

Special article

Spirituality and recovery in 12-step programs: An empirical model

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Abstract

Alcoholics Anonymous (AA) and other 12-step programs are widely employed in the addiction rehabilitation community. It is therefore important for researchers and clinicians to have a better understanding of how recovery from addiction takes place, in terms of psychological mechanisms associated with spiritual renewal. A program like AA is described here as a spiritual recovery movement, that is, one that effects compliance with its behavioral norms by engaging recruits in a social system that promotes new and transcendent meaning in their lives. The mechanisms underlying the attribution of new meaning in AA are considered by recourse to the models of positive psychology and social network support; both models have been found to be associated with constructive health outcomes in a variety of contexts. By drawing on available empirical research, it is possible to define the diagnosis of addiction and the criteria for recovery in spiritually oriented terms. © 2007 Elsevier Inc. All rights reserved.

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1. Introduction

The purpose of this article is to develop a model of recovery from addiction that is compatible with the spiritual orientation espoused by many members of Alcoholics Anonymous (AA). This is important because 12-step programs address issues such as patients' affiliative and spiritual needs and are not time limited. To clarify this model of recovery, we will first consider how the concept of recovery itself can be framed.

Two empirically grounded perspectives have played a material role in framing how we conceptualize recovery. One was derived from a model of psychopathology modeled on the work of Emil Kraepelin (Kraepelin, 1902). He framed an approach that now characterizes the contemporary medical model for mental disorders, categorizing disease entities

diagnosed based on explicit and discrete symptoms. This approach is evident in the development of criteria for substance use disorders employed in recent editions of the symptom-based *Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2000)*. From this perspective, a state of remission, colloquially called recovery in rehabilitation circles, can take place with the resolution of the specific symptoms listed as diagnostic criteria. A second perspective on recovery derives from behavioral psychology, whose model of stimulus–response sequences has led to the ordering of experience around discrete phenomena that can be observed by a researcher or clinician. From this perspective, recovery can also be defined in terms of observable, measurable responses to substance use, lending credence to recovery as a process defined in behavioral terms.

Both perspectives are well suited to the study of psychopathology and have lent the addiction field approaches to studying addiction as a disorder, one that is compatible with research approaches employing experimental controls that are used in the physical and biological sciences. Both have therefore had heuristic value in promoting a research field that has yielded many advances

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in addiction treatment. There is a third perspective, however, that is defined based on reports of substance-dependent individuals' own subjective experience. These experiences are not directly observable by the clinician but are available only as reported through the prism of the person's own introspection and reflection. This model is more difficult to subject to measurement, but instruments are being developed that can be applied for its study, as will be discussed below. This approach is inherent in the spiritually oriented psychology of Carl Jung (Jung, 1978), who had a direct influence on Bill W's framing of the AA ethos (Cheever, 2004). William James (James, 1929), often described as the father of American psychology, also described mental phenomena in terms of subjectively experienced mystical or spiritual experience. (In fact, he wrote that "the drunken consciousness is one bit of the mystic consciousness" [p. 378].) Recovery can also be understood relative to the work of Abraham Maslow (Maslow, 1964), who placed importance on subjectively felt states, "peak experiences," for example, that reflect people's need to potentiate their self-esteem and self-actualization. Ultimately, the need for spiritual redemption was vital in the writings of Viktor Frankl, who wrote *Man's Search for Meaning* (Frankl, 1984), and has recently been espoused with regard to psychotherapy by William Miller (Miller, 1999).

This third perspective is related to the model of spiritually grounded recovery we will discuss here, insofar as it emphasizes the achievement of meaningful or positive experiences, rather than a focus on observable, dysfunctional behaviors. Research on this third approach would typically rely on self-report scales, such as those that can be facilitated by development of instruments like the Life Engagement Test (Scheier et al., 2006), the General Well-Being Schedule (Dupuy, 1973), or our own Spiritual Self-Rating Scale (Galanter et al., 2007). We will consider its role in AA, models as to how it takes place, and ways how it can be measured. In this respect, recovery can be understood as a process whereby an abstinent addicted person is moving toward a positive adaptation in life. This movement can take place with varying degrees of success, depending on the person's own innate capacities and the circumstances in which they find themselves.

