FRAGILE SELF-ESTEEM AND ALCOHOL-RELATED NEGATIVE CONSEQUENCES AMONG COLLEGE STUDENT DRINKERS

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The pattern of alcohol consumption among college students and its negative consequences have been extensively studied. The purpose of the present study was to gain a better understanding of the connection between self-esteem and alcohol use among college students. Participants were 623 undergraduates who completed measures of self-esteem level (i.e., an overall evaluation of one’s own value and worth), contingent self-esteem (i.e., what an individual believes he or she must accomplish in order to have value and worth as a person), alcohol use, harmful drinking patterns, and negative consequences of alcohol use. Our results show that individuals who possess high levels of self-esteem that are contingent (their positive self-views are strongly influenced by whether they have met the goals or standards they have set for themselves) report more alcohol-related negative consequences than individuals with noncontingent high self-esteem. Implications of these findings for understanding the connection between self-esteem and alcohol-related outcomes will be discussed.

There is no shortage of dangerous recreational drugs available to young people in the United States but alcohol tends to be the substance of choice for many college students (Hingson, Zha, & Weitzman, 2009; Horgan, Skwara, & Strickler, 2001; Wechsler & Nel-
The pattern of alcohol consumption among college students has been of considerable interest to researchers during recent decades because of the high rates of alcohol use reported by college students (e.g., Johnston, O’Malley, Bachman, & Schulenberg, 2009), the unhealthy patterns of their consumption (e.g., heavy episodic drinking; Hingson, Heeren, Zakocs, Kopstein, & Wechsler, 2002), and the relatively high rates of alcohol-related negative consequences reported by these individuals (e.g., failing grades, unplanned pregnancies, death; Borden et al., 2011). Alcohol-related negative consequences have increased to a point where alcohol use is commonly recognized as one of the most serious health problems facing college students (Ham & Hope, 2003; Hingson et al., 2009).

In order to effectively reduce the negative consequences of alcohol consumption for college students, it is important to determine some of the possible risk factors that may contribute to this behavior. Past research has identified a number of important factors such as demographic variables, the value system of the student, previous experience with alcohol, and expected outcomes of consumption (e.g., Borsari, Murphy, & Barnett, 2007; Greenbaum, Del Boca, Darkes, Wang, & Goldman, 2005; Johnson & Cohen, 2004). The risk factor investigated in the present study will be self-esteem. Self-esteem refers to how an individual evaluates oneself (see Zeigler-Hill, 2013, for a review). Self-esteem is typically associated with the self-concept but these are distinct constructs. That is, the self-concept concerns the beliefs an individual has about oneself (e.g., I am intelligent), whereas self-esteem reflects how an individual evaluates oneself (e.g., I like myself). Our interest in the connection between self-esteem and alcohol-related negative consequences stems from recent studies suggesting that low self-esteem is associated with drinking among college students (DeHart, Tennen, Armeli, Todd, & Mohr, 2009; Korn & Maggs, 2004; Pullen, 1994). These studies suggest individuals with low self-esteem are more likely to consume alcohol for a variety of reasons including the belief that drinking will make them more socially desirable (Korn & Maggs, 2004) and help them cope with negative emotional states (Backer-Fulghum, Patock-Peckham, King, Roufa, & Hagen, 2011). Further, low self-esteem has been linked with the use of fewer self-protective strategies when drinking and more negative consequences stemming from their consumption (Hammer & Pape, 1997; Zeigler-Hill, Madson,
& Riedorf, 2012) as well as reduced perception of risks associated with alcohol consumption (McNair, Carter, & Williams, 1998; Neumann, Leffingwell, Wagner, Mignogna, & Mignogna, 2009).

