Helping, Spirituality and Alcoholics Anonymous in Recovery*

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ABSTRACT. Objective: The purpose of this study is to examine how helping activities and spirituality—perhaps key influences on sobriety—change over recovery. The study also explores interrelations among Alcoholics Anonymous (AA), helping and spirituality. **Method:** Questionnaires were administered to recovering alcoholics (118 men, 80 women) recruited at AA and Women for Sobriety meetings, treatment programs and through personal connections. A helping scale measured Recovery Helping (8-item $\alpha = 0.78$), Life Helping (12-item $\alpha = 0.62$), and Community Helping (6-item $\alpha = 0.60$). The Daily Spiritual Experiences scale assessed two components of spirituality identified by factor analysis: Theism and Self-Transcendence. Two components of an AA scale, Involvement and Achievement, were also treated separately on the basis of factor analysis. **Results:** Structural equation modeling revealed that longer sobriety predicted significantly more time spent on Community Helping, less time spent on Recovery Helping and higher levels of Theism, Self-Transcendence and AA Achievement. Model covariances revealed that both AA components were related to more Recovery Helping and higher Theism. Both spirituality components related to all forms of helping, with one exception. **Conclusions:** The findings highlight important changes in helping with length of sobriety. As their sobriety accumulates, recovering alcoholics seem to devote less time to informal helping and more time to organized community projects—perhaps indicating evolving needs and abilities. The results also suggest roles for AA and spirituality in encouraging helping, and they indicate that some forms of spirituality relate to AA affiliation. Future work might establish whether and when helping in different domains contributes to the maintenance of abstinence and to other drinking-related outcomes. (*J. Stud. Alcohol* **65:** 383-391, 2004)

AS PEOPLE RECOVER from alcoholism, they can experience dramatic changes in how they think about themselves, others and the world in general. In fact, common wisdom in Alcoholics Anonymous (AA) asserts that recovery from alcoholism *necessitates* a radical change in perspective. AA's world view asserts that self-centeredness lies at the heart of alcoholics' suffering; hence, overcoming alcoholism requires overcoming self-centeredness by committing to helping others and by surrendering to a higher power (Humphreys and Kaskutas, 1995). Echoing these thoughts, one AA member has commented (Rudy and Greil, 1987):

> AA makes you aware of other people. I think the major problem with most of us is that we were always too concerned about ourselves. Now, it's different. You have to realize that alcoholism is a physical, mental, and spiritual affliction and that AA is more than just not drinking—it's a way of life, a spiritual philosophy. (p. 54)

AA members commonly understand sobriety itself within a spiritual context, believing that being sober (versus simply "dry") entails acceptance, humility and serenity—in other words, spiritual maturity (Miller, 1998).

This study extends research on helping and spirituality by describing how helping activities and spirituality in a sample of recovering alcoholics differ over the course of recovery. It also examines interrelations among helping, spirituality and AA. The object of the research is to generate both an overview of the recovery process and testable hypotheses surrounding dynamically varying causes and effects of abstinence.

Previous research on helping and spirituality

Observing mutual-help groups, Frank Reissman (1965, 1976) noticed that those who helped others seemed most likely to benefit from involvement in the group. This idea—that helpers help themselves—became known as the "helper therapy principle." Supporting Riessman's idea, two studies have found positive associations between self-reported helping and psychological outcomes among various mutual-help groups (Maton, 1988; Schiff and Bargal, 2000); a third, using behavioral measures of helping and sampling from a group for the mentally ill, also found that more helping predicted better outcomes (Roberts et al., 1999). Although these studies did not include AA members, their conclusions may well generalize to recovering alcoholics. AA research reliably suggests that sponsoring another member is, among all core AA activities, the strongest correlate

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of abstinence (Emrick et al., 1977; Sheeren, 1988). Moreover, longitudinal research on recovering substance users suggests that helping during treatment decreases the likelihood of problem drinking at follow-up (Zemore et al., in press).

