcohol, physical dependence, severity of dependence, and obsessive-compulsive drinking, all with correlations in the range of .18–.26 (Emrick et al., 1993). In Project MATCH, a positive correlation was observed between intake severity and AA attendance in the first 6 months (Connors, Tonigan, & Miller, 2001b). In a secondary analysis, Type B alcoholics showed greater rates of AA affiliation and lower rates of disaffiliation than the less severe Type As in the Project MATCH TSF sample (Tonigan, Bogenschutz, & Miller, 2006). Similarly, in a prospective study of 127 alcohol-dependent individuals with some baseline AA attendance, drinking severity (drinks per drinking day) significantly predicted AA disaffiliation, with heavier drinkers more likely to continue in AA (Bogenschutz & Tonigan, 2007). Baseline frequency of AA attendance also predicted continued AA attendance. Timko et al. reported 1-year follow-up data on a sample of 515 untreated, treatment-seeking problem drinkers (Timko, Finney, Moos, Moos, & Steinbaum, 1993). In this study, patients with greater initial severity both attended more AA meetings and participated more extensively in formal treatment. In a study of 173 patients consecutively admitted to a residential program with a behavioral orientation, patients with more extensive alcohol-related problems prior to treatment were more likely to attend AA after treatment (McLatchie & Lomp, 1988). A crosssectional survey of a large treatment-seeking sample (n = 927) found that 82.8% had a history of affiliation with AA. Past AA affiliation was positively associated with severity of alcohol and social problems as well as past treatment history (Humphreys, Kaskutas, & Weisner, 1998b). In a large (n = 8057) survey of former drinkers, severity factors such as meeting DSM criteria for alcohol use disorder, compulsion to drink, and maximum alcohol consumption predicted help-seeking including AA as well as formal treatment (Hasin & Grant, 1995). An analysis of data from the NESARC survey reported characteristics of those who sought vs. those who did not seek help for alcohol dependence among 4422 individuals with prior-to-past-year onset of alcohol dependence (Dawson, Grant, Stinson, & Chou, 2006). Only 25.6% of those with prior-topast-year onset of alcohol dependence had ever sought any form of help; 20.1% (or 78.5% of those who had sought help) reported twelve-step participation. Those who sought help had stronger family histories of alcoholism, greater daily ethanol consumption, more episodes of dependence, and more psychiatric and substance use comorbidity. Surprisingly, they also had later onset of alcohol dependence and slower progression to alcohol dependence. A small study in drug abusers also found greater lifetime severity in the frequent twelve-step attendees (Brown, O'Grady, Farrell, Flechner, & Nurco, 2001).

Compared to the consistent relationship between severity and AA involvement, there are few data to indicate whether AA is more helpful to people with more severe alcohol problems. In the Dawson et al. study described above, the most consistent moderator of the effect of help-seeking was severity (number of dependence symptoms), which had positive interactions with help-seeking in predicting abstinence for all time periods (Dawson et al., 2006). Morgenstern et al. also reported a stronger association between twelve-step affiliation and percent days abstinent in Type B alcoholics than in Type As (Morgenstern, Kahler, & Epstein, 1998). However, Project MATCH provided only very limited support for severity matching hypothesis (Cooney, Babor, & Litt, 2001b), and no support for matching based on alcohol involvement (Rychtarik, Miller, & Tonigan, 2001) or alcoholism typology (Litt & Babor, 2001).

2.9. Cognitive Impairment

Morgenstern et al. reported similar AA participation and substance use outcomes in alcohol patients with and without executive function impairment (Morgenstern & Bates, 1999). However, the hypothesized change mechanisms had a much less robust effect in those with impaired executive functioning. Cognitive impairment was not found to be a significant treatment matching effect in Project MATCH (Donovan, Kivlahan, Kadden, & Hill, 2001). However, a secondary analysis of Project MATCH data revealed that cognitive impairment was associated with greater AA attendance in that study (Bates, Pawlak, Tonigan, & Buckman, 2006). Furthermore, self-efficacy appeared to play a smaller role in mediating the effects of AA on drinking in the cognitively impaired group.

