College Student Drinking and Meaning in the Pursuit of Life Goals

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The current study was designed to examine the association between risky alcohol use and life goals among college students. Introductory psychology students completed a questionnaire that included measures of typical life goals and alcohol use behavior. Students listed their 5 most typical life goals and rated them each on a series of dimensions from which 2 factors were derived (i.e., Goal Meaning, Goal Efficacy). Hierarchical regression analyses showed that the lower levels of goal meaning were associated with more heavy episodic use of alcohol and alcohol-related negative consequences. Results are consistent with motivational models of drinking that depict alcohol use as a function of satisfaction from other life goals. Findings support the importance of understanding college student drinking within the broader context of life goal appraisal.

Keywords: alcohol, college student, goals, motivation, social–environmental context

Recent surveys on college student drinking suggest that almost 40% of all college students have engaged in a heavy drinking episode within the past 2 weeks (Wechsler, Lee, Kuo, & Lee, 2000). Extensive research has documented the negative consequences associated with heavy episodic drinking (Vik, Carrello, Tate, & Field, 2000). Such findings have led to efforts to identify the factors that contribute to these patterns in order to design more effective prevention and intervention strategies for risky drinking among college students (cf. Larimer & Cronce, 2002).

A number of investigators have suggested that hazardous drinking patterns may be understood in terms of motivational processes related to the pursuit of life goals (Cox & Klinger, 1988; Miller & Rollnick, 2002; Vuchinich & Tucker, 1988). In their motivation model, Cox and Klinger (1988) suggested that decisions to use alcohol are determined by expectations of affective change from drinking versus not drinking. Students come to value alcohol on the basis of their expectations of how alcohol will directly influence affect as well as how it will indirectly influence affect through its effects on the attainment of important goals (Simons, 2003). The value of alcohol is also influenced by the availability of other sources of satisfaction (Cox & Klinger, 1988). The incentive value of alcohol is increased as individuals experience less emotional satisfaction from other incentives in their lives, leading to increased frequency and quantity of consumption (Cox & Klinger, 1988; Cox et al., 2002). Binge-drinking college students, for example, report less pleasure from substance-free activities than non-binge-drinking students (Correia, Carey, Simons, & Borsari, 2003).

Although emotional satisfaction is influenced by engagement in enjoyable activities, other sources of emotional satisfaction appear to be important to adaptive functioning (McGregor & Little, 1998) and contribute to alcohol use patterns (Cox et al., 2002, Newcomb & Harlow, 1986). For instance, the ways in which individuals appraise the goals that make up their lives are important sources of satisfaction (Emmons, 1989; Little, 1983). In particular, meaning and efficacy are two distinct components of the pursuit of life goals that contribute to emotional satisfaction (McGregor & Little, 1998). Individuals who have a sense of purpose, value, and self-identification with their life pursuits experience higher levels of meaning, and those who experience more control and expect greater likelihood of success report higher levels of efficacy (McGregor & Little, 1998).

Cox et al. (2002) found that the association between past alcohol problems and current alcohol consumption is moderated by the adaptive pursuit of life goals (characterized by higher levels of commitment, more joy in goal pursuit, more active roles, greater chance of success). For those who had experienced problems from alcohol use in the previous year, higher ratings on the adaptive goal factor were associated with less alcohol use. Recent work suggests that perceived meaning in the pursuit of life goals may be particularly important in student’s decisions to drink (Lecci, MacLean, & Croteau, 2002). Higher meaningfulness ratings on a single important medium-range goal were associated with less total alcohol consumption in the prior month, but goal efficacy ratings were not.

Taken together, these studies suggest that life goals may play an important role in college drinking behavior. However, there are still a number of issues that remain to be addressed. First, although ratings of a single goal may provide some indication of how students’ appraise their life goals as a whole, a more accurate assessment of life goal appraisal involves ratings across multiple goals that characterize students’ lives (Lecci et al., 2002). Moreover, ratings of goal efficacy and meaning taken from a broader range of typical student goals allow one to examine whether alcohol use is related to the appraisal of specific goal types. Second, although the motivational model makes predictions about decisions to drink, we know little about whether goal appraisal is associated with increased hazardous drinking patterns (e.g., heavy episodic drinking; alcohol-related consequences), frequency of alcohol use, or typical quantity per occasion.
We conducted this study to examine whether the dimensions of meaning and efficacy of life goal pursuit were associated with hazardous drinking. Using the Personal Projects Analysis (Little, 1983), we assessed five goals that students identified as “typical” of the goals that they themselves pursued in everyday life. We hypothesized that hazardous alcohol use (as indicated by heavy episodic drinking and alcohol-related negative consequences) would be associated with lower estimates of goal meaning. We also examined other indices of alcohol use (frequency of use and quantity of use per occasion).

