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Grandiose and Vulnerable Narcissism: Associations with Alcohol Use, Alcohol Problems and Problem Recognition

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Abstract

Objectives—This study fills a gap in the literature by examining the relationship between two types of narcissism, vulnerable and grandiose, and five alcohol-related outcomes (i.e., alcohol use, alcohol problems, evaluation and expectancies of problems, and readiness to change).

Participants—345 college students (28% male, 72% female) from a Midwestern university were recruited from undergraduate psychology courses from April 2015 to October 2016.

Methods—Participants completed an online survey with questionnaires measuring the variables of interest. Multiple regression analyses were used to test the hypotheses.

Results—Grandiose narcissism was a positive predictor of alcohol consumption and a positive (i.e., good) evaluation of alcohol-related problems. Vulnerable narcissism was a positive predictor of alcohol-related problems, problem recognition (i.e., readiness to change), and problem expectancies.

Conclusions—The results speak to the effects that different types of narcissism have on alcohol use, alcohol problems and attitudes towards alcohol problems among young adults.

Keywords

grandiose narcissism; vulnerable narcissism; alcohol use; alcohol problems; problem recognition; problem evaluations; problem expectancies

Introduction

Alcohol use is a favorite pastime among many college students. Almost three out of five college students drink alcohol, approximately two of whom are binge drinkers.¹ Additionally, college students drink more than their counterparts not enrolled in college.¹ A sizable number of college students experience alcohol-related problems, ranging from academic difficulties and poor class attendance to interpersonal, physical and psychological health issues or legal problems.^{2, 3, 4} While men drink more than women and the rates of alcohol use disorder are consistently higher in men,⁵ when controlling for alcohol quantity, women experience more alcohol-related problems (e.g., physical illness, cognitive and

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motor impairment, and greater risk for physical and sexual assault) compared to men.⁶ College drinking contributes to approximately 600,000 injuries and about 1,825 deaths per year.^{7, 8} However, a recent meta-analysis has revealed that alcohol consumption may not be the sole predictor of alcohol-related consequences.⁹ Identifying additional risk factors for alcohol problems among college students is important for prevention and treatment of detrimental outcomes that college students experience as a result of alcohol use.

Consistent associations are observed between certain personality and temperament characteristics such as impulsivity,¹⁰ self-control,¹¹ sensation seeking,¹² and alcohol use and problems in an adult population. Narcissism's association with alcohol use and problems has been insufficiently studied among young adults. Associations exist between narcissistic personality disorder and alcohol abuse and dependence among adults.¹³ Other studies list narcissism as a personality category common to drinkers.^{14, 15, 16} However, Sawrie et al.¹⁷ did not find significant associations between narcissism and alcohol dependence. It is worth noting that, though most studies examine narcissism dimensionally, they may still be useful in understanding the DSM construct of narcissistic personality disorder and vice versa.¹⁸

Little is known about narcissism and drinking in college students, a population that is at high risk for alcohol-related problems. The majority of studies on the topic sampled adults from treatment facilities or prisons.^{14, 15, 16, 17} Only two studies were found that evaluated the relationship between alcohol consumption quantity,¹⁹ drinking frequency,²⁰ and narcissism among college students. No studies examined associations between narcissism and alcohol problems, problem expectancies, problem evaluation and readiness to change.

Grandiose and Vulnerable Narcissism and Alcohol Outcomes

As a trait, narcissism is classified into two types: grandiose and vulnerable.²¹ Grandiosity includes arrogance, conceit, and a domineering attitude and behaviors as well as entitlement, exploitation and a lack of empathy.^{22, 23} Both grandiose and vulnerable narcissism can include self-centered, manipulative, and aggressive behaviors, and grandiose thoughts.²⁴ Vulnerable narcissism, however, is more associated with personal insecurity, specifically about one's attitudes and beliefs.²⁵ It also leads to sensitivity to others' evaluation and approval, and this feedback is then used to regulate self-esteem.²⁶ However, they are often unsatisfied with the feedback they receive.²⁷