2.10. Comorbidity (Psychiatric and Substance Use)

Dually diagnosed individuals face a number of issues that complicate their participation in twelve-step programs. Noordsy et al. reported low rates of long-term twelve-step involvement among severely mentally ill substance abusers and enumerated issues which may interfere with their ability to participate in and benefit from twelve-step programs (Noordsy, Schwab, Fox, & Drake, 1996). For example, paranoia and social anxiety may make it very difficult for patients to participate in groups, especially when a confrontational style of interaction is employed as it is in many twelve-step meetings. Patients may feel they have little in common with the non-mentally ill members of the groups. They may be told that they are not clean and sober if they are taking psychiatric medication. Bogenschutz and Akin reported significant correlation between dual diagnosis patients' attitudes toward twelve-step meetings and their recent attendance of meetings. (Bogenschutz & Akin, 2000) Among patients with a psychotic diagnosis, the relevant issues were those most closely related to their status as mentally ill individuals, e.g., negative attitudes of other group members toward medication, feeling that other group members do not understand about mental illness, paranoia in meetings.

In spite of these potential barriers, most studies that have looked at twelve-step meeting attendance by dually diagnosed patients have found rates similar to those of singly diagnosed substance dependents. Westermeyer and Schneekloth found that schizophrenic patients attended twelve-step meetings as much as non-schizophrenic patients with substance use disorders (Westermeyer & Schneekloth, 1999). A study of psychiatric inpatients with alcohol dependence found that these patients reported comfort with AA, and 37% had a history of regular AA attendance, with no difference by psychiatric diagnosis (Pristach & Smith, 1999). A survey conducted in an outpatient dual diagnosis program with a mixed diagnosis sample of seriously mentally ill patients with substance use disorders found rates of AA attendance very similar to those reported for the Project MATCH sample, but with lower rates for patients with psychosis (Bogenschutz & Akin, 2000). These findings were confirmed in a larger sample by Jordan et al., who also found that dually diagnosed patients overall attended about the same number of twelve-step meetings as substance use disorder patients, but that patients with schizophrenia or schizoaffective disorder attended fewer meetings (Jordan, Davidson, Herman, & BootsMiller, 2002). A survey of AA contact persons found that most had positive attitudes toward the dually diagnosed and believed that they should take their medications as prescribed (Meissen, Powell, Wituk, Girrens, & Arteaga, 1999). However, a majority also believed that specialized groups for the dually diagnosed would be more helpful than mainstream AA.

A few recent studies in male VA populations have investigated the relationships between twelve-step attendance and relevant clinical outcomes in the dually diagnosed. In a sample of 981 dual diagnosis patients who were followed for a year after discharge from inpatient treatment, twelve-step attendance was associated with slightly greater improvement in coping skills (Moggi, Ouimette, Moos, & Finney, 1999). Another study found that although dually diagnosed patients had lower rates of abstinence at 5 years, twelve-step involvement was associated with abstinence in substance use disorder patients both with and without co-occurring psychiatric disorders (Ritsher, McKellar, Finney, Otilingam, & Moos, 2002). However, a prospective study of 2161 male inpatients, 110 with substance use disorder and comorbid depression and 2051 with substance use disorder only, found that the depressed patients appeared to benefit less from traditional twelve-step groups, although substance use outcomes were similar for both groups (Kelly, McKellar, & Moos, 2003).

Another group of studies has looked at the mediating effect of psychiatric severity on AA participation or outcomes in general populations of alcoholics. Patients higher in psychiatric severity report more psychiatric symptoms and distress but may or not have a formal psychiatric diagnosis. In Project MATCH, psychiatric severity was one of the few matching variables for which significant matching effects were found: outpatients with lower psychiatric severity had better drinking outcomes when treated with TSF than with CBT, whereas those of higher psychiatric severity had worse outcomes with MET than with TSF or CBT (Cooney et al., 2001a). Polcin et al. found that patients higher in

psychiatric severity had similar levels of AA involvement, but lower rates of AA achievement (completing the twelve steps), as well as lower scores on measures of spirituality (Polcin & Zemore, 2004).

In summary, patients with co-occurring psychiatric and substance use disorders attend twelve-step programs at rates comparable to those with substance use disorders alone, although rates may be lower for those with psychotic disorders. The extant studies consistently show a positive relationship between twelve-step attendance and recovery (including decreased substance use) among the dually diagnosed, although it is possible that the magnitude of this effect is different from that found in those without mental illness. Very little work has been done to elucidate the mechanisms by which twelve-step involvement may facilitate change in dually diagnosed individuals. Many treatment models for co-occurring disorders include twelve-step involvement, yet to date there are only two controlled studies investigating the effectiveness of TSF for dually diagnosed populations. These yielded equivocal results, although the more recent study using manualized treatment found greater improvement in substance use in the twelve-step condition (Brooks & Penn, 2003). Neither of these studies utilized specialized twelve-step programs such as Double Trouble in Recovery or Dual Recovery Anonymous.