The recent surge of research on spirituality also implies a role for spirituality in recovery. Studies consistently conclude that spirituality decreases the likelihood of substance use and related problems (Cochran et al., 1992; Gorsuch, 1993, 1995; Gorsuch and Butler, 1976; Miller, 1998). Spirituality has also been implicated as an influence on recovery itself. In its large-scale clinical trial, Project MATCH, controlling for baseline drinking, found that higher baseline scores on the Religious Background and Behavior scale (RBB) predicted better drinking outcomes at the 1-year follow-up (Connors et al., 2001). Using a smaller sample, Connors et al. (2003) found that higher scores on several measures of spirituality predicted higher rates of abstinence at the 6-month follow-up. Kaskutas and colleagues (2003) found that, although baseline religiosity failed to predict outcomes among treatment seekers, individuals who reported a spiritual awakening as a result of their AA involvement were nearly four times more likely to be abstinent at Year 3 than individuals who reported never having had a spiritual awakening.

The last finding highlights an important connection between AA and spirituality. Spirituality is integral to AA's philosophy, an association supported by empirical work revealing that spiritually oriented individuals are more likely to affiliate with AA than are agnostics or atheists (Fiorentine and Hillhouse, 2000; Tonigan et al., 2002; Winzelberg and Humphreys, 1999). Project MATCH, for instance, found that higher scores on the Religious Background and Behavior scale predicted higher AA meeting attendance and involvement as well as better outcomes through follow-up (Connors et al., 1996).

AA also encourages helping during recovery, a point AA researchers have repeatedly emphasized (Emrick et al., 1977; Rudy and Greil, 1987). Among AA's Twelve Steps, three encourage responsibility to others: Steps Eight and Nine require members to take responsibility for the harm they caused others and make amends; Step Twelve asks members to "carry the message" to other alcoholics, to help newcomers achieve sobriety and sustain AA itself. However, little research examines the relationships between AA and helping as a part of recovery (cf., Zemore et al., in press).

In sum, both spirituality and a helping orientation—important components of AA's program—appear to influence recovery from addiction. AA's dual emphases on spirituality and helping come, perhaps, quite naturally because these factors are themselves interwoven. Caring for others is overtly encouraged by many spiritual traditions and institutions and may be a direct expression of spirituality. Caring for others may also intensify one's sense of spirituality by fostering mutuality. Research has shown, indeed, that individuals who report frequent community service also tend to report both a stronger belief in God as a causal agent (Bernt, 1999) and more frequent church attendance (Thoits and Hewitt, 2001) than those who volunteer infrequently. Associations between AA, spirituality and helping, although little-studied, deserve notice because they bear heavily on the interpretation of each variable's effects.

The current study

Given the foregoing arguments, the current article seeks to describe how helping, spirituality and AA participation change over recovery and how they relate to each other. We take a different tack from most treatment research, which typically adopts a drinking outcome as its key dependent variable. Our study, sampling exclusively abstinent alcoholics, considers instead whether different durations of sobriety (as an independent variable) relate to different levels of helping, spirituality and AA participation. The goals are to explore how alcoholics' behavior and perspectives change over recovery and to identify factors causally related to maintaining abstinence at different stages. Our approach acknowledges that treating and describing recovery as a process rather than a state is critical because factors important to abstinence in early recovery may not sustain abstinence later on (Humphreys et al., 1997; Moos, 1994; Tucker et al., 1994).

We pay special attention to understanding whether all dimensions of spirituality and AA participation operate equivalently because several scholars have emphasized the multidimensional nature of these constructs (for spirituality, see Chatters, 2000; Larson et al., 1992; Miller and Thoresen, 2003; for AA participation, see Montgomery et al., 1995; Tonigan et al., 1996). The following hypotheses are proposed: (1) helping activities and spirituality will vary as a function of length of sobriety; (2) AA participation will be positively associated with helping and spirituality; (3) helping activities and spirituality will show positive associations with each other.

Method

Sample and protocol

Treatment professionals and their research assistant distributed written surveys, consent forms and stamped return envelopes to a stratified convenience sample ($N = 257$) of recovering alcoholics. The greater part of the sample was drawn from AA (60%), Women for Sobriety (8%), Life Ring (2%) and public and private treatment centers (19%). To reach people not involved in mutual-help or treatment, however, the remaining 11% were recruited through per-

sonal connections with other participants or research staff. The protocol for recruitment at mutual-help groups was guided by recommendations from the AA general service committee that represented meetings where recruitment occurred, and all recruiters were themselves AA members active in the sampled communities. To avoid implying any endorsement by the group, recruiters approached attendees individually outside meeting rooms before and after meetings and did not announce the study during meetings. Participants filled out the surveys, which required about 30 minutes to complete, whenever and wherever convenient. About 97% of the approached sample provided consent, and 75% of consenting individuals returned surveys and received a $5.00 compensation. Survey return rates from those giving consent did not differ by gender, race or recruitment source; consenting respondents, however, were significantly older than consenting nonrespondents ($t = 3.02$, 237 df, $p < .01$ and reported longer sobriety ($t = 5.64$, 231 df, $p < .001$).

