SELF-DECEPTION, SELF-ESTEEM, AND CONTROL OVER DRINKING AT DIFFERENT STAGES OF ALCOHOL INVOLVEMENT


With two studies, the authors sought to clarify how alcoholism relates to beliefs about drinking control and self-esteem by varying the stage of alcohol involvement. The stages were active abuser, commitment to change, early recovery, and late recovery. As hypothesized in Study I, long-term recovering abstainers had greater drinking-related internal locus of control, self-efficacy about abstaining, and self-esteem than those in detoxification. Unexpectedly, active abusers did not differ from the long-term recovering abstainers. Study 2 successfully discriminated these extreme groups with a measure of self-deception. Active abusers' positive beliefs about drinking control and self-esteem were associated with high self-deception. Self-beliefs at commitment to change were negative, but self-deception was still high. Early and late recovery was associated with positive self-beliefs and significantly lower self-deception.

Considerable research has focused on the relationships of alcoholism with locus of control and self-esteem. Nearly all definitions of alcoholism include low self-esteem and beliefs about loss of control over drinking and inefficacy at preventing relapse once abstinence is attained (Cox 1979; Hinrichsen 1976; Marlatt and Gordon 1985). Findings on locus of control (Joe 1971) led to the hypothesis that alcoholics would be more externally oriented than nonalcoholics. Subsequent research has not consistently supported this hypothesis, whether measuring locus of control generally or drinking-related control specifically. Compared to nonalcoholics, alcoholics were sometimes more internal (Goss and Morosko 1970; Gozali and Sloan 1971; Oziel, Obitz, and Keyson 1972), sometimes no different (Donovan and O'Leary, 1975; Weissbach, Volger, and Compton 1976), and sometimes more external (Donovan and O'Leary 1978; Naditch 1975). A belief in one's self-efficacy at maintaining abstinence has been implicated as an important factor in relapse prevention (Marlatt and Gordon 1985), although there is limited research to support this view (Burling et al. 1989). Studies of self-esteem consistently have reported lower group means for alcoholics compared to nonalcoholics; nonetheless, many individual alcoholics were found to have very high self-esteem (Berg 1971; Charalampous, Ford, and Skinner 1976).

Repeated calls have been made for a stage conception of alcohol involvement.
Hinrichsen (1976) argued that differences in samples and stages of treatment for alcoholism may account for differences in reported locus of control. Subsequent research has demonstrated greater internality with longer successful involvement in treatment (Abbott 1984; Oziel and Obitz 1975; Walker et al. 1979). Bean (1975), in her analysis of Alcoholics Anonymous (AA), posited three stages of development in the career of an alcoholic -- active drinking, acute or early recovery, and late recovery. She associates progress with change from denial to other defenses that are more mature and less distorting. Supportive of this view, higher (presumably defensive) self-esteem has been found in active drinkers not seeking treatment compared to those in treatment (Charalampous, Ford, and Skinner 1976). Brownell and associates (1986) posited a three-stage model of change in addictions -- decision and commitment to change, initial change, and maintenance of change; they argue that different variables are relevant at different stages of an addict’s natural history.

Despite arguments for a stage conceptualization of alcohol involvement, research typically has settled for accessible inpatients in detoxification. Two important groups, active alcohol abusers and long-term recovering abstainers, have been largely neglected in this literature. Active abusers, who deny that their drinking is a problem and have made no commitment to change, are likely to differ in self-esteem and beliefs about drinking-control from those seeking treatment for their drinking. Identifying and accessing active abusers is a difficult research problem; however, individuals apprehended for driving while under the influence of alcohol (DUI) have been suggested (Zung 1980). Brownell and associates (1986) decry the lack of research on those successfully abstaining after extended exposure to treatment. Compared to those entering treatment, this group can be expected to have regained self-esteem and beliefs in their control over drinking and their efficacy at maintaining abstinence. Relevant research has found evidence of improved well-being and functioning in long-term recovering abstainers (Kurtines et al. 1978; Mellor, Conroy, and Masteller 1986).