Another common form of comorbidity in the alcohol-dependent population concerns co-occurring drug use disorders. Bogenschutz and Tonigan examined the effect of polysubstance use on prospectively measured AA attendance in a sample of 127 alcohol-dependent individuals with at least minimal AA attendance at baseline (Bogenschutz & Tonigan, 2007). On the other hand, for those with a co-occurring drug use disorder, a greater intensity of twelvestep involvement appears to be necessary to predict abstinence (Witbrodt & Kaskutas, 2005).

2.11. Personality

Although decades of research have put to rest the search for a unitary "alcoholic personality," there are clearly personality traits that predispose individuals to alcoholism, such as high impulsivity and low harm avoidance. For the present chapter it is germane to ask whether, given problem drinking, there are personality traits that predict or are correlated with AA involvement and/or differential benefit from AA.

Although a large number of studies have examined personality correlates of AA involvement, no consistent pattern of findings has emerged. Emrick noted in a 1989 review that with respect to personality "systematic differences have not been observed between affiliates and nonaffiliates" (Emrick, 1989). An early study reported that alcoholics with a high degree of AA affiliation displayed more anxiety and were more influenced by emotion (as opposed to intellect) than those with lower degrees of AA involvement (O'Leary, Calsyn, Haddock, & Freeman, 1980). In another study, no consistent differences on MMPI were found between AA attendees and non-attendees (Thurstin,

Alfano, & Sherer, 1986). A study using the Eysenk personality questionnaire compared AA members (n = 91) to sex- and race-matched control alcoholics who had completed alcoholism treatment and were not AA members (Hurlburt, Gade, & Fuqua, 1984). The AA members differed from non-members on three out of four personality scales, being more extroverted and less toughminded and emotional than the non-members. Timko et al. reported greater engagement in patients who were more extroverted and had more interpersonal skills, but AA benefit was greater in those who were less interpersonally skilled (Timko et al., 2006).

Project MATCH examined several personality characteristics as possible client-treatment matching variables. There were no consistent matching effects associated with sociopathy, and patients high in sociopathy had rates of AA attendance comparable to others (Kadden et al., 2001). Anger, which may in part be attributed to personality or temperament, was found to predict better outcome with MET rather than TSF or CBT (Waldron, Miller, & Tonigan, 2001). This was interpreted as having to do with the specific effects of MET in handling resistance, rather than anything specific to TSF or to AA participation. It was hypothesized that persons high in interpersonal dependency would benefit most from TSF, but this hypothesis was not supported by the data (Rychtarik, 2001).

2.12. Social Support

Differing forms of social support could potentially affect AA participation in different ways. Social support for abstinence and social support for AA attendance would be expected to enhance AA attendance, whereas social support for drinking might tend to discourage AA attendance. In Project MATCH, baseline social support for drinking was negatively correlated with AA attendance during first 6 months (Connors et al., 2001b) . At 3-year follow-up, outpatients with initially high network support for drinking drank less frequently and less intensively if they had been assigned to TSF (Longabaugh, Wirtz, Zweben, & Stout, 2001). This effect was partially mediated by AA attendance.

A small study (n = 45) confirmed that alcoholics attending AA (and those seeking formal treatment) had less social network support for drinking than problem drinkers who were not seeking help of any kind (George & Tucker, 1996). On the other hand, in a national survey study, social pressure to change drinking was significantly associated with a history of both AA attendance and formal treatment in men (Hasin, 1994).

2.13. Socioeconomic Status

Timko et al. reported higher rates of AA participation and greater AA benefit in outpatients with lower educational level (Timko et al., 2006). AA benefit was also greater in those who were not stably employed. In a 3-year follow-up study of 135 problem drinkers who never sought professional treatment,

Humphreys et al. demonstrated a pattern of abstinent recovery associated with low socioeconomic status and AA participation, and a pattern of moderate drinking associated with higher socioeconomic status and greater social support (Humphreys, Moos, & Finney, 1995).