The final sample ($n = 200$) was mostly white (83%), but included some African American/black (7%), Latino/Hispanic/Puerto Rican (7%), Asian/Pacific Islander (2%), Native American (1%) and other (1%) participants. About half (40%) were women; ages ranged from 21 to 82 years (mean [SD] = 47.0 [12.5] years). Most of the respondents (69%) had been sober at least a year, although sobriety ranged from 3 days to 50 years (mean [SD] = 6.8 [8.3] years).

Measures

Helping. The study assessed helping during recovery using a self-report checklist composed of three subscales (available from the authors upon request). Recovery Helping (8-item $\alpha = 0.78$) measures helping other alcoholics with their recovery, including items on sharing experiences about staying clean and sober, giving moral support and encouragement and explaining program rules. Life Helping (12-item $\alpha = 0.62$) assesses helping others with issues not related to recovery, including items on sharing experiences about dealing with other problems, helping someone find a job and taking care of children. Community Helping (6-item $\alpha = 0.60$) measures involvement in community projects that benefit others, including items on fund-raising, working at a homeless shelter or soup kitchen, mentoring youth and helping out with children's sports.

On each item, respondents indicate how much time they spent in the preceding week on a given activity. Estimates are aggregated by (1) converting all reports to minutes, summing over the week and dividing by 7; (2) recoding these daily means into intervals, assigning a 0 (0 min/day), 1 (.01-15.00 min/day), 2 (15.01-30.00 min/day), 3 (30.01-60.00 min/day), 4 (60.01-120.00 min/day), or 5 (120.01 min/day or more); and (3) averaging across items within subscales. For each subscale, individuals thus obtain a score ranging from 0 to 5. For the main analyses here, scores were recoded as their inverse to compensate for skewed and leptokurtic distributions. This transformation reverses the distribution of scores so that the largest values become the smallest, and vice versa. To prevent confusion in interpreting results, however, we report positive parameter estimates where associations with the original scale would be positive, and negative estimates where associations with the original scale would be negative.

Exploratory analyses substantiate the validity of these novel scales. In the current study, participants reporting more Recovery and Life Helping also reported more frequently making time for another person and more frequently lending something or giving it away (both in the previous week; all p's $< .05$). Participants high on Life Helping were also more likely to report having changed jobs at the expense of status or income to "be a better person" or to "enhance my integrity or well-being" (p's $< .01$). Higher scores on all three subscales related to a greater likelihood of having changed jobs to "be consistent with the principles of my recovery" (p's $< .05$).

AA participation. To measure AA participation, the study included a nine-item version of a standard scale (Humphreys et al., 1998) that assessed meeting attendance and twelve-step-related behaviors, experiences and beliefs ($\alpha = 0.84$). All questions except the meeting question used a yes/no format. To code meetings, responses were assigned a 0, 0.25, 0.5, 0.75 or 1 based on a quartile split of attendees. Questions assessed current participation (e.g., "Do you now have a sponsor?") and participation history (e.g., total number of steps worked). Questions did not distinguish between AA, Narcotics Anonymous and Cocaine Anonymous. Because all participants were recovering alcoholics, however, the scale in this context is best considered a measure of AA (not twelve-step) participation. Previous analyses using eight-item (Zemore et al., in press) and nine-item (Humphreys et al., 1998) versions suggest good reliability and validity.

As previously noted, we proposed in this study to examine whether all dimensions of AA participation operate equivalently. To determine the factor structure of these items, therefore, preliminary analyses included an exploratory factor analysis. This analysis produced two factors with eigenvalues over 1. The first, a seven-item factor, accounted for 46% of the variance and included items targeting current AA involvement (labeled "AA Involvement," $\alpha = 0.85$). The second, a two-item factor, accounted for 14% of the variance, and the items (i.e., completion of the Twelve Steps and sponsoring another AA member) seemed not to target AA involvement so much as the degree to which respondents had worked the program ("AA Achievement," $\alpha = 0.66$). On the basis of these results, we created separate measures of AA Involvement and Achievement, averaging the seven and two items and assessing each, respectively.