**Study 1**

In this study, we investigated differences in drinking-related locus of control, abstinence efficacy, and self-esteem at four stages of alcoholism. A moderate positive correlation was hypothesized between the three variables. Hypothesized were between-group differences on all three measures: moderate scores by active abusers; the greatest externality, inefficacy, and disesteem by those entering treatment; lowered scores by those completing detoxification; and the least externality, inefficacy, and disesteem by recovering abstainers.

**Method**

**Subjects**

A total of one hundred subjects were recruited, twenty-five from each of the following four groups. The active abusers were recruited from a DUI state-mandated educational program; to be included in the study, they had to score three or higher on the Short Michigan Alcoholism Screening Test.
(SMAST) (Selzer, Vinokur, and Van Rooijen 1975), indicating ongoing problems with alcohol in addition to their DUI arrest. Two early-treatment groups included detoxification inpatients in the first five days of treatment and the last five days. The recovering abstainers had been active AA members for at least one year. Subjects were recruited by announcement in group settings and were given a packet to complete anonymously at the end of the meeting or to return by mail to the researchers.

Measures
All subjects completed an information page with questions on age, sex, marital status, education, and drinking habits (SMAST). Drinking-related locus of control was assessed with the twenty-five-item DRIE Scale (Donovan and O'Leary 1978), scored dichotomously for externality. Self-esteem was assessed with the ten-item scale by Rosenberg (1965), a commonly used measure of self-esteem (Wylie 1979), with higher scores indicating lower esteem. Efficacy beliefs about alcohol abstinence were assessed with a ten-item questionnaire, developed as part of this research program (Bernstein and Barone 1984). For consistency with the above measure, higher scores indicate less efficacy. Subjects are asked to indicate on a seven-point answer format the likelihood of drinking despite a decision to stop drinking if faced with certain circumstances (depressed, in a drinking situation, working under pressure, after an argument, etc.).

Results
Scores on all measures, presented in table 1, were surprisingly low. That is, subjects tended to indicate internality, self-esteem, and abstinence efficacy. There were substantial intercorrelations between measures, ranging from .48 to .59. A MANOVA and subsequent ANOVAs found that the four groups differed significantly on the three measures as a set (Wilks' lambda = .50, df = 9, p < .001) and individually, as shown in table 1. T-score conversions and profiles are shown in figure 1; T-score profiles are familiar from MMPIs and underscore that existing groups rather than changes across stage were evaluated. A profile analysis found no differences in shape of profiles (parallelism -- Wilks' lambda = .92, df = 6, p > .10) or between measures across groups (flatness of the composite profile -- Fs < 2, df = 3, 96, p > .10); however, it did find differences in profile levels for groups (F = 27, df = 3, 96, p < .001). In other words, the four groups had the same profile; the multivariate difference was between groups differing in alcohol involvement rather than between measures (standardized) or as the result of a group-by-measure interaction. Means were ordered as predicted, with early detox subjects topping out on the measures ("hitting bottom" in AA parlance). Long-term abstainers were significantly lower on the three measures than the early recovery groups, who differed from each other on all but locus of control. The surprising finding was that the abusers did not differ significantly from the long-term abstainers on either drinking control or self-esteem, but only on abstinence efficacy.

Discussion
The results of this study support the notion that self-beliefs differ with stage of
alcohol involvement. Greater self-esteem and beliefs in drinking-control and abstinence efficacy were shown to be associated with longer successful participation in abstinence-supporting treatment and activities. The results also suggest the need for another variable to portray accurately cognitive-motivational differences between active abusers and long-term recovering abstainers.

**Study 2**

Bean (1975), like many clinicians, argued for the centrality of denial in active alcoholics. Hinrichsen (1976) suggested that this group has exaggerated, unrealistic perceptions of control; he labelled them as defensive internals. In nonclinical research, Turkat (1978) noted the increasing use of social desirability scales to distinguish genuine from defensive high self-esteem. Paulhus (1984) found evidence for a two-factor model of social desirability: self-deception -- the individual appears to believe positive self-reports, and impression management -- intentional deception for social advantage. Compared to nonalcoholics, recovering abstainers of more than one year have been shown to score lower on self-deception, but no differently on impression management (Mellor, Conroy, and Masteller 1986); however, Paulhus' complete scales were not used. These findings are impressive because they tap general self-deception (on issues such as relations with parents and sexual and aggressive impulses) rather than drinking-related self-deception; they need to be replicated with Paulhus' complete scales.