Although previous research has documented an association between self-esteem level and the negative consequences of alcohol use, the underlying process linking feelings of self-worth with alcohol use remains unclear. One possible explanation for this connection is that low self-esteem may serve as a risk factor for a variety of negative outcomes including alcohol-related negative consequences. The possibility that individuals may consume larger amounts of alcohol and suffer more negative consequences because of their low self-esteem is consistent with the vulnerability model of self-esteem (see Zeigler-Hill, 2011 for a review). The underlying rationale of models emphasizing the protective properties of high self-esteem—such as the vulnerability model—is that negative experiences may be less detrimental for individuals with high self-esteem because of their enhanced coping resources (Brown, 2010) and the certainty they have regarding their positive characteristics (Campbell et al., 1996). In contrast, individuals with low self-esteem lack the buffer provided by positive feelings of self-worth which may explain their heightened reactivity to negative events. The clearest illustration of this vulnerability model of low self-esteem may be the connection between self-esteem and depressive symptoms. Low self-esteem is believed to play a causal role in the development and maintenance of depressive symptoms because of its intrapsychic processes (e.g., rumination) and interpersonal strategies (e.g., excessive reassurance seeking; see Zeigler-Hill & Holden, in press, for a review). The vulnerability model may provide at least a partial explanation for the connection low self-esteem has with various forms of psychopathology (see Zeigler-Hill, 2011, for a review). Preliminary studies concerning alcohol use have provided results consistent with this model such that individuals with low self-esteem have been found to consume more alcohol following negative social events (DeHart et al., 2009). However, research demonstrating the existence of multiple forms of high self-esteem (e.g., Kernis, 2003) may suggest the protective properties of high self-esteem do not necessarily extend to everyone who expresses high self-esteem but may be restricted to only those individuals with certain forms of high self-esteem.
SECURE VS. FRAGILE FORMS OF SELF-ESTEEM

In order to gain a more nuanced understanding of the connection between self-esteem and alcohol-related negative consequences, we believe it is necessary to account for features of self-esteem that extend beyond the level of self-esteem (i.e., how an individual typically evaluates oneself). As a result, the present study will examine self-esteem level in conjunction with contingent self-esteem which refers to feelings of self-worth that are reliant upon meeting standards or goals (Crocker & Wolfe, 2001; Deci & Ryan, 1995). In essence, contingent self-esteem refers to what an individual believes he or she must do or be in order to have value and worth as a person. Individuals who possess contingent self-esteem believe they need to meet certain goals or live up to particular standards in order to feel good about themselves. For example, an individual with contingent self-esteem may base their feelings of self-worth on their appearance. As a result, this individual may feel quite good about herself if someone compliments her appearance but she may feel relatively bad about herself if someone notices she has gained a few extra pounds. Contingent self-esteem is important because it suggests a person’s general feelings of self-worth are not the entire story. Rather, the basis for self-esteem is also important because contingent self-esteem is inherently vulnerable if the individual fails to meet important standards or goals in areas of life such as physical appearance, popularity, or academic success.

The inclusion of contingent self-esteem will allow us to distinguish between the different forms of self-esteem that have been identified in previous research (Kernis, 2003). For example, it appears high self-esteem is a heterogeneous construct consisting of both a secure form and a fragile form (see Kernis, 2003 for a review). Secure high self-esteem reflects positive attitudes toward the self that are realistic, well-anchored, and resistant to threat. Individuals with secure high self-esteem appear to have a solid foundation for their feelings of self-worth that does not require constant validation. In essence, individuals with secure high self-esteem are thought to be better able to accept themselves as they actually are rather than feeling the need to foster positive illusions about themselves. In contrast, fragile high self-esteem refers to feelings of self-worth that are vulnerable to challenge, require constant validation, and
rely upon some degree of self-deception. Individuals with fragile high self-esteem are believed to be preoccupied with protecting and enhancing their vulnerable feelings of self-worth. Contingent high self-esteem is considered to be a form of fragile high self-esteem because the positive self-views of the individual can only be maintained as long as he or she is able to successfully meet the standards upon which his or her self-esteem is based (Deci & Ryan, 1995; Kernis, 2003). For example, a college professor may generally feel relatively good about himself such that he experiences a high level of self-esteem. However, he may possess fragile high self-esteem if his feelings of self-worth are contingent upon his performance in a particular area of his life such as being a productive researcher. His contingent feelings of self-worth may lead him to feel quite good about himself at some points (e.g., following a positive experience such as the acceptance of a manuscript for publication) but he may experience a drop in his self-esteem at other times (e.g., following a negative experience such as the rejection of a major grant proposal he thought would be funded). In contrast, another college professor with secure high self-esteem would not base his feelings of self-worth on whether he was able to meet certain standards or goals. This second professor would likely be far less reactive to events that had evaluative implications because he would be more certain about his feelings of self-worth and less concerned about external validation.