Spirituality. The Daily Spiritual Experiences scale (DSE; Underwood, 1999) assessed spirituality. This 16-item scale measures "the individual's perception of the transcendent (God, the divine) in daily life and the perception of interaction with or involvement of the transcendent in life" (Underwood, 1999, p. 11). Items focus on day-to-day experiences rather than religious ideology. Respondents indicate how often they have various spiritual experiences on a scale from 1 (never or almost never) to 6 (many times a day). Using a scale from 1 (not at all close) to 4 (as close as possible), respondents also rate how close they feel to God. The DSE has demonstrated consistently high reliability (i.e., α's of 0.94 and 0.95) and associations with both psychological health (e.g., depression and anxiety) and alcohol use among medical center clients (Underwood and Teresi, 2002).

Consistent with our interest in the dimensional structure of our variables, an exploratory factor analysis was applied to the DSE. In contrast to previous psychometric work (Underwood and Teresi, 2002), our results supported a two-factor rather than a one-factor solution. The first, 11-item factor accounted for 61% of the variance and included all 10 items referring to "God" or "religion" plus one other (i.e., "I feel thankful for my blessings"). Two of this set, "I feel thankful for my blessings" and "In general, how close do you feel to God?," showed low item-total correlations and were discarded. Our resulting nine-item composite appeared to assess the experience of God in daily life (labeled "Theism," $\alpha = 0.96$). The second, five-item factor accounted for 9% of the variance and appeared to measure a feeling of connection with others and the universe ("Self-Transcendence," $\alpha = 0.85$). Items included "I feel a selfless caring for others" and "I feel deep inner peace or harmony." Averaging these five items created a second construct.

Because these results depart from those of previous analyses, confirmatory factor analyses contrasting one- and two-factor solutions were also applied. The results substantiate our exploratory analysis, indicating better fit for the two-factor solution ($\chi^2_{diff} = 83.8$, 1 df, $p < .001$). Subsequent analyses therefore treat Theism and Self-Transcendence as distinct variables (see Analysis).

Length of sobriety. All participants provided their sobriety date at recruitment. Using the date of data entry as a reference point, we calculated length of sobriety in weeks. A log transformation improved the originally skewed and leptokurtic distribution of this variable.

Secondary measures. Secondary measures included the 11-item psychiatric severity scale of the Addiction Severity Index (McLellan et al., 1980, 1985). This scale assesses psychological and emotional problems (e.g., depression, anxiety and hallucinations). Composite scores range from 0 (no significant problems) to 1 (substantial problems).

Analysis

Principal tests of the study's theoretical model involved structural equation modeling using Maximum Likelihood estimation and implemented in Mplus (Muthén and Muthén, 1998). Structural equation modeling allowed us to examine the relationship between length of sobriety and a given dependent variable (e.g., Recovery Helping) while simultaneously controlling for relationships between length of sobriety and the other dependent variables (e.g., Life Helping). By incorporating latent variables, we also avoided measurement error in those variables (Bollen and Long, 1993).

The structural model simultaneously regressed all dependent variables—including the spirituality variables (Theism and Self-Transcendence), helping measures (Recovery, Life and Community) and AA variables (Involvement and Achievement)—on length of sobriety. Covariances among the dependent variables were freed, permitting an examination of associations among those variables. Theism and Self-Transcendence were treated as latent variables with nine and five indicators, respectively. Because the helping variables demonstrated inadequate internal cohesiveness, Recovery, Life and Community Helping were treated as observed variables. For different reasons, the AA variables were likewise treated as observed variables. In the case of AA variables, item scoring was unsuitable to latent variable modeling: Most AA items used a dichotomous format, but Maximum Likelihood estimation requires continuous indicators of latent constructs. Alternative estimation techniques require samples of 500 or more (Hoyle, 1995).

