Short communication

Development and validation of the alcohol-related God locus of control scale

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Abstract

Control beliefs and spirituality appear to be important factors in recovery from alcoholism. However, the integration of these two constructs has received little attention, and the relationship of spiritually related control beliefs to recovery remains unclear. Currently no measures exist to specifically assess these beliefs. To address this need, the Alcohol-Related God Locus of Control scale (AGLOC) was developed. This 12-item self-report measure assesses perceptions of God/Higher Power’s role in recovery from alcoholism. The AGLOC was administered to 144 recovering alcoholics attending Alcoholics Anonymous meetings. Exploratory factor analysis yielded a two-factor solution with one factor related to attributions of God control over initial cessation of drinking (Cessation) and the other factor related to attributions of God control over one’s continued maintenance of sobriety (Maintenance). Both subscales and the overall scale demonstrated adequate to high internal consistency. Demonstrating convergent and discriminant validity, the total AGLOC scale and the Cessation subscale were significantly but moderately correlated with spirituality (both frequency and importance), and independent of perceptions of internal control over drinking. Maintenance subscale scores were inversely associated with internal drinking-related scores and were not associated with spiritual importance or frequency of spiritual practice. Findings support the utility of this instrument for the assessment of alcohol-related God/Higher Power locus of control beliefs in an alcoholic population and suggest the importance of further research on changes in alcohol-related God control beliefs throughout the course of recovery.

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1. Introduction

Alcohol misuse is a significant problem in the United States with an estimated 12.9 million problem drinkers (Substance Abuse and Mental Health Services Administration, 2002). To more effectively treat individuals with alcohol-related problems, researchers have examined personality constructs that may predict better treatment outcomes (Project Match Research Group, 1997). Two personality constructs, internal control beliefs and spirituality, have been positively correlated with successful post-treatment outcomes (e.g., Brown & Peterson, 1991). However, the exact nature of these relationships is poorly understood, and the possible intersection between control beliefs and spirituality in predicting outcomes remains largely unexplored.

Research has shown that locus of control (also referred to as control beliefs) plays a significant role in recovery from alcoholism (Abbott, 1984; Brown & Peterson, 1991). Studies using a drinking-specific measure of control beliefs have found differences in attributions of control between alcoholics and non-alcoholics that were not detected using measures of general internal control (Donovan & O’Leary, 1978). Specifically, more internal drinking-related control beliefs have been associated with more favorable trends in drinking behavior and recovery outcomes (Huckstadt, 1987). Based on these findings, it appears that internal alcohol-related control beliefs are adaptive for individuals recovering from alcoholism. However, this conceptualization appears inconsistent with one of the fundamental tenets of Alcoholics Anonymous (AA), which encourages externalization of control in the form of reliance on God or a Higher Power (Alcoholics Anonymous, 2001). Research has consistently shown a positive correlation between spirituality, positive alcohol treatment outcomes, and quality of life (Carroll, 1993). Thus, there appears to be support for an adaptive/beneficial role of external perceptions of alcohol-related control in recovery from alcoholism.

Research has also demonstrated that a number of control belief subtypes exist (e.g., chance, fate, powerful others; Levenson, 1974). One subtype of control that has recently received increasing attention is control attributed to God (Welton, Adkins, Ingle, & Dixon, 1996). However, research on God locus of control is relatively new and little is known about how this construct may relate to various outcomes including behavior change. The dearth of studies examining the potential role of God control in alcoholism is due at least in part to the paucity of available measures. In order to further understand the potential role of God control beliefs in recovery from alcoholism, a reliable and valid domain-specific instrument is needed. The purpose of the present study was to develop a measure of God/Higher Power control beliefs over alcoholism, and to provide initial data on the reliability and validity of this measure.

2. Method

2.1. Instrument development

Items for the new instrument (the Alcohol-Related God Locus of Control scale; AGLOC) were modeled after the God Locus of Health Control Scale (GLHC; Wallston et al., 1999). Using GLHC items as models, 12 items were generated; six that assessed perceptions of God/Higher Power’s role in the initial decision to stop drinking, and six that addressed perceptions of God/Higher Power’s role in continued maintenance of sobriety. A 6-point Likert response format ranging from strongly disagree to strongly agree was used (Table 1).
2.2. Participants and procedures

Participants were 144 Californian members of AA (89 men, 55 women). Average age was 40.3 years (SD = 11.1, range 20–72). Participants reported attending an average of 4 meetings per week (SD = 2.2; range 0–11) and the average length of current sobriety was 72.8 months (SD = 69.6; range 0–327). Self-reported ethnicity was 88% Caucasian, 7% Hispanic, and 5% African American. AA members were recruited at meetings by fellow members who had volunteered to help with the study and an estimated 80% of those approached agreed to participate.

2.3. Measures

In addition to completing the AGLOC, participants completed the Drinking-Related Locus of Control Scale (DRIE; Keyson & Janda, 1972). This 25-item self-report questionnaire assesses attributions of control over alcohol consumption. Internally oriented responses are summed to produce a total score. Participants also responded to two spirituality items: frequency of weekly attendance at spiritual/religious meetings and importance of spirituality in their lives.