2. Spirituality in AA

AA is a self-governing, nonprofit organization whose only requirement for membership is a desire to stop drinking. It is remarkable among voluntary membership groups, as it charges no dues and subsists on mutual support and commitment to its "program of recovery." As listed on its web site (www.aa.org), it has a worldwide membership of 1.8 million who attend more than 100,000 local groups with some regularity. The 25 millionth copy of the group's principal publication, *Alcoholics Anonymous* (the "Big

Book"; AA World Services, 1955), was printed in 2005, reflecting the value lent its role in addiction recovery.

Spirituality has been defined as "that which gives people meaning and purpose in life" (Puchalski, Dorff, & Hendi, 2004). As a latent concept, one that can be understood only in relation to multiple disciplines, it has been examined from the perspectives of psychology, physiology, and cross-cultural research (Galanter, 2005). It is distinguished from orientations that would define addiction based on physical and behavioral sequelae of disease alone and from religiously based sectarian practices as well. In the United States, the concept of recovery from addiction is regularly identified with AA and other 12-step programs, regularly defined as spiritual fellowships. The AA model is applied to varying degrees in most American rehabilitation programs, but because it arose outside the biomedical and academic psychology communities, it was not subjected to research validation before it was widely applied. It is, however, useful to consider how recovery through AA (and hence, other 12-step programs) can be understood based on existing, empirically grounded research (McKellar, Stewart, & Humphreys, 2003).

3. Spiritually grounded recovery

The AA "program of recovery" is mentioned in numerous places in the Big Book, *Alcoholics Anonymous*, and is associated there with terms such as "spiritual experience" and "spiritual awakening," and with working AA's Twelve Steps. Four of the steps include the word God, which is qualified "as we understood Him." Some clarity is lent to this latter phrase in the Big Book where it is pointed out that "with few exceptions, our members find that they have tapped an unsuspected inner resource which they presently identify with their own conception of a Power greater than themselves" (pp. 569–570). Flexibility on the issue of theistic belief is also made clear in one chapter that addresses any alcohol-dependent person "who feels he is an atheist or agnostic," encouraging that person's membership as well. The text points out for these members that even "We Agnostics ... had to face the fact that we must find a spiritual basis for life" (p. 44) to achieve recovery, implying therein the fellowship's distinction between spirituality and theistic religion.

This issue of theistic connotation, however, is as yet resolved relative to the judicial system, where the application of AA is sometimes constrained because of potential church/state conflicts. It is open to question, however, whether the theistic connotations of AA can be modified without vitiating the program's effectiveness. In this relation, it should be noted that in a 5-year follow-up of recovering cocaine-dependent patients, the strength derived from religion and spirituality significantly distinguished between those who had a highly favorable outcome and those who did not (Flynn, Joe, Broome, Simpson, & Brown, 2003). Additionally,

attendance at religious services distinguished significantly between criminal justice clients referred for substance abuse treatment who had a positive outcome and those who did not (Brown, O'Grady, Battjes, & Farrell, 2004).

In defining recovery from mental disorders generically, it may be useful to consider how it was framed in a recent report of the U.S. federal government's Presidential Commission on Mental Health (*The President's Commission on Mental Health, 2003*). The Commission pointed out that "Recovery refers to the process in which people are able to live, work, learn, and participate fully in their communities [observable traits] ... Science has shown that having hope plays an integral role in the individual's recovery [subjective experience]." This was echoed in an ensuing position statement of the American Psychiatric Association, pointing out that "The concept of recovery emphasizes a person's capacity to have hope and lead a meaningful life" (*Committee on Public and Community Psychiatry, 2005*). Recovery is therefore presented as a subjective positive experience as well as one defined by observable behaviors. Jerome Frank, in fact, wrote that all psychotherapies, including AA, have, in common, the instillation of hope (Frank, 1971). An intrapsychic process, as opposed to manifest behavioral changes, has been considered to be inherent in a variety of conceptions of recovery from addiction. For example, Prochaska and DiClemente (1985) described the stages of change that involve the addicted person achieving a transition from "precontemplation" to "contemplation" before undertaking action to terminate their patterns of addiction. De Leon (2000) described the recovery from addiction within the therapeutic community (TC) as a "developmental process," wherein the TC resident learns "to recognize the inner thoughts, perceptions and feelings that produce his or her self-defeating behaviors" (p. 71).