To identify important control variables in each equation, a preliminary model incorporated all four controls available to the study (i.e., gender, race, age and psychiatric severity). The final model was then re-estimated with the exclusion of those controls that showed insignificant relationships with the dependent variable in each equation. On the basis of modification indices and theoretical plausibility, this final model also specified correlated measurement error between two pairs of items loading on Theism and between one pair of items loading on Self-Transcendence.

Results

The current study hypothesized that length of sobriety would predict both helping activities and spirituality (Hypothesis 1), that AA participation would relate to both helping and spirituality (Hypothesis 2) and that helping and spirituality would interrelate (Hypothesis 3). Model results support each of the study's hypotheses for some, but not for all, variable dimensions.

The final model showed acceptable fit ($\chi^2 = 384$, 196 df, $n = 149$, $p < .001$, CFI = 0.92, TLI = 0.90, RMSEA = 0.080 [0.068-0.092]). (Bentler and Bonett, 1980, suggest that CFI indices of 0.90 and higher indicate acceptable fit.)

Figure 1 displays key parameter estimates. Consistent with Hypothesis 1, longer sobriety was significantly associated with more Community Helping, *less* Recovery Helping, higher Self-Transcendence and higher Theism. Sobriety was unrelated to Life Helping, however. Although our study made no predictions for associations between length of sobriety and AA participation, longer sobriety did predict significantly more AA Achievement.

Figure 2 displays residual covariances among the model's dependent variables. Consistent with Hypothesis 2, both AA Involvement and AA Achievement were positively associated with Theism and Recovery Helping. Consistent with Hypothesis 3, both Theism and Self-Transcendence related to all three helping subscales—with the important exception of Theism and Community Helping, which did not covary. No other associations attained significance.