Method

Participants

One hundred twenty-one students (51% female, 49% male) participated in the present study on “college health behaviors” for introductory psychology class credit. The mean age of students was 18.99 years (SD = 1.04). Ethnic/racial minorities comprised 21% of the sample (4% Hispanic, 14% Asian/Pacific Islander, 3% Black), and White students comprised 79% of the sample. Of these students, 16.5% had not consumed alcohol in the prior month. Participants engaged in heavy drinking a mean of 3.14 (SD = 3.81) times in the past month and reported a mean of 3.8 (SD = 2.98) alcohol-related problems in the past year.

Measures

Personal Projects Analysis. We used the Personal Projects Analysis to assess the content and characteristics of student’s life goals. We asked participants to generate a list of 10 projects that they were currently undertaking or thinking about undertaking in the near future. From this list, they were asked to choose 5 that were most characteristic of their lives and best represented what they typically tried to do. Following this list, participants completed a series of 11-point Likert scales to assess goal representations. Participants completed all scales for a given project before beginning to rate the next. Consistent with previous work with personal projects (McGregor & Little, 1998), we assessed the factor structure of the measure by conducting a principal-components analysis on the items with varimax rotation to maximize interpretability of factors. This procedure was repeated for each of the goals separately to examine the invariance of the factor structure for goals that were listed as most important and less important. Retention of factors was on the basis of eigenvalues greater than one, our examination of the scree plot, and factor interpretability. A two-factor solution emerged from this analysis that distinguished between “meaning” (i.e., commitment, importance, trademark) and goal efficacy (i.e., difficulty, likelihood of success, perceived progress, feel in control of project) that was consistent across projects. The final two-factor solution accounted for over 60% of the variance across projects.

Alcohol Consumption Questionnaire (Dimeff, Baer, Kivlahan, & Marlatt, 1999). Participants completed a series of questions on alcohol use, including frequency of alcohol consumption, typical quantity of consumption, and maximum amount consumed on one occasion in the past month. Heavy episodic drinking was assessed by questions about the number of times that students had consumed four or more drinks (women) or five or more drinks (men) on one occasion in the past month. Heavy episodic drinking was assessed by questions about the number of times that students had consumed four or more drinks (women) or five or more drinks (men) on one occasion in the past month.

Young Adult Alcohol Problems Test (YAAPST; Hurlbut & Sher, 1992). The revised (YAAPST) is a 27-item measure that assesses the frequency of alcohol-related consequences (e.g., driving while intoxicated) and problems more specific to college students (e.g., missing classes) over the previous year (Kahler, Strong, Read, Palfai, & Wood, 2004).

Results

Personal Project Ratings and Alcohol Involvement

To examine the association between goal representations and alcohol involvement, we conducted separate regression analyses in which we entered gender and college year as covariates in Step 1 and goal meaning and goal efficacy as covariates in Step 2 (see Table 1). This analysis showed that lower levels of goal meaning predicted more binge drinking among students. In contrast, goal efficacy did not predict heavy episodic drinking.

Our analysis of alcohol-related problems from the YAAPST revealed the same pattern (see the lower portion of Table 1). Students who reported less meaning in their personal projects reported having experienced more alcohol-related problems in the preceding year.

Regression analyses on other drinking indices showed that goal meaning predicted both frequency (β = -.25, p = .07) and quantity per occasion (β = -.21, p = .02). Moreover, follow-up analyses of the subset of students who reported drinking in the past month showed that goal meaning was significantly associated with frequency of binge drinking (β = -.26, p = .09), alcohol-related problems (β = -.29, p = .01), and frequency of consumption (β = -.23, p = .02). Similarly, the association with quantity of drinking per episode approached significance (β = -.19, p = .06).

Personal Projects Content and Alcohol Involvement

Analysis of goal content showed that participants most frequently listed goals that were achievement related. In both the free listing phase and the choice of the five most typical goals, students identified achievement-related goals (e.g., getting a 3.5 grade point average “this semester”) most frequently (33%), followed by fitness/recreation (23%), interpersonal (20%), and intrapersonal (14%) goals. Those who listed more achievement goals had fewer binge-drinking episodes (pr = -.35).