4. AA's utility

In considering the value of recovery through AA, findings from Project MATCH (Babor & Del Boca, 2003) demonstrate that the outcome of the professionally grounded format of 12-step facilitation (TSF) is equivalent to approaches based on cognitive behavioral therapy (CBT) and motivational treatment (MT), a finding corroborated in an extensive Cochrane Collaboration review (Ferri, 2006). TSF is applied by a professional but leads to involvement in a voluntary organization, whereas the other two modalities do not necessarily point that way. McLellan et al. (2005) posited that addiction needs to be understood as a chronic illness, with recovery monitored over time in an open-ended manner. Clearly, third-party payers are only likely to provide ongoing treatment by professionals of CBT or MT in a time-limited manner. This is underlined by the fact that reimbursement available for addiction treatment by large corporations was found to have declined by 75% during the 1990s (Galanter, 1999).

Pharmacologic treatment, as well, may not provide a long-term workable approach for alcoholism. Long-acting injectable naltrexone, for example, thought to augment psychosocial supportive treatment, has yet to be demonstrated as a reliable procedure over time. In one recent study (Kranzler, Wesson, & Bilot, 2004), it was found to be not significantly more effective than placebo on most indicators of decline in heavy drinking, and in another, it yielded only a 25% reduction in heavy drinking relative to placebo (Garbutt et al., 2005).

On the other hand, 12-step programs are available in an open-ended manner over the course of a lifetime to many different types of patients. A meta-analysis of outcome studies on patients 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 et al., 1993), 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). AA has also been found to be effective even at modest levels of participation following intensive professional treatment (Kaskutas et al., 2005; Kelly, Stout, Zywiak, & Schneider, 2006). Importantly, AA's operative philosophy underlies the view of a sufficient number of its members to help fuel the commitment evident in 12-step meetings. Promotion of long-term engagement in AA and its spiritually grounded orientation may therefore serve as an important vehicle for sustaining recovery.

The full nature of AA in the context of its historical development, social significance, and ethos bears further examination. This has been elaborated elsewhere, and the reader may refer to a number of related sources (Kurtz, 1979; Miller, 1999; Rudy, 1986; White, 1998).

5. Positive psychology

The concept of *positive psychology* (Seligman, Steen, Park, & Peterson, 2005) has recently gained currency in academic psychological circles. Advocates of this approach focus on enhancing a person's positive, gratifying experiences rather than on the relief of psychopathology. Their goal is to increase the potential for enjoyment of life and promote resiliency in the face of problems a person may confront. This perspective may be useful in providing a rubric under which AA's ethos of life improvement can be framed, and the way a concept is framed can have a heuristic value in providing an approach to research and clinical intervention.

There are some interesting examples of studies associated with positive psychology, suggesting how it can be related to improved health. Although these do not suggest specific mechanisms of its impact on pathology, they do offer a useful way of categorizing certain health outcomes. A positive outlook has been shown to be associated with improved outcome in relation to better pulmonary function (Kubzansky et al., 2002), decreased incidence of stroke

among the elderly, and increased longevity among both older community-dwelling individuals (Duckworth, Steen, & Seligman, 2005) and monastic nuns (Danner, Snowdon, & Friesen, 2001). Conversely, an association between depression and poor outcome following myocardial infarction has been reported (Frasure-Smith, Lesperance, & Talajic, 1995). Depressed patients have also been found to be less likely to comply with medical treatment (Chwastiak et al., 2002), with attendant ill consequences.