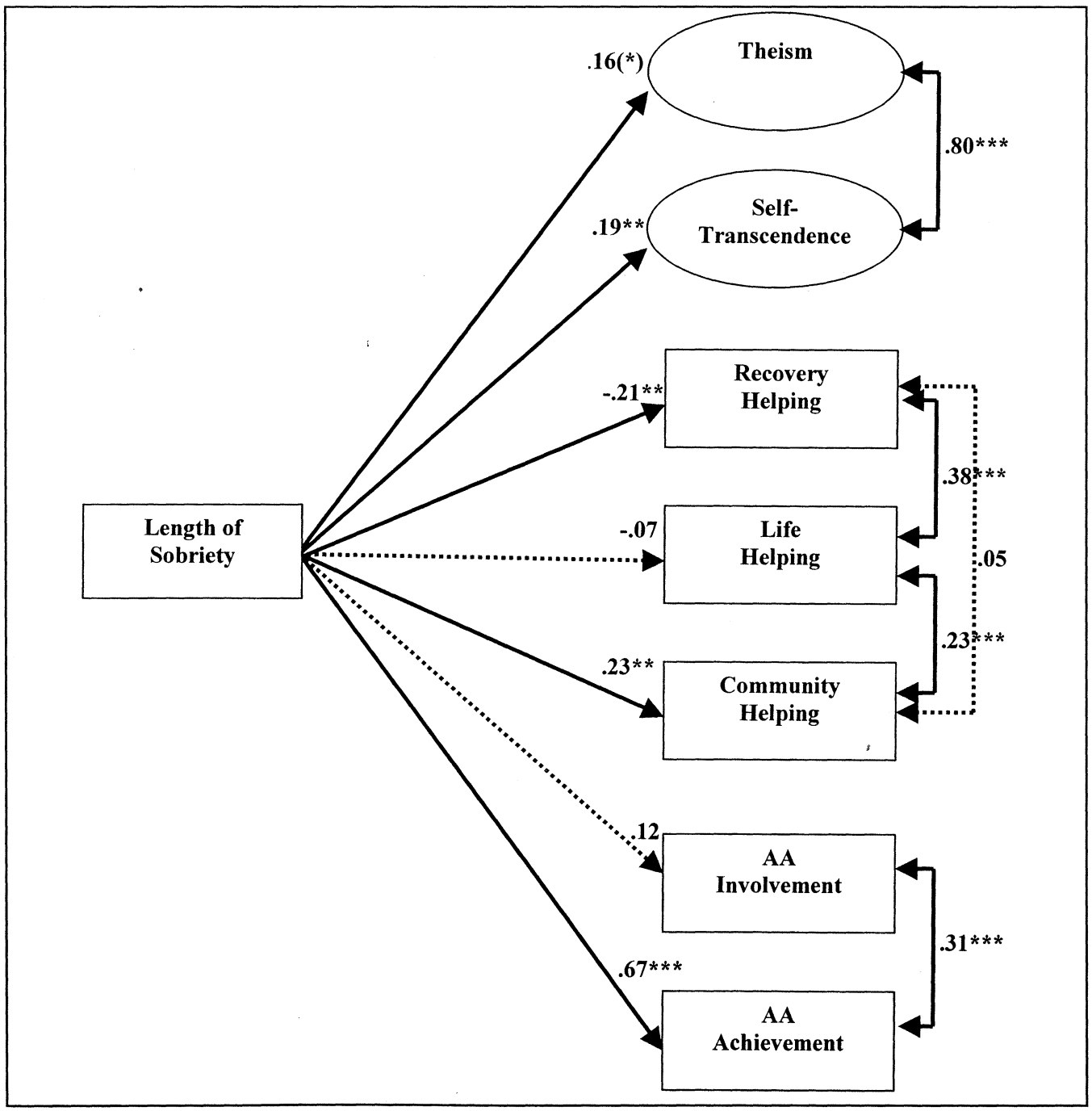

FIGURE 1. Parameter estimates (standardized) for main conceptual model ((*)$p = .05$; **$p < .01$; ***$p < .001$)