3. Results

3.1. Factor analysis

An exploratory principal components factor analysis with oblique rotation was performed on the 12 items of the AGLOC. Examination of Eigenvalues and the scree plot indicated retention of two primary
factors. The first factor had an Eigenvalue of 5.70 and accounted for 47.5% of the total variance. The second factor had an Eigenvalue of 1.63 and accounted for an additional 13.7% of the total variance. No other Eigenvalues exceeded 1.0.

An examination of factor loadings revealed two 4-item subscales that related to 1) the initial decision to stop drinking (Cessation subscale) and 2) the continued maintenance of sobriety (Maintenance subscale). Items 1, 3, 4, and 6 related to the initial decision to stop drinking and had factor loadings >.73 on Factor 1. Items 7, 8, 11, and 12 asked about God’s role in the maintenance of sobriety, and all items loaded >.76 on Factor 2. The remaining four items loaded on both factors and were retained only for use in creating a total score which is the sum of all 12 items.

3.2. Reliability and validity

3.2.1. Total AGLOC scale

The AGLOC demonstrated good internal consistency with a coefficient alpha of .89. AGLOC total scores were independent of DRIE scores (r = −.08, p > .05), but moderately correlated with both frequency of attendance at spiritual meetings (r = .21, p < .02) and spiritual importance (r = .22, p < .01).

3.2.2. Cessation subscale

Internal consistency for the 4-item Cessation subscale was acceptable with a coefficient alpha of .76. Cessation subscale scores were not significantly correlated with DRIE scores (r = .06; p = .48), but were positively associated with both spiritual importance (r = .30, p < .001) and frequency of attendance at spiritual meetings (r = .29, p < .001). Cessation subscale scores were strongly correlated with total AGLOC scale scores (r = .84; p < .001).

3.2.3. Maintenance subscale

The Maintenance subscale demonstrated good internal consistency with an alpha coefficient of .86. Maintenance subscale scores were inversely correlated with DRIE scores (r = −.17; p < .001), although the relationship was very small (<3% shared variance). Interestingly, the Maintenance subscale was not significantly associated with either spiritual importance (r = .03, p = .72) or frequency of attendance at spiritual meetings (r = .04, p = .63). Maintenance subscale scores were moderately associated with Cessation subscale scores (r = .41; p < .001) and strongly associated with the total AGLOC scale scores (r = .80; p < .001).

4. Discussion

The purpose of this study was to develop and evaluate the psychometric properties of a new measure of alcohol-related God/Higher Power control beliefs. Results suggest that the AGLOC is a reliable and valid measure of alcohol-related God/Higher Power control beliefs in recovering alcoholics. Factor analysis of the 12-item measure revealed two moderately intercorrelated 4-item subscales, cessation and maintenance, both strongly associated with a total score reflecting overall alcohol-related God control beliefs. Internal consistency of the scale and subscales was good.

Convergent validity for the overall AGLOC and the Cessation subscale was demonstrated by positive correlations with both spiritual practice and spiritual importance. However, although AGLOC total
scores and Cessation subscale scale scores were significantly related to spirituality, these relationships were relatively weak, suggesting that measurement of general spirituality cannot serve as a proxy for spiritually based alcohol control beliefs.

Divergent validity for the total AGLOC scale and the Cessation subscale was demonstrated by non-significant associations with a measure of internal alcohol-related control beliefs. The finding that beliefs in internal control over alcohol are independent of spiritually related alcohol control beliefs is consistent with existing research (Wallston et al., 1999) and indicates that God/Higher Power control beliefs may have differential relationships to outcomes of interest.

Interestingly, the Maintenance subscale showed a different pattern of associations. Maintenance subscale scores were not positively associated with either spiritual practice or spiritual importance. These findings, combined with the modest relationship of spirituality to both AGLOC total scores and Cessation subscale scores, indicate that alcohol-related God control beliefs are distinct from spirituality and raise the possibility that these beliefs may become more distinct from general spirituality as an individual maintains recovery and participation in AA. Unlike total AGLOC scores or Cessation subscale scores, Maintenance subscale scores did show a significant inverse relationship with alcohol-related internal control beliefs; however the relationship was very small. Based upon this pattern of results, it appears that the AGLOC scales (e.g., Total, Cessation, and Maintenance) are largely independent from alcohol-related internal control beliefs.

While recent studies (e.g., Tonigan, Miller, & Schermer, 2002) have demonstrated that general God beliefs change with increased exposure to Alcoholics Anonymous, studies involving alcohol-specific God control attributions have been noticeably lacking. This is surprising given that traditional subtypes of locus of control attributions (e.g., internal, external) are largely domain specific and it is reasonable to suspect that control attributed to God may also be situation dependent. With the advent of the AGLOC, researchers will be able to assess God locus of control beliefs specific to alcohol and examine how these beliefs (and changes in these beliefs over time and with intervention) may influence treatment outcome.

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References