Previous studies have shown an association between contingencies of self-worth and high levels of alcohol consumption (Luhtanen & Crocker, 2005; Neighbors, Larimer, Geisner, & Knee, 2004). Previous studies have focused on the association between contingent self-esteem and alcohol use without accounting for its interaction with self-esteem level which is necessary to capture fragile high self-esteem. Accounting for the interaction between self-esteem level and contingent self-esteem may provide greater insight into the connection between feelings of self-worth and alcohol use in the same way it has clarified the links that self-esteem has with outcomes such as defensiveness (Kernis, Lakey, & Heppner, 2008), interpersonal behavior (Zeigler-Hill, Clark, & Beckman, 2011), interpersonal support and liking of others (Park & Crocker, 2005), and responses to various types of self-esteem threats (Park, Crocker, & Kiefer, 2007; Park & Maner, 2009; Zeigler-Hill, Besser, & King, 2011).
OVERVIEW AND PREDICTIONS

The purpose of the present study was to examine whether the independent associations self-esteem level and contingent self-esteem have been found to have with alcohol-related outcomes would be moderated by their interaction. This was accomplished by asking college students to complete measures of self-esteem level, contingent self-esteem, alcohol consumption, harmful drinking patterns, and alcohol-related negative consequences. At the most basic level, we expected our results to replicate previous results showing that individuals with low levels of self-esteem and those with contingent self-esteem would tend to consume more alcohol and experience more negative consequences stemming from their consumption. We also expected the interaction of self-esteem level and contingent self-esteem to predict alcohol-related outcomes such that individuals with secure high self-esteem (i.e., high self-esteem level and low contingent self-esteem) would report the lowest levels of consumption and the fewest negative consequences. That is, we expected that individuals with secure high self-esteem would report fewer negative alcohol-related outcomes than those with fragile high self-esteem (i.e., high self-esteem level and high contingent self-esteem) or low self-esteem. The basic rationale for this prediction was that secure high self-esteem would provide the sort of coping resources that would protect individuals from consuming too much alcohol and experiencing negative consequences. In contrast, we expected that fragile high self-esteem would fail to provide this sort of protection—due to the uncertain nature of their feelings of self-worth and desire for external validation—which may lead this form of self-esteem to be linked with more negative alcohol-related outcomes. We believed that fragile high self-esteem and low self-esteem would be associated with more negative alcohol-related behavior because these individuals may use alcohol as a means for escaping negative arousal states (e.g., stress) rather than utilizing the more effective coping strategies employed by those with secure high self-esteem. This idea is consistent with previous work suggesting that one reason individuals rely on alcohol is to manage their negative emotional states (Marlatt, 1987; Sayette, 1993; Sher, 1987). This may be particularly important for those with fragile self-esteem because they may experience high levels of affective instability (e.g., Kashdan, Uswatte, Steger, & Julian, 2006).
The role of gender as a potential moderator was also examined in the present study. There were three basic reasons we were interested in the role that gender may play in the connection between fragile self-esteem and alcohol-related outcomes. First, important gender differences in alcohol-related behaviors have been observed in previous studies such that men tend to consume more alcohol and experience more alcohol-related negative consequences than women (e.g., Borden et al., 2011). Second, gender has been found to moderate the association fragile self-esteem has with certain outcomes including interpersonal style (Zeigler-Hill, Clark, et al., 2011) and psychological adjustment (Zeigler-Hill & Wallace, 2012). Third, gender has been found to moderate the connections self-esteem level and protective behavioral strategies have with alcohol-related outcomes such that men with low levels of self-esteem report problematic alcohol-related outcomes even when they utilize protective behavioral strategies (Zeigler-Hill et al., 2012). Due to the gender differences that have emerged in past studies, we believed gender may moderate the expected association between fragile self-esteem and alcohol-related behavior such that a stronger association would emerge for men than would be observed for women.