The following study investigated differences in drinking-related locus of control, self-esteem, self-deception, and impression management at four stages of alcohol involvement. Given its high correlation found with established measures and the need to limit the number of measures, alcohol efficacy was omitted. The findings of Study 1 were predicted to be replicated with different recovery samples. Self-deception but not impression management was hypothesized to decrease with stage of alcohol involvement. Profiles including drinking-related locus of control, self-esteem, and self-deception were hypothesized to distinguish between different stages of alcoholism.

**Method**

**Subjects**

A total of 106 subjects were included, each of the four groups containing twenty-two to thirty-two. Subjects again were recruited by announcement in group settings and were given a packet to complete anonymously at the end of the meeting or return by mail to the researchers. Active abusers again were recruited from DUI classes. More stringent criteria for inclusion in this study had to be met: SMAST score of 3 or higher, no current involvement in AA or other treatment for drinking, and no commitment to stop drinking. Of the sixty-three volunteers, thirty-two met these criteria and were included as subjects. The three recovering groups were recruited from outpatient facilities that offered AA meetings. This source instead of inpatient facilities was used in this study to increase the generalizability of the results. One group of twenty-two subjects included those who had initiated a commitment to stop drinking by having "picked up a white
"chip" at the end of an AA meeting within the last thirty days. Another group of twenty-seven subjects were in the initial stage of change and had been sober for three to six months. The final group of twenty-eight in the later stage of recovery had been sober for more than one year. All subjects included in the last three groups had alcohol abuse as their primary addiction.

Measures
As in Study 1, subjects completed demographic information, the SMAST, the Drinking-related Locus of Control Scale, and the Self-esteem Scale. In addition, they completed the Balanced Inventory of Desirable Responding (BIDR) (Paulhus 1984), which assesses self-deception (SD) and impression management (IM) with two twenty-item scales answered with seven-point Likert formats. BIDR items are taken from previous social desirability and validity scales; items cover libidinal and aggressive impulses (SD) and minor flaws such as littering, lying, or being late (IM).

Results
The four groups did not differ on age, sex, income, education, or marital status. Few blacks or Hispanics were included, but women made up from 25% to 45% of group membership. The average SMAST score of 5.2 for the DUI group clearly points to difficulties with alcohol, but 72% of them viewed themselves to be only moderate or average drinkers. Approximately 55% of the DUI group had tried at least one time to stop drinking, and 75% had participated on at least one occasion in AA or treatment for their drinking. In the recovering groups, over half were currently in treatment and were also attending AA meetings almost on a daily basis. The longest abstainers had been sober for an average of five years. As shown in table 2, DRIE and self-esteem scores, were again quite low, whereas self-deception and impression management scores were mid-range on their scales. The two early recovering groups in this study scored lower on externality and higher on esteem than the detox groups in Study 1; however, this study's longest abstainers scored higher on externality and lower on esteem than the comparable group in Study 1. DRIE and self-esteem scores correlated .44 compared to .59 in Study 1. SD and IM correlated .49 with each other but from -.15 to -.33 with DRIE and SE. Thus, greater internality and self-esteem were associated with greater self-deception and impression management.

A MANOVA and subsequent ANOVAs found that the four groups differed significantly on the four measures as a set (Wilks' lambda = .60, df = 12, p < .001) and individually except for impression management, as shown in table 2. T-score conversions and profiles are shown in figure 2. A profile analysis on the three discriminating measures found differences in profiles (nonparallelism -- Wilks' lambda = .75, df = 6, p < .001). In other words, the multivariate difference resulted from a groups-by-measures interaction, thereby producing differently shaped profiles. In contrast, groups in Study 1 had the same profile; if SD were eliminated, the groups in this study would also have had the same profile. Means were ordered as predicted except for a minimal reversal on SD in the two longest-sober groups. Compared to the earliest recovery group, the longest
abstainers were significantly lower on DRIE and SE but not on SD. The intermediate recovery group did not differ on any measure from either of the other recovery groups. As predicted, the active abusers showed the most self-deception, significantly more so than the two longer recovery groups. However, those nearest the time of commitment to change, although "hitting bottom" in terms of self-esteem and beliefs about control, were not significantly lower in self-deception than the active abusers.