Although these findings may result from diverse mechanisms, they do allow for considering health maintenance from the perspective of a positive affective state. One mechanism posited for this is that when positive emotions are generated, they lend breadth and flexibility to people's attentional focus and behavioral repertoire and improve memory and cooperativeness (Burton & King, 2004), all of which facilitate a constructive management of one's health needs. This certainly may play a role in health maintenance, along with other posited mechanisms.

It has been found that actively encouraging people to enhance the positive aspect of their affective state may yield better health and mood outcomes. College students assigned to ponder their most intensely positive experiences and then write essays on them were found to have fewer visits to the school's health center for illness over the ensuing months than those who were told to write on neutral topics. Subjects who participated in a "gratitude" intervention, repeatedly writing about things for which they were thankful, reported feeling better about their lives and demonstrated more positive affect (Emmons & McCullough, 2003). Seligman et al. (2005) solicited volunteers who visited a web site on positive psychology. They applied certain exercises promoted on the web site specifically designed to increase individual happiness and compared them to affectively neutral exercises. Those respondents who were offered the positive exercises (such as practicing the use of strengths in a new and different way each day for 1 week) achieved a measurable improvement in scores on a validated scale for "happiness" over a subsequent period of 6 months' duration.

AA can buoy the mood of many of its members by promoting a sense of spiritual renewal. This aspect of positive psychology in AA may therefore be considered associated with better health. Measures of the impact of AA (described below) on a positive affect may support the concept of AA-based recovery as relevant to empirically oriented research.

6. Social networks

Social ties have been found to be important for health maintenance, and this relates to AA membership as well. Nurturing social ties, both close and peripheral, is helpful in providing informational support and access to health-promoting resources in the community. They also support behavior conducive to good health. With regard to somatic

pathology, a lack of close personal relationships, reflected in being single or widowed, has been found to be associated with greater incidence of coronary artery calcification independent of age and coronary risk factors (Kop et al., 2005). Subjects with more extensive social networks have been shown to have greater antibody response to influenza vaccine (Pressman et al., 2005), and social participation and engagement have also been shown to be predictive of lesser dementia and cognitive decline in men and women who are more than 65 years of age (Kawachi & Berkman, 2001).

Longevity is associated with social support as well. On a 9-year follow-up, Berkman and Syme (1979) found that the magnitude of social ties (to spouse, family, friends, or religious and social groups) reported by healthy adults was inversely related to subsequent mortality. Among Swedish men age 50 and older, reports of high numbers of stressful events were found to be associated with greater risk for mortality over the ensuing 7 years, but this effect was countered by higher levels of reported emotional support (Rosengren, Orth-Gomer, Wedel, & Wilhelmsen, 1993).

These observed relationships may be due to the buffering effects of social support (or perceived support) against stress and to facilitating better self-care. The spiritually grounded ethos of mutual support in AA may be one more example of this benefit. An additional issue, different from receiving support, is the benefit derived from the altruistic experience in giving support, also an important beneficial aspect of the 12-step experience; this is apparent in the 12-step phenomenon of sponsorship (Crape, Latkin, Laris, & Knowlton, 2002).

7. Attributing meaning

To understand how engagement into spiritually oriented movements takes place, we can turn to a body of social psychology that has informed research on group influence. This will shed light on both the affective and affiliative aspects of AA and how they can lead to recovery-oriented attitudes. One issue is the way people attribute meaning to their experiences. Research on attribution theory suggests that people are most likely to adopt a new or unusual explanation for their situation when they have lost confidence in themselves and encounter a quandary they cannot solve and then experience a social context that promotes the new perspective different from their own (Kelley, 1967). They may then adopt this new perspective and undergo a reordering of how they attribute meaning to subsequent experiences. They will therefore explain new observations by using the perspective they adopted so that their circumstances are better understandable to them. This is evident in the transformation one sees in despairing addicted people who encounter the new perspective offered by AA on their plight in the supportive atmosphere of its group meetings.