METHOD

PARTICIPANTS AND PROCEDURE

Participants were 623 undergraduates (272 men, 351 women) at a university in the southern region of the United States who were enrolled in psychology courses and participated in return for partial fulfillment of a research participation requirement. Participants completed measures concerning self-esteem level, contingent self-esteem, amount of alcohol consumed, harmful drinking patterns, and negative consequences associated with alcohol use via a secure website. The two criteria for participating in the present study were that the individuals had to be between the ages of 18 and 24, the average age for our participants was 19.95 years ($SD = 1.70$) and had consumed alcohol within the past 30 days. The racial/ethnic composition was 64% White, 31% Black, and 5% Other.
MEASURES

Self-Esteem Level. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a 10-item measure of global self-esteem (e.g., On the whole, I am satisfied with myself). Participants were instructed to complete the instrument according to how they typically or generally feel about themselves. Responses were made on scales ranging from 1 (strongly disagree) to 5 (strongly agree). This instrument is regarded as a well-validated and reliable measure of global self-regard (e.g., Blaskovich & Tomaka, 1991). The internal consistency estimate for the present study was high ($\alpha = .89$).

Contingent Self-Esteem. The Contingent Self-Esteem Scale (Paradise & Kernis, 1999) is a 15-item measure of general self-esteem contingency (e.g., When my actions do not live up to my expectations, it makes me feel dissatisfied with myself). Participants were asked to respond to these items on scales ranging from 1 (not at all like me) to 5 (very much like me). The Contingent Self-Esteem Scale has been found to be a reliable and valid measure of contingent self-esteem (Kernis & Goldman, 2006). The internal consistency of this measure for the present study was $\alpha = .79$.

Amount of Alcohol Consumed. The amount of alcohol consumed by participants over the last 30 days was measured using a modified version of the Daily Drinking Questionnaire (Collins, Parks, & Marlatt, 1985). In order to accurately assess the level of alcohol consumption, this measure asked participants to estimate the number of standard drinks they consumed on each day of the typical week for the past month. Following the guidelines established by Collins and colleagues (1985) for classifying drinkers based on the Daily Drinking Questionnaire, participants were classified as infrequent drinkers (less than 3 drinks per week), moderate drinkers (4–11 drinks per week), or heavy drinkers (12 or more drinks per week).

Harmful Drinking Patterns. The Alcohol Use Disorders and Identification Test (AUDIT; Saunders, Aasland, Babor, De La Fuente, & Grant, 1993) is a 10-item instrument that assesses harmful drinking patterns (e.g., How often do you have six or more drinks on one occasion?). The AUDIT is the leading instrument for the detection of early-phase risky drinking patterns across different cultures and age groups (e.g., Reinert & Allen, 2002). The internal consistency estimate for the AUDIT was .81 for the present study.
Negative Consequences of Alcohol Use. The negative consequences of alcohol consumption were measured using the Brief Young Adult Alcohol Consequences Questionnaire (Kahler, Strong, & Read, 2005) which is a 20-item instrument that assesses the frequency with which college students have experienced negative alcohol-related consequences during the past year (e.g., The quality of my work or school work has suffered because of my drinking). Participants were asked to respond to items using either a Yes or No. Higher scores indicate more frequent negative consequences during the past year. For this sample, the internal consistency was good ($\alpha = .80$).

RESULTS

The means, standard deviations, and intercorrelations for the measures employed in the present study are displayed in Table 1. An inspection of the correlations revealed self-esteem level to be negatively associated with contingent self-esteem ($r = -.23$, $p < .001$), harmful drinking patterns ($r = -.19$, $p < .001$), and the negative consequences of alcohol use ($r = -.19$, $p < .001$). Contingent self-esteem was associated with the negative consequences of alcohol use ($r = .12$, $p = -.003$). It is important to note that neither self-esteem level nor contingent self-esteem were significantly correlated with the amount of alcohol consumed. Not surprisingly, the amount of alcohol consumed was associated with both harmful drinking patterns ($r = .61$, $p < .001$) and the negative consequences of alcohol use ($r = .34$, $p < .001$). The average reported number of standard drinks per week was 7.77 ($SD = 10.58$). Men reported consuming an average of 11.52 ($SD = 13.34$) drinks per week and women reported consuming