With regards to alcohol use, grandiosity can be a cause or an effect of drinking.²⁸ For example, because heavy drinking is a cultural norm on college campuses and often rewarded, it is likely that college students high in narcissism drink to "show off" and gain admiration with their peer group. Additionally, the more one drinks, the more grandiose one might feel, creating a feedback loop. Therefore an individual characteristic such as grandiosity flourishes within an environment where drinking is reinforced, placing grandiose narcissists at an additional risk. The vulnerable trait of reactive aggression has been indirectly associated with substance use via peer rejection and delinquency.²⁹ Also, vulnerable narcissism can cause one to be less personally secure and more preoccupied with acceptance from peers which might lead to increased alcohol consumption especially among a college population where drinking is more prevalent.³⁰ Finally, vulnerable narcissists can

over-identify with distress (i.e., they are more distressed than anyone) leading to the possibility of alcohol use becoming a coping mechanism.²¹

Narcissism and Alcohol Problem Recognition, Expectancies, and Evaluations

Alcohol problem recognition has been related to the likelihood to reduce drinking and seek treatment.³¹ Some research suggests that people who score high on narcissism scales often readily admit problems with substance use.¹⁵ It is unlikely, however, that they actually think of these problems as problems and may rather see problems as events that are reinforced among peers and something to brag about. Very little research has been conducted specifically on narcissism's effect on problem recognition or a person's readiness to change.

In addition to problem recognition, important factors that might maintain or change drinking behavior are expectancies and evaluations of problems. People learn from observation and repeated paired exposure when they comprehend the relationship between two events (i.e., drinking alcohol and positive or negative outcomes).³² Therefore one's beliefs (i.e., evaluations and expectancies) about alcohol use and related problems could be due to past alcohol use and affect future alcohol use. This idea is consistent with both longitudinal and cross-sectional studies on adolescents which showed that as expectancies about the social facilitation effects of alcohol use increases so does alcohol consumption.^{33, 34} There is no empirical study to date that tested the effects of narcissistic traits on the evaluation of alcohol-related consequences.

The current study examines the association between two types of narcissism (grandiose and vulnerable), and alcohol variables (consumption and problems), as well as how individuals with narcissism regard alcohol problems (evaluation), if they expect them to happen to them (expectations) and if they recognize the problems (i.e., do I believe I have a problem or not). Specifically, this study hypothesizes that both vulnerable and grandiose narcissism will be significantly and positively associated with alcohol use and problems, and a positive problem evaluation (i.e., they will evaluate problems as "good") and will be significantly and negatively associated with problem recognition and expectancies (i.e., they will not recognize problems when they occur nor expect problems to happen to them). The current study remedies several issues with the existing literature such as the large number of studies utilizing older conceptualizations of narcissism and older versions of the DSM. The findings of this study can have implications for rehabilitation and future research. For example, future prevention and treatment methods and research can be developed to cater to a narcissistic population if this group is at increased risk of detrimental alcohol use problems.

Methods

Procedure

Participants were recruited through in-class and online announcements in undergraduate courses at a Midwestern university. Students between the ages of 18 and 25 were eligible to participate. Participants were told of the nature of the study and provided informed consent by agreeing to take the online survey. All procedures were approved by the institutional review board (IRB). Participants received course credit for their participation.

Participants

Participants were 383 undergraduate college students at a Midwestern university. All participants were between the ages of 18 and 25 ($M = 19.56$, $SD = 1.45$). The full sample was 28% male and 72% female. With regard to racial demographics, 88.3% were White or Caucasian, 2.93% were Black or African American, 2.64% were Asian or Asian American, almost 1% were Native American or Alaska Native, 2.64% were multiracial, and less than 1% responded with “other”. Ethnically, 2.05% of the sample identified as Latino or Hispanic.

Measures

Alcohol Use—The Daily Drinking Questionnaire – Revised (DDQ-R) assessed typical drinks per week in the past 30 days.³⁵ Participants gave the number of standard drinks typically consumed and number of hours typically spent drinking for each day in an average week.