8. Intensely zealous groups

How does acceptance of a new perspective buoy the spirit of AA members and transform their attitude toward alcohol? We can consider a model for the enhancement of affective status in members of zealous, intensely cohesive movements to understand this. An example of this can be derived from the psychology of spiritually grounded experiences in cultic religious sects. I studied such “experiments of nature” over several years and evaluated the course of membership in the Unification Church, a religious movement that attracted followers of Reverend Moon and led late adolescents and young adults to abandon prior attitudes and behaviors. In an initial study, my colleagues and I (Galanter, Rabkin, Rabkin, & Deutsch, 1979) found that scores on two scales, one measuring cohesiveness toward the group and the other commitment to the group’s ideology, significantly predicted a large portion of the variance in members’ affective state: The stronger an individual’s affiliative feelings toward the group were, the higher were their scores on the General Well-Being Schedule (Dupuy, 1973). A second, prospective study on the recruitment process in the sect revealed that those persons exposed to the sect who scored lowest in general well-being were the most likely to be retained in a 3-week recruitment sequence and to later join (Galanter, 1980).

In a third study on long-term members, well-being and health status were studied in relation to compliance with the group’s demanding behavioral expectations. Compliance with group behavioral norms was predictive of 15% of the variance in (lower) general well-being and 11% of the variance in the (higher) number of health problems. When items on ideologic commitment and social affiliation to the group were also used as predictors, however, a total of 31% of the variance in well-being scores and 22% of the variance in health problems were predicted. The deleterious impact of compliance was negated by a greater sense of cohesiveness and ideologic commitment to the group. That is to say, compliance caused distress, but the distress was relieved by a greater commitment to the group (Galanter, 1983).

Thus, a distressed inductee who responds to the recruitment process in such a zealous group is operantly reinforced to develop strong affiliative feelings toward the group’s members and accept its ideology. This response to affiliation yields a decline in emotional distress, a relief effect, which is contingent on maintaining ties to the group. The attendant improvement in their mood, however, is dependent on maintaining continued ties to the group and adhering to behavioral expectations that themselves may cause distress. In a seemingly paradoxical way, it is only by maintaining dependent ties to the group that the distress it causes can be relieved. This phenomenon can also take place in the context of a religious conversion or sometimes in ideologic conversion in some zealous political movements. When it does take place, many changes in a member’s life, in social, occupational, and family circumstances, may ensue.

9. Spiritual recovery movements

How does this intense phenomenon relate to recovery from addiction by means of spiritual and social support? There is a parallel between the way attitudes are transformed in intensely zealous groups and the way the denial of illness and the self-defeating behaviors of alcohol- and drug-dependent individuals may be reversed through induction into a 12-step group like AA.

AA can be considered as a highly successful example of a social phenomenon called spiritual recovery movement. Such movements have three primary characteristics. They (a) claim to provide relief from disease, (b) operate outside the modalities of established empirical medicine, and (c) ascribe their effectiveness to higher metaphysical powers. The appeal of such movements in the contemporary period is due, in part, to the fact that physicians tend not to attend the spiritual or emotional concerns of their patients (Galanter, 2005).

Clearly, the attitudes and behavioral norms that AA espouses are much more in conformity with the values of the larger culture than those of zealous religious sects. The expectation of avoiding drunkenness in AA, normative in our culture, illustrates this. Additionally, adherence to a spiritual recovery movement like AA and its health-related philosophy does not involve all areas of the inductee’s life; for example, it is limited if there are any constraints on personal property, family ties, or residence. As a spiritual recovery movement, however, AA does engage its followers in behavioral expectations associated with the health issue it addresses.

People who are highly distressed over the consequences of their addiction are therefore candidates to respond to the strong ideologic orientation of AA toward recovery and are operantly reinforced by the relief produced by affiliation with the group’s ideology and behavioral norms, all related to abstinence and a spiritually grounded lifestyle. Significantly, AA generates distress in its members by pressing them to give up their addictive behaviors, but the distress associated with this conflict is relieved if they sustain affiliation and cleave to the group.