### Table 1. Intercorrelations and Descriptive Statistics

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<td>2. Contingent Self-Esteem</td>
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<td>3. Amount of Alcohol Consumed</td>
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<td>$-.01$</td>
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<td>4. Harmful Drinking Patterns</td>
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<td>$.04$</td>
<td>$.61^{***}$</td>
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<td>$.12^{**}$</td>
<td>$.34^{***}$</td>
<td>$.64^{***}$</td>
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Mean: 3.95, 3.30, 7.77, 0.65, 6.92

Standard Deviation: 0.80, 0.54, 10.58, 0.48, 5.79

*p < .05; **p < .01; ***p < .001.
The majority of participants were classified as either infrequent drinkers ($n = 281$ [45%]) or moderate drinkers ($n = 195$ [31%]) with the remaining participants classified as heavy drinkers ($n = 147$ [24%]; Collins et al., 1985).

A hierarchical multiple regression analysis was used to examine whether the interaction of self-esteem level and contingent self-esteem was associated with the amount of alcohol individuals reported consuming. The main effect terms for self-esteem level, contingent self-esteem, and gender (0 = female, 1 = male) were entered on Step 1 with higher-order interactions entered on subsequent steps. Continuous predictor variables were standardized for the purpose of testing interactions and these analyses were followed by the simple slopes tests recommended by Aiken and West (1991) to describe the interaction of continuous variables. The results of this analysis are presented in Table 2.

The main effect emerged for gender ($\beta = .32, t = 8.15, p < .001$) such that higher levels of alcohol consumption were observed for men. This main effect was qualified by the three-way interaction of self-esteem level, contingent self-esteem, and gender which emerged from this analysis ($\beta = .12, t = 2.24, p = .03$). The predicted values for this interaction are presented in Figure 1. As suggested by Cohen, Cohen, West, and Aiken (2003), this interaction was probed by first examining whether the two-way interaction of self-esteem level and contingent self-esteem was significant for men and women separately. These analyses found the interaction of self-esteem level and contingent self-esteem to emerge for men ($\beta = .16, t = 2.44, p = .02$) but not for women ($\beta = .04, t = 0.77, p = .44$). Simple slopes tests were then conducted which found the slope of the line representing the association between contingent self-esteem and the amount of alcohol consumed to be positive for men with high self-esteem ($\beta = .24, t = 2.87, p = .004$) but negative for men with low self-esteem ($\beta = -.19, t = -2.44, p = .02$). Taken together, these results show that contingent self-esteem was associated with greater alcohol consumption for men with high levels of self-esteem but it was actually associated with less alcohol consumption for men with low self-esteem. Consistent with our prediction, this pattern of results
suggests those with secure high self-esteem (i.e., high self-esteem level but low contingent self-esteem) tend to consume less alcohol than those with fragile high self-esteem (i.e., high self-esteem level and high contingent self-esteem).

FRAGILE SELF-ESTEEM AND NEGATIVE ALCOHOL-RELATED OUTCOMES

A series of hierarchical multiple regression analyses were used to examine the possibility that fragile self-esteem would be associated with negative alcohol-related outcomes (i.e., harmful drinking patterns and negative consequences of alcohol use). These analyses included the main effect terms for self-esteem level, contingent self-esteem, gender, and the amount of alcohol consumed on Step 1. Higher-order interactions of self-esteem level, contingent self-esteem, and gender were entered on subsequent steps. The amount of alcohol consumed was included as a control variable on Step 1 because of the association that tends to emerge between the amount of alcohol consumed and alcohol-related negative consequences. Continuous predictor variables were centered for the purpose of testing interactions and these analyses were followed by the simple slopes tests recommended by Aiken and West (1991) to describe the