Alcohol-related Problems—The Young Adult Alcohol Consequences Questionnaire (YAACQ) identified the consequences of alcohol use that participants have experienced in the past 90 days.³⁶ The total score was calculated by summing the number of problems experienced by the participant. Internal consistency was good for this measure ($\alpha = .95$).

Problem Recognition—This was measured by the Readiness to Change Ruler for Decreased Drinking.³⁷ Participants rated their level on the ruler ranging from 0 (Never think about my drinking) to 10 (My drinking has changed. I now drink less than before).

Evaluations and Expectancies—Evaluation and expectancies toward alcohol-related problems were measured by separate 50-item scales used in a previous study.³⁸ Participants were asked to give an evaluation (good/bad) and an expectancy (likely/unlikely) rating to all items of the DrInC (Drinker Inventory of Consequences),³⁹ each of which was rephrased to make sense (e.g., “Having a hangover or feeling bad after drinking”). A mean of the responses to each scale was calculated for a total score on each scale. High scores on both scales reflect likely to occur and positive/good problems. Both scales had good internal consistency ($\alpha = .98$ for both scales).

Grandiose and Vulnerable Narcissism—The two types of narcissism were measured using the Five Factor Narcissism Inventory (FFNI).⁴⁰ Participants rated their agreement to 148 statements about themselves (39 for vulnerable narcissism and 109 for grandiose narcissism) on a five-point scale. An overall mean score of narcissism was calculated for the two subscales (i.e., grandiose and vulnerable narcissism). Internal consistency in the current study was alpha of .84 for the grandiose narcissism subscale and .79 for the vulnerable narcissism subscale.

Social Desirability—This was measured by the New Scale of Social Desirability.⁴¹ The scale consists of 33 True/False self-report items concerning personal attitudes and traits. An overall mean score of the items was used. A high score indicates a desire to be more socially

accepted. Low scores indicate the opposite. Internal consistency was good in the current study ($\alpha = .78$).

Data Handling and Preparation

Preliminary analyses were conducted to determine the ranges and distributions of variables. Two participants were considered multivariate outliers and excluded from the analysis due to unreliable response style. Additionally, 36 participants were excluded from the analysis because they took the survey in less than 600 seconds (10 minutes). The final analysis sample was 345 participants, which represents about 90% of the original 383 participants. Thirteen additional outliers were included but reduced in value to one unit greater than the nearest non-outlying value.⁴² Variables included in the analyses were relatively normally distributed.

Results

Descriptive Statistics

Descriptive statistics and bivariate correlations are in Table 1. The five alcohol-related variables were differentially related to the two types of narcissism. Grandiose and vulnerable narcissism were both associated with the number and evaluation of alcohol-related problems. Additionally grandiose narcissism was associated with alcohol use but not with problem recognition or expectation. In contrast, vulnerable narcissism was associated with problem recognition and expectation but not alcohol use.

Regression Analyses

Multiple regression analyses were conducted in Stata 14 (StataCorp, 2014). Five outcome variables (alcohol use, problems, and problem recognition, expectancies and evaluations) were tested in steps. For each regression model, gender, social desirability, and alcohol use (in the models where it wasn't the outcome) were entered at Step 1. Though age was collected, it was not controlled for due to the sample being so homogenous. At Step 2 the types of narcissism, vulnerable and grandiose, were simultaneously entered into the model. Non-drinkers were excluded from the alcohol problems model and participants that did not complete the questionnaire for the outcome variable were excluded from the appropriate model causing different degrees of freedom.

Alcohol use—Grandiose and vulnerable narcissism were hypothesized to be significantly associated with alcohol use while controlling for gender and social desirability. At Step 1, gender and social desirability were entered in the model $F(2, 278) = 7.89, p < .001, R^2 = .05$. Male gender, but not social desirability, was a significant predictor. At Step 2 both types of narcissism were entered into the model. This resulted in a significant improvement in the model, $F(2, 276) = 7.54, p < .001, R^2 = .05$. Grandiose narcissism was significantly associated with alcohol use, but vulnerable narcissism was not $F(4, 276) = 7.90, R^2 = .10$. (see Table 2).