10. Defining recovery based on spirituality

In the clinical context, recovery is based on a person’s behavioral and physiologic status, which can be assessed by recourse to criteria employed in the *DSM*. Some of these criteria are also embodied in the Addiction Severity Index (McLellan et al., 1992), which is employed widely in research to evaluate recovery. These items can be assessed relatively easily, as they are premised on observable behavior or delineated by symptomatology described by a patient, family member, or clinician.

A spiritually grounded definition of recovery, however, can be useful as well. Such a concept relates to the importance of nondemographic subject factors, originally proposed as “quality of life” issues (Campbell, Converse, &

Rogers, 1976)—among which spirituality can be considered. In this context, a series of suitable criteria for “diagnosing” addiction (a more apt a term than *substance dependence*) could be developed. They could then be used to assess the spiritual aspect of recovery associated with the 12-step experience. Resolution of these issues could be considered as important to the spiritual aspect of recovery from addiction. A series of criteria could include items such as:

- loss of sense of purpose due to excessive substance use,
- a feeling of inadequate social support because of one’s addiction,
- continued use of a substance while experiencing moral qualms over its consumption, and
- loss of the will to resist temptation when the substance is available.

Another aspect of the *DSM* format can be considered as well. *DSM* stipulates “course specifiers” of remission, such as “on agonist therapy” and “in a controlled environment.” These are included because they are explanatory to the clinician. Another course specifier that would be equally explanatory to many clinicians, “fully engaged in a program of 12-step recovery,” could be added to the ones already mentioned.

But are spiritually grounded criteria measurable? In recent years, methodologies have been developed and validated that could be used to assess outcome based on such subjectively experienced criteria. They employ a systematic approach to measurement and can be used to describe spiritually related states:

1. Affective state:
 - (a) A sense of well-being, measured by the General Well-Being Schedule, which we employed (Dupuy, 1973), or the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999).
 - (b) Contentment with one’s life circumstances, measured by the Satisfaction with Life Scale (Diener, Suh, Lucas, & Smith, 1999).
 - (c) Positive affect, assessed with the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), which treats both variables as separate dimensions rather than bipolar ends of the same scale.
 - (d) Feelings of support, employing a scale for Perceived Social Support (Cohen, Mermelstein, Kamarck, & Hoberman, 1985).
2. Existential variables: meaningfulness in one’s life, assessed by the Purpose in Life Test (Crumbaugh & Maholick, 1969).
3. Flow (the experience associated with engaging one’s highest strengths and talents to meet achievable challenges; Csikszentmihalyi & Larson, 1987), as measured by Experience Sampling (Duckworth et al., 2005) or the Flow Scale (Mayers, 1978).

4. Spirituality: the Spirituality Self-Rating Scale, which we developed and applied to both substance-abusing and non-substance-abusing populations (Galanter et al., 2007), as well as other such scales. By means of our own scale, we were able to distinguish the level of spiritual orientation of different substance-abusing populations from that of non-substance-abusing populations.
5. Personality assessment: the Classification of Strengths (Peterson & Seligman, 2004), a series of characteristics based on categories of moral excellence drawn from observations across different cultures.
6. AA involvement: measures of the degree of affiliation and commitment to the AA fellowship (Humphreys, Kaskutas, & Weisner, 1998).

A methodology for defining recovery based on measurements like these may not have the same appeal to biomedically oriented clinicians as does the conventional symptom-based approach, as these measurements are based on self-report of the person’s subjective state. Furthermore, the enthusiasm of newfound recovery may yield a Hawthorne effect. The biomedical format currently applied in diagnosis derives from the school of Kraepelin and subsequent investigators like those who developed the Feighner criteria (Feighner et al., 1972) in the 1970s and is evident in the ensuing *DSM* system. Spiritual variables, however, have a lineage as well, from William James, Carl Jung, and Bill W.

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