<table>
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<th>TABLE 2. Regression of the Amount of Alcohol Consumed on Self-Esteem Level, Contingent Self-Esteem, and Sex</th>
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<tr>
<td>Amount of Alcohol Consumed</td>
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<td>Step 1</td>
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<td>$R^2$</td>
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<td>Self-Esteem Level (SEL)</td>
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<td>Contingent Self-Esteem (CSE)</td>
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<td>Gender</td>
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<td>Step 2</td>
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<td>$R^2$</td>
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<td>SEL × CSE</td>
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<td>SEL × Gender</td>
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<tr>
<td>CSE × Gender</td>
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<td>Step 3</td>
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<tr>
<td>$R^2$</td>
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<td>SEL × CSE × Gender</td>
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*p < .05; **p < .01; ***p < .001.
interaction of continuous variables. The results of these analyses are presented in Table 3.

**Harmful Drinking Patterns.** Main effects emerged for self-esteem level ($\beta = -0.15, t = -4.67, p < .001$) and the amount of alcohol consumed ($\beta = 0.59, t = 17.92, p < .001$) such that individuals who possessed lower levels of self-esteem and reported consuming more alcohol tended to experience more harmful drinking patterns. The main effect of self-esteem level was qualified by its interaction with contingent self-esteem ($\beta = 0.09, t = 2.51, p = .01$). The predicted values for the interaction are presented in Figure 2. Simple slopes tests found the slope of the line representing the association between contingent self-esteem and harmful drinking patterns to be positive for those with high self-esteem ($\beta = 0.12, t = 2.25, p = .03$) but it was not significant for those with low self-esteem ($\beta = -0.04, t = -0.67, p = .50$). These results show that individuals with secure high self-esteem (i.e., high self-esteem level but low contingent self-esteem) report the lowest levels of harmful drinking. In contrast, those with fragile high self-esteem (i.e., high self-esteem level and high contingent self-esteem) report elevated levels of harmful drinking patterns that were comparable to those reported by individuals with low self-esteem.

**Negative Consequences of Drinking.** The results for the negative consequences of drinking were very similar to those that emerged for harmful drinking patterns. That is, main effects emerged for self-esteem level ($\beta = -0.15, t = -3.97, p < .001$) and the amount of alcohol...
consumed (β = .35, t = 8.97, p < .001) such that individuals who possessed lower levels of self-esteem and reported consuming more alcohol tended to experience more harmful drinking patterns. As in the previous analysis, the main effect of self-esteem level was qualified by its interaction with contingent self-esteem (β = .09, t = 2.12, p = .03). The predicted values for the interaction are presented in Figure 3. Simple slopes tests found the slope of the line representing the association between contingent self-esteem and the negative consequences of alcohol consumption to be positive for those with high self-esteem (β = .12, t = 2.40, p = .02) but it did not reach conventional levels of significance for those with low self-esteem (β = -.04, t = -0.60, p = .55). These results show that individuals with secure high self-esteem (i.e., high self-esteem level but low contingent self-esteem) report fewer negative consequences than other individuals following alcohol use. In contrast, those with fragile high self-esteem (i.e., high self-esteem level and high contingent self-esteem) reported negative consequences of alcohol use that were no different than those reported by individuals with low self-esteem.

### TABLE 3. Regression of Harmful Drinking Patterns and Negative Consequences of Alcohol Use on Self-Esteem Level, Contingent Self-Esteem, Sex, and Amount of Alcohol Consumed