2.14. Motivation

In their meta-analysis, Emrick et al. reported significant correlations between "anxiety about drinking" and AA involvement (r = .20) (Emrick, Tonigan, Montgomery, & Little, 1993). Rather than a symptom of an anxiety disorder, such anxiety might be interpreted as a measure of the "discrepancy" an individual is experiencing with respect to his drinking or his awareness of negative consequences of drinking, both of which are related to motivation to change. MeKellar et al. conducted a 2-year prospective study of 2319 alcohol-dependent men (McKellar et al., 2003). Time-ordered data over 2 years of follow-up provided strong support for the proposition that AA participation has a beneficial causal effect on alcohol outcomes which is not accounted for by motivation. In this study, high self-reported motivation for change at baseline predicted lower AA involvement and more alcohol problems at 1 year. A study of 125 mostly white, male, middle-aged alcoholics examined the effects of pretreatment motivation for change on 1-year outcomes after 21-day inpatient treatment (Isenhart, 1997). High Determination scores on the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES) (Miller & Tonigan, 1996) predicted AA affiliation at follow-up, and low Contemplation scores predicted having a sponsor at follow-up. In a study of predictors of outcome in a sample of 248 alcoholics entering inpatient treatment, baseline indices of twelve-step involvement and motivation were independent predictors of drinking days at 3 month and 1-year follow-ups (Staines et al., 2003).

A scale has been developed to measure motivation specific for AA participation (Kingree et al., 2006). Although preliminary reliability and validity data have been published, predictive validity has not yet been reported. An interesting small trial (n = 48) in alcoholics undergoing detoxification compared the effectiveness of motivational enhancement therapy that focused on motivation to attend twelve-step meetings to that of brief advise to attend twelve-step meetings (Kahler et al., 2004). In this trial, treatment assignment had no main effect on alcohol use or AA attendance. Many individuals in the sample had extensive histories of AA involvement, and all but seven individuals planned to attend AA at least once per week prior to receiving the intervention. Thus, the intervention may not have been well matched to the stage of change and level of commitment of AA of many of the participants.

2.15. Pattern of Affiliation

There is evidence that different patterns of AA attendance and different forms of participation have different effects on drinking and other outcomes.

Although continued frequent attendance may be most effective in promoting abstinence, declining attendance (often with continued self-reported affiliation) may also be effective (Kaskutas et al., 2005). In a sample of 473 initially untreated alcoholics followed up to 8 years, early and continued participation had a larger effect on abstinence than delayed or discontinued participation (Moos & Moos, 2004). At 16 years (n = 362), among those entering treatment, outcomes were more favorable in those who entered AA at the same time than in those who only later started attending AA (Moos & Moos, 2005).

Gossop et al. examined the effects of AA attendance on drinking outcomes in a sample of 150 (38 women) following inpatient treatment. When AA participation was broken down into categories of less than weekly and weekly or more, the more frequent attendees had better drinking outcomes than the nonattendees, but the infrequent attendees did no better than the non-attendees, suggesting a threshold effect or minimum effective dose in this sample (Gossop et al., 2003). In a study of male patients after treatment, AA attendance in the month following treatment was associated with better outcomes during 48 weeks post-treatment, but the magnitude of benefit was not moderated by the extent of involvement (frequency of attendance) (Watson et al., 1997). Regarding the quality of participation, helping other alcoholics (step 12) predicts sobriety independent of the number of meetings attended (Pagano, Friend, Tonigan, & Stout, 2004).

3. Unanswered Questions

This review is a testament both to the huge amount that has been learned since 1993 and to the large number of scientifically and clinically important questions that remain unanswered concerning predictors of AA participation and benefit.

Regarding "preclinical" scientific questions, the predictors of AA participation and benefit described above call out for explanation. For example, why do alcoholics of greater severity tend to affiliate more readily with AA? If there are consistent ethnic differences in AA involvement and benefit, are they due to differences in beliefs, communication styles, socioeconomic status, characteristics of available AA groups, and or something else? What might these differences tell us about the underlying mechanisms of AA participation and benefit? Fine-grained longitudinal studies continue to be necessary to test hypotheses generated by such questions.

On the clinical side, although the beneficial effect of AA and the efficacy of twelve-step-oriented treatment are now well established, many basic clinical questions remain about how best to treat some of the special groups discussed above. For example, under what circumstances is referral to AA an adequate first-line intervention? What are the optimal strategies for referral to AA? Are there effective brief intervention strategies that can be used in primary care or other non-addiction treatment settings? How well do existing TSF strategies

work as treatment for groups such as adolescents and prisoners? To what extent do specialized TSF techniques enhance outcomes in special populations? To what extent do specialized AA or other twelve-step groups enhance outcomes in special populations? How can AA participation most effectively be combined with other (non- twelve-step) forms of treatment? Such questions call out for randomized clinical trials of the sort that have been relatively scarce in the AA literature.

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