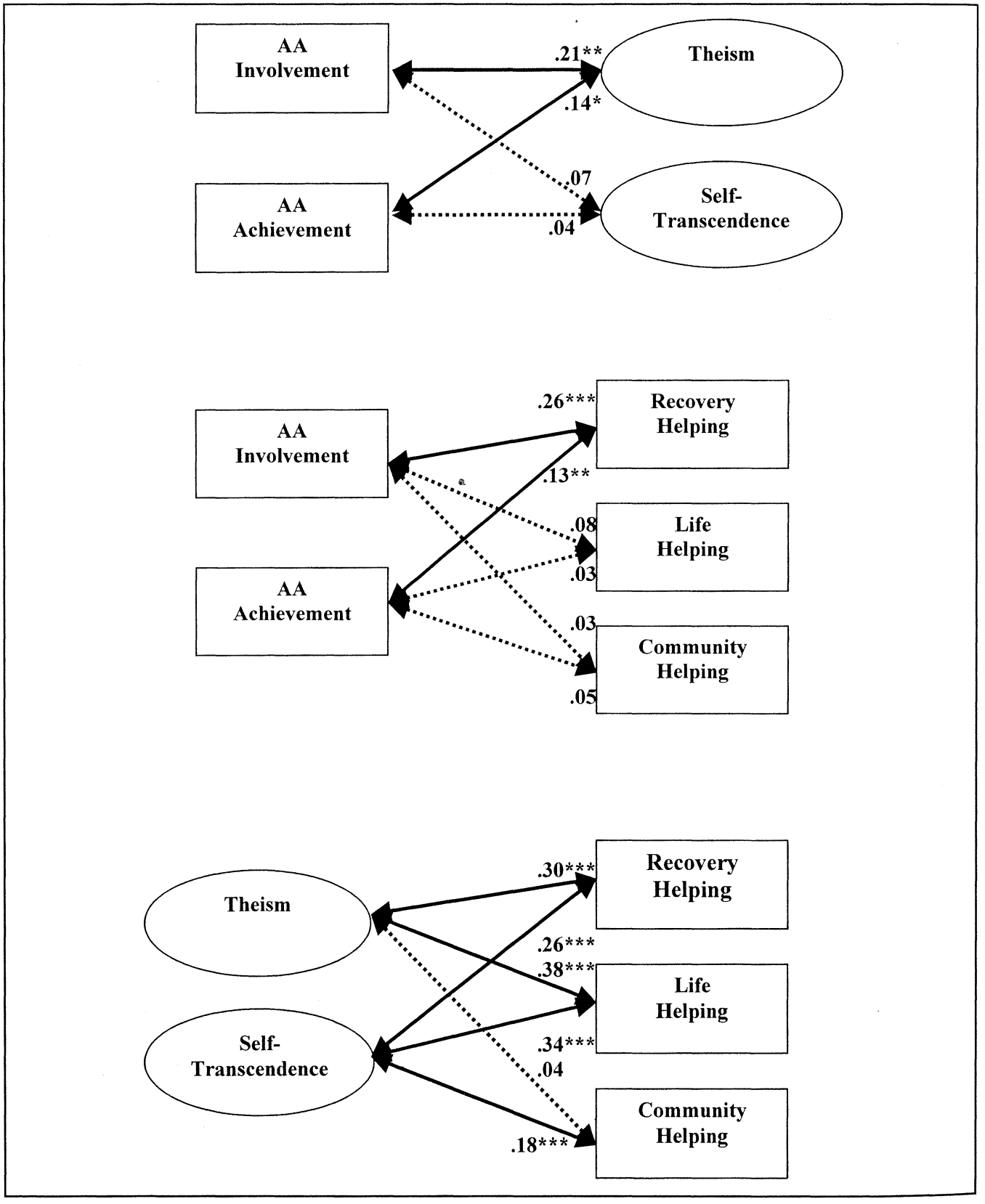

FIGURE 2. Residual covariances (standardized) among dependent variables (*$p < .05$; **$p < .01$; ***$p < .001$)

In addition to these findings, several control variables (not shown in either figure) demonstrated significant associations. First, gender emerged as an important predictor. Men reported more Community Helping ($\beta = 0.20$, $p < .01$), Recovery Helping ($\beta = 0.22$, $p < .001$) and AA Involvement ($\beta = 0.21$, $p < .01$) than did women. The latter two findings for men, however, may be an artifact of sampling procedures, since most men (75%) but only half of the women (50%) were recruited from AA, and recruitment from AA was associated with high rates of Recovery Helping and AA Involvement. Recruitment was unrelated to Community Helping. Second, older participants indicated both more Recovery Helping ($\beta = 0.19$, $p < .01$) and less AA Achievement ($\beta = -0.15$, $p < .01$) than did younger participants. It should be noted that age was negatively associated with AA Achievement only when controlling for length of sobriety. Given the same length of sobriety, older individuals reported less AA Achievement than younger individuals. The simple bivariate relationship between age and AA Achievement, however, was positive. Finally, participants high on psychiatric severity scored lower on Self-Transcendence ($\beta = -0.19$, $p < .001$) than did participants low on psychiatric severity. Psychiatric severity did not predict Theism.

Discussion

Main conclusions

The current study generated intriguing evidence for relationships between length of sobriety, helping, spirituality and AA, but interpretation of these findings is not simple. Findings of a positive association between length of sobriety and a given variable could imply changes in recovering alcoholics' needs, abilities and/or behavior with time. They could also imply that the variable contributes to maintaining abstinence throughout recovery (hence, appearing at higher levels among those who have successfully remained sober) or that changes in the variable result from accumulated abstinence and associated lifestyle changes. There is a similar case for negative associations. Findings for a null association do not imply that the variable fails to contribute to maintaining sobriety but merely indicate that levels of the variable do not vary as a function of length of sobriety. Counterbalancing this interpretational ambiguity, however, the current study offers a dynamic perspective on important causes and effects of the recovery process.

A first key finding was that longer sobriety was associated with spending more time on community projects that benefit others and less time on informal, recovery-focused helping. This result may reflect temporal changes in recovering alcoholics' needs and abilities. In early sobriety, individuals may need and want to focus on understanding themselves and building intimacy with other recovering alcoholics, and recovery-focused helping may serve those purposes. Later, with accumulated sobriety, individuals may experience an increased drive for broader communities and identities—so that service work gains importance. Movement from a personal to a collective focus may occur in conjunction with, and partly as a result of, accumulated progress in AA: In the current sample, longer sobriety was also strongly associated with AA Achievement.

Despite this trend, Recovery Helping does not seem to disappear with accumulated sobriety. This is consistent with AA's Twelfth Step, which urges continued reaching out to other alcoholics (Alcoholics Anonymous, 1991). Even among individuals who reported more than 5 years of sobriety ($n = 83$), 92% reported spending time the preceding day in giving moral support and encouragement (with 27% spending more than 15 minutes), and 90% reported sharing experiences about staying clean and sober (with 28% spending more than 15 minutes). Recovering alcoholics in later sobriety also demonstrated relatively high rates of formal recovery-related helping. Most individuals (57%) with more than 5 years of sobriety were sponsors, whereas a minority of individuals (12%) with less than 5 years of sobriety were sponsors.