<table>
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<tr>
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<th>Negative Consequences of Alcohol Use</th>
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<tr>
<td></td>
<td>R²</td>
<td>ΔR²</td>
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<td>Step 1</td>
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<td>.39***</td>
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<tr>
<td>Self-Esteem Level (SEL)</td>
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<td>–4.67***</td>
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<tr>
<td>Contingent Self-Esteem (CSE)</td>
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<tr>
<td>Gender</td>
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<tr>
<td>Amount of Alcohol Consumed</td>
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<td>17.92***</td>
</tr>
<tr>
<td>Step 2</td>
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<td>.01*</td>
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<tr>
<td>SEL × CSE</td>
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<td>2.51***</td>
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<tr>
<td>SEL × Gender</td>
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<td>-0.55</td>
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<tr>
<td>CSE × Gender</td>
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<td>-0.80</td>
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<tr>
<td>Step 3</td>
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<td>.00</td>
</tr>
<tr>
<td>SEL × CSE × Gender</td>
<td>.01</td>
<td>0.16</td>
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*p < .05; **p < .01; ***p < .001.
In partial support of our prediction concerning the connection between self-esteem and alcohol consumption, we found that individuals with secure high self-esteem reported consuming less alcohol than those with fragile high self-esteem. However, it is important to note that this pattern was more complex than we anticipated because men with low self-esteem also reported relatively low levels of alcohol consumption when they possessed contingent self-esteem. This pattern shows that we found support for our prediction that individuals with secure high self-esteem would consume less alcohol than those who had fragile high self-esteem but those with secure high self-esteem did not consistently consume less alcohol than those with low levels of self-esteem. It is important to note the role gender played in these results. In particular, women generally consumed less alcohol than men which may explain why women with contingent low self-esteem did not show evidence of the same relative drop in alcohol consumption as their male counterparts. This finding is consistent with previous studies showing gender differences in the connection between self-esteem and alcohol-related outcomes (Neumann et al., 2009; Zeigler-Hill et al., 2012). The
moderating role of gender may be due, at least in part, to gender norms concerning alcohol consumption (Neighbors et al., 2008). For example, women generally consume less alcohol than men for various reasons that include concerns about the risks involved with intoxication such as unwanted sexual experiences (Wilsnack, Wilsnack, Kristjanson, Vogeltanz-Holm, & Gmel, 2009).

The results for alcohol-related negative consequences were consistent with our predictions. That is, individuals with fragile high self-esteem reported more alcohol-related negative consequences than did those with secure high self-esteem. In fact, the alcohol-related problems reported by those with fragile high self-esteem were high enough they did not significantly differ from those reported by individuals with low self-esteem. It is important to note this pattern emerged even though the analyses controlled for the amount of alcohol individuals were consuming. This suggests the differences in the negative consequences associated with alcohol consumption are not simply a product of heightened consumption for certain individuals. Rather, this pattern is consistent with the argument that the confidence and coping resources that accompany secure high self-esteem may serve as resources that can be drawn upon to protect individuals from negative experiences such as alcohol-related problems (see Zeigler-Hill, 2011 for a review).
contrast, the uncertainty and vulnerability that accompany fragile high self-esteem and low self-esteem may not only fail to protect individuals from aversive experiences but may actually lead them to experience particular types of negative outcomes connected with alcohol use. For example, fragile high self-esteem may contribute to alcohol-related problems through the intrapsychic processes and interpersonal strategies that tend to characterize those who possess this form of high self-esteem. It is possible individuals with fragile high self-esteem drink to escape negative emotional states and fail to use protective behavioral strategies in ways that are similar to the behaviors exhibited by individuals with low levels of self-esteem.

The vulnerability of those who lack secure high self-esteem to alcohol-related problems may be due to those individuals having fewer coping resources than those who possess secure high self-esteem. These differences in coping resources may lead those with fragile high self-esteem, for example, to make poor decisions with regard to the amount of alcohol they consume and the protections they put into place to prevent themselves from being harmed. The desire to receive external validation by impressing others may also explain why individuals with fragile high self-esteem engage in this pattern of behavior. This possibility is consistent with recent evidence suggesting self-esteem enhancement is a common motive for alcohol consumption (Doyle, Donovan, & Simpson, 2011). An alternative explanation may be that individuals who lack secure high self-esteem may turn to alcohol because they expect alcohol to alter their negative mood states (Marlatt, 1987). For example, it has been suggested that individuals who experience stress response dampening—or a reduction in negative arousal states—as a result of using alcohol are likely to increase their frequency and quantity of consumption when faced with these arousal states (Sayette, 1993; Sher, 1987). Several authors have suggested that negatively reinforcing drinking motives (i.e., reduction of negative emotional states) may have a particularly strong association with negative alcohol-related consequences (Cooper, Frone, Russell, & Mudar, 1995; Martens, Ferrier, & Cimini, 2007).