We examined partial correlations (controlling for gender and college class) between alcohol use and appraisal dimensions for different goal types. Meaning ratings of achievement goals were associated with less heavy episodic drinking (pr = -.32), fewer alcohol-related problems (pr = -.37), and less quantity (pr = -.25) and frequency (pr = -.24). None of the other goals appeared to be associated in this manner, although greater meaning associated with intrapersonal goals was associated with fewer alcohol-related problems (pr = -.35). We also observed similar correlations among the subset of students who reported consuming alcohol in the previous month. Efficacy ratings of individual goals were not associated with drinking patterns.

Discussion

The current study was designed to better explain how life goals are related to alcohol use patterns that put students at risk for alcohol-related harm. Through examination of multiple personal projects, we attempted to capture the most typical goals of these students. Results showed that the level of meaning that college students experience in the pursuit of their daily life goals was associated with risky drinking behavior. Students who found less meaning in their life goals were more likely to engage in binge drinking and reported more alcohol-related consequences. Moreover, these associations were also observed

1 Hierarchical regression analyses that examined the relation between goals and alcohol-related variables found no gender by goal dimension interactions.
among the subset of participants who had consumed alcohol in the previous month. Consistent with the motivational model of alcohol use (Cox & Klinger, 1988), those who experienced higher levels of satisfaction in the pursuit of life goals were less likely to use alcohol frequently or engage in heavy drinking episodes.

In addition, we found evidence that the content of goals may distinguish between binge-drinking and non-binge-drinking students. Those with less frequent binge-drinking episodes identified more achievement-related goals among their most important 10 projects in the free-listing phase (see also Simons, Christopher, & McLaury, 2004), and these students reported more meaning in their pursuit of achievement-related goals. This result is consistent with the view that students who are more committed to academic achievement and other activities that reflect conventional values are less likely to engage in problematic substance use behavior (Hawkins, Catalano, & Miller, 1992; Petraitis, Flay, & Miller, 1995).

Through the use of multiple goals, analysis of goal content and structure, and assessment of multiple dimensions of alcohol use, this research provides initial support for a key component of motivational models of alcohol use among college students. However, it is important to emphasize that these findings are based on cross-sectional self-report measures. Clearly, direction of causality has not been established; nor can socially desirable response biases be ruled out as an alternative explanation of these results. Moreover, to evaluate the importance of goal meaning in alcohol use behavior among college students, it will be important to also consider goal meaning in the context of alcohol-specific cognitions (e.g., drinking motives) that may influence the incentive value of alcohol (Maggs, 1997). Decisions to drink will be a function of the interplay between drinking- and nondrinking-related incentives (Cox & Klinger, 1988).

In sum, the present study suggests that meaning associated with typical life goals may be important to consider in models of risky alcohol use behavior among college students. Specification of the processes that underlie the association between life goals and alcohol use will be particularly important in efforts to develop motivational intervention approaches to hazardous college drinking (Cox & Klinger, 2004).

Table 1
Summary of Hierarchical Regression Analyses for Variables Predicting Heavy Episodic Drinking and Alcohol-Related Negative Consequences From Goal Meaning and Goal Efficacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$ for $\Delta R^2$</th>
<th>$\Delta R^2$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy episodic drinking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1 Gender</td>
<td>0.59$^a$</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2 Goal Meaning</td>
<td>5.27$^b$</td>
<td>0.08</td>
<td>−0.27$^c$</td>
</tr>
<tr>
<td>Goal Efficacy</td>
<td></td>
<td></td>
<td>0.13</td>
</tr>
</tbody>
</table>

Alcohol-related negative consequences

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$ for $\Delta R^2$</th>
<th>$\Delta R^2$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 Gender</td>
<td>0.59$^a$</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Class</td>
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<td>0.04</td>
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</tr>
<tr>
<td>Step 2 Goal Meaning</td>
<td>5.34$^b$</td>
<td>0.08</td>
<td>−0.29</td>
</tr>
<tr>
<td>Goal Efficacy</td>
<td></td>
<td>0.03</td>
<td></td>
</tr>
</tbody>
</table>

Note. Values are taken from the step in which they were added to the model.
$^a$ $df$s = 2 and 118. $^b$ $df$s = 2 and 116. $^c$ $p < .05$.

References


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