A second key finding was that length of sobriety related positively to both Theism (i.e., experiences of God) and Self-Transcendence (i.e., perceptions of connection with others and the universe). We suspect this finding reflects both a positive effect of spirituality on maintaining abstinence and a positive effect of abstinence and the recovery lifestyle on spirituality. Spirituality can confer a sense of meaning in life and connection with others, thus helping to maintain abstinence by enhancing psychological health and recovery motivation. Reciprocally, abstinence and a recovery lifestyle can contribute to spirituality because individuals maintaining abstinence benefit from improved social relationships, perceived mutuality with others and perceived security and self-worth.

In addition to these results for length of sobriety, the data revealed provocative associations among helping, spirituality and AA. As expected, both of the AA variables (i.e., Involvement and Achievement) were positively associated with Recovery Helping, suggesting that AA's encouragement and/or environment facilitates peer helping. AA participation, however, was unrelated to Life and Community Helping. This lack of relation may indicate that AA's positive impact on helping is limited to recovery-specific forms, although future research will be required to confirm that possibility.

Also intriguing were findings that both AA variables were positively related to Theism but unrelated to Self-Transcendence. The relationship between AA participation and Theism is consistent with prior research that relates AA affiliation to greater spirituality (Connors et al., 1996; Fiorentine and Hillhouse, 2000; Tonigan et al., 2002;

Winzelberg and Humphreys, 1999) and with lay perceptions of AA as a religious (or theistic) organization. The null findings for Self-Transcendence contrast with these results, however. Perhaps the current AA measures failed to capture important components of AA participation that do relate to Self-Transcendence. On the other hand, research on the relationship between AA participation and spiritual variables has produced admittedly mixed results (e.g., using a measure of purpose in life, Tonigan et al., 2001). Emerging results from the joint National Institute on Alcohol Abuse and Alcoholism-Fetzer initiative should provide more information on this important topic.

Strong relationships emerged among the spirituality variables and all forms of helping, a finding consistent with the view that helping is an expression of spirituality. A noteworthy exception was Theism and Community Helping, which were unrelated. Comparing that null relationship to the positive relationship between Self-Transcendence and Community Helping, the findings seem to indicate that recognizing interdependence with forces beyond the self, but not a belief in God per se, encourages a caring orientation that extends to the broader community.

Last, results revealed that the distinct dimensions of helping, spirituality and AA participation may show idiosyncratic response patterns. The preceding discussion has already made that point for the spirituality and helping variables. Divergent patterns likewise emerged for the AA variables, most strikingly for their associations with individual difference variables. Whereas only gender predicted AA Involvement, race, age and psychiatric severity predicted AA Achievement. Such results argue for taking the multidimensionality of these constructs seriously.

Limitations and future research

Several limitations suggest a cautious interpretation of our results, chief of which are the relatively small sample size, nonrandom sampling and cross-sectional design. These limitations introduce the possibility that sampling biases may account for the results and emphasize the importance of future replications using a longitudinal design and representative sample. Also, the study's analyses aggregate individuals recruited from various sources (e.g., mutual-help groups and treatment programs), so the generalizability of results to each subgroup cannot be determined. The current sample is too small to be divided, but within-group analyses constitute a worthy goal for future research.

Readers may also question whether the study's conceptual model, tested by structural equation modeling (SEM), was too complex to provide reliable parameter estimates. We addressed this concern in a close examination of the correlation matrix (not shown), which essentially replicates the SEM results. Separate regression analyses likewise replicate the pattern. A single exception emerges: Bivariate tests show significant associations between AA Achievement and both Self-Transcendence and Community Helping, whereas the SEM results show no such associations. Focused regressions suggest that these bivariate associations can be explained by shared associations with a third variable, that is, length of sobriety. The SEM results differ, it appears, because estimating the relationship between AA Achievement and each variable involved controlling for length of sobriety.

Future work might examine relationships between all three forms of helping and the maintenance of abstinence, considering in particular whether the roles of each vary as a function of time since treatment initiation. Future work might also compare helping among recovering alcoholics with helping in the general population. Such a study could provide a valuable context for understanding the recovery process and contribute to reducing the stigma associated with recovery.

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