These results suggest it is important to account for markers of fragility—such as contingent self-esteem—when considering the connections between self-esteem level and alcohol-related outcomes. Inclusion of fragility markers allow for a more nuanced understanding of the consequences associated with feelings of self-worth. The form of fragile high self-esteem that is identified by contingent
self-esteem can only be maintained as long as the individual who possesses it is able to successfully meet the standards upon which his or her self-esteem is based. It is possible the pressure individuals with fragile high self-esteem feel to maintain their tenuous feelings of self-worth may be at least part of the reason for these individuals experiencing more negative consequences of their alcohol consumption than those with secure high self-esteem.

It is important to note that individuals with contingent self-esteem are required to possess at least some level of awareness concerning the fragile nature of their feelings of self-worth because it is assessed through direct self-reports. This is an important difference between contingent self-esteem and other markers of fragility such as low implicit self-esteem or unstable self-esteem which do not necessarily involve this sort of insight. The insight required to assess contingent self-esteem may be important given that we assessed alcohol-related problems through the same direct measurement strategy. It is possible individuals who are identified as possessing fragile high self-esteem using the other markers may be less likely to report the negative consequences of alcohol consumption because they lack insight into their condition. It would be informative for future research to examine whether the present results extend to the other markers of fragile high self-esteem in order to gain a better understanding of the similarities and differences between these markers.

The present study had a number of strengths (e.g., use of a large sample, inclusion of multiple measures of alcohol-related outcomes) but it is also important to acknowledge some of its limitations. First, we were unable to determine whether self-esteem actually caused alcohol consumption or negative alcohol-related outcomes due to the correlational nature of our data. We assumed secure high self-esteem would lead individuals to consume less alcohol and experience fewer alcohol-related problems but this causal relationship cannot be established using the present data. For example, it is unclear whether fragile high self-esteem causes negative alcohol-related outcomes or if the direction of causation was reversed such that negative alcohol-related outcomes lead to the development of fragile high self-esteem. Previous research has found mixed results concerning the causal connection between self-esteem and alcohol use with some studies supporting the possibility that self-esteem predicts future alcohol use (e.g., Zimmerman, Copeland, Shope, & Dielman, 1997) but others studies have failed to support this con-
neation (Trzesniewski et al., 2006). We believe the inconsistency in these previous results may be due to the failure to distinguish between those with fragile and secure forms of high self-esteem. The inclusion of fragile self-esteem markers in future longitudinal studies may clarify the causal connection between self-esteem and alcohol-related outcomes. Second, the present study relied exclusively on self-report measures so it is possible our results may have been influenced by distorted responses from the participants (e.g., socially desirable responding). This is particularly important because self-report measures concerning alcohol use and its consequences capture the perception of the respondents which may be at least somewhat different from their actual experiences. For example, individuals may not always be aware of the extent to which their consumption of alcohol has a negative impact on their lives. Third, the generalizability of the present findings may be limited to college students in the southern region of the United States. It is unclear whether similar patterns would emerge for other samples because college students in the southern United States have some of the lowest alcohol consumption rates in the country (Johnston et al., 2009). Future research should extend the present results to college samples in other regions of the country as well as noncollege student samples (e.g., community samples, clinical samples). Fourth, we did not include additional indicators of psychological adjustment (e.g., depressive symptoms) in the present study. As a result, we are unable to rule out the possibility that psychological adjustment may have played at least some role in our results. It would be helpful for future studies concerning the connection between fragile self-esteem and alcohol-related outcomes to account for other indicators of psychological adjustment.

CONCLUSION

The present results show that individuals with secure high self-esteem consume less alcohol and experience fewer negative consequences than those with fragile high self-esteem. That is, individuals with high self-esteem that was not contingent tended to consume less alcohol and experience fewer problems with alcohol than those who relied on living up to certain standards in order to feel good about themselves. These findings provide additional support for the idea that secure high self-esteem serves as a resource that
may protect individuals from negative experiences such as alcohol-related problems. These results extend our understanding of the link between self-esteem and alcohol use as well as provide more support for the importance of distinguishing between secure and fragile forms of high self-esteem.

REFERENCES