**General Discussion**

The results of these two studies demonstrate that cognitive-motivational assessment can discriminate between groups known to differ in drinking behavior. Findings about alcoholics' self-esteem and drinking-control beliefs were orderly when stage of alcoholism and self-deception were included in the analysis. Active abusers' positive self-esteem and beliefs about controlling drinking were found to be associated with high self-deception; hence, these positive beliefs appear to be defensive rather than genuine. Those in the early stage of recovery had lowered expectations about drinking-control and reduced self-esteem; however, their general self-deception continued to be present. With continuing sobriety, beliefs about drinking control and self-esteem are higher and general self-deception is lower. These findings are consistent with posited stage models of alcohol involvement (Bean 1975; Brownell et al. 1986), with previous findings of improved well-being in long-term recovering abstainers (Kurtines et al. 1978; Mellor et al. 1986), and with denial or defensiveness in active abusers (Bean 1975; Hinrichsen 1976). Recently, others also have pointed out the importance of social desirability response sets in interpreting self-reports of alcoholics (Rychtarik, Tarnowski, and St. Lawrence 1989).

The results of this study are limited by its subject selection and cross-sectional design. Specific AA-related groups were sampled, and participants included only those willing to volunteer. Future research needs to sample other groups across stages of alcohol involvement; strategies to increase participation rate are, of course, always welcome and increase the ability to make generalizations. The most important need is for longitudinal research, although there is great difficulty in following subjects from active abuse through long-term recovery. While the present study documented differences in groups recruited at each stage, it cannot claim to have demonstrated changes within individuals from stage to stage of alcohol involvement. It is possible that there are changes in group composition from stage to stage, with only those already having a certain characteristic at one stage moving on to the next stage. For example, it may be that those active abusers with the lowest esteem are most likely to make the commitment to change. However, the logic of this explanation does not fit well with the findings on most measures in this study, which showed curvilinear (parabolic) rather than linear trends from group-to-group (from high esteem in abstainers, to lowest esteem in early recovery, and back to high esteem in late recovery). The hypothesis that individuals change from stage to stage of alcohol involvement appears more likely from such data, but only longitudinal data can
definitively confirm this hypothesis.

**ACKNOWLEDGMENTS**

The authors would like to acknowledge the statistical and computing assistance of Robert Kabacoff, Ava Colantuono-Land, and Alfred Sellers.

**Table 1 Means, Standard Deviations (in parentheses), and Between-group Tests for Measures in Study 1 (N=25)**

Legend for Chart:

A - Measures
B - Groups Active Abusers
C - Groups Early Detox.
D - Groups Late Detox.
E - Groups AA + Sober 1 yr
F - F (df = 3, 96)

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<td>(4.37)</td>
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Note: DRIE = Drinking-Related Internal/External (scored for externality); SE = Self-Esteem (scored for disesteem); AE = Abstinence Efficacy (scored for inefficacy). Means with one or more common subscript do not differ, α = .05, on Tukey's HSD test.

<sup>**</sup>p < .001

**Table 2 Means, Standard Deviations (in parentheses), and Between-group Tests for Measures in Study 2**

Legend for Chart:
A - Measures  
B - Groups Active Abusers  
C - Groups Sober < 1 month  
D - Groups Sober 3-6 Months  
E - Groups Sober > 1 year  
F - F (df = 3, 102)

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(N = 30) (N = 28)  
(N = 26) (N = 22)

Note: DRIE = Drinking-Related Internal/External (scored for externality); SE = Self-Esteem (scored for disesteem); SD = Self-Deception; IM = Impression Management. Means with one or more common subscript do not differ, \( \alpha = .05 \), on Tukey's HSD test.

(*) \( p<.01 \)  
(**) \( p<.001 \)

GRAPH: Figure 1; T-score Profiles at Four Stages of Alcohol Involvement (Study
1) for Drinking-Related Internal/External (scored for externality), Self-Esteem (scored for disesteem), and Abstinence Efficacy (scored for inefficacy).

GRAPH: FIGURE 2; T-score Profiles at Four Stages of Alcohol Involvement (Study 2) for Drinking-Related Internal/External (scored for externality), Self-Esteem (scored for disesteem), and Self-Deception.

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