Alcohol-related problems—Both grandiose and vulnerable narcissism were hypothesized to be significantly associated with alcohol-related problems while controlling

for alcohol use, gender, and social desirability. At Step 1, alcohol use, gender, and social desirability were entered into the model $F(3, 199) = 26.53, p < .001, R^2 = .29$. Female gender, social desirability, and alcohol use were all significant predictors. At Step 2, both types of narcissism were entered into the model. This resulted in a significant improvement in the model $F(2, 197) = 11.08, p < .001, R^2 = .07$. Vulnerable narcissism, but not grandiose narcissism, was significantly associated with alcohol-related problems $F(5, 197) = 21.96, R^2 = .36$. (see Table 2).

Problem recognition—Both grandiose and vulnerable narcissism were hypothesized to be negatively associated with problem recognition meaning a narcissist is less likely to recognize that a problem exists. Alcohol use, gender and social desirability were controlled for in the regression. At Step 1, alcohol use, gender and social desirability were entered into the model $F(3, 247) = 4.04, p = .008, R^2 = .05$. Gender and social desirability were not significant predictors while alcohol use was. At Step 2, both types of narcissism were entered into the model. This resulted in a significant improvement in the model $F(2, 245) = 7.67, p < .001, R^2 = .05$. Vulnerable narcissism, but not grandiose narcissism, was significantly associated with problem recognition $F(5, 245) = 5.62, R^2 = .10$. (see Table 3).

Problem evaluation—Both grandiose and vulnerable narcissism were hypothesized to be associated with more positive evaluations of problems meaning narcissists will evaluate the problems they encounter as positive. Alcohol use, gender and social desirability were controlled for in the regression. At Step 1, alcohol use, gender and social desirability were entered into the model $F(3, 276) = 0.76, p = .52, R^2 = .01$. The model was not significant and alcohol use, gender and social desirability were not significant predictors, either. At Step 2, both types of narcissism were entered into the model. This resulted in the model becoming significant $F(2, 274) = 8.78, p < .001, R^2 = .06$. Grandiose narcissism, but not vulnerable narcissism, was significantly associated with a positive problem evaluation $F(5, 274) = 3.99, R^2 = .07$. (see Table 3).

Problem expectancies—Grandiose and vulnerable narcissism were both hypothesized to be negatively associated with problem expectancies meaning a narcissist would be less likely to expect alcohol-related problems to happen to them. Alcohol use, gender and social desirability were controlled for in the regression. At Step 1, alcohol use, gender and social desirability were entered into the model $F(3, 275) = 3.97, p = .009, R^2 = .04$. Social desirability and alcohol use were significant predictors but not gender. At Step 2, both types of narcissism were entered into the model. This resulted in a significant improvement in the model $F(2, 273) = 2.62, p = .075, R^2 = .02$. Vulnerable narcissism was a significant predictor of expecting alcohol-related problems but not grandiose narcissism $F(5, 273) = 3.46, R^2 = .06$. (see Table 3).

Comment

The current study explored the relationship between narcissism and alcohol use, alcohol-related problems, problem recognition, evaluation, and problem expectancies in a college population. Grandiose and vulnerable narcissism differentially predicted all five of the outcomes. Grandiose narcissism was a significant predictor of alcohol use and a positive

problem evaluation while vulnerable narcissism was a significant predictor of alcohol-related problems, problem recognition, and problem expectancy. These results will be discussed in turn.

Grandiose Narcissism and Alcohol Outcomes

Grandiose narcissism significantly predicted alcohol use, as did male gender and social desirability. This relationship is not surprising given that some research has linked narcissism, and specifically grandiosity, to alcohol use.^{13, 20, 28} It is possible that young narcissists might drink a lot to “show off” and gain admiration from their peer group. It is also possible that the more one drinks, the more grandiose one might act, creating a feedback loop, consistent with the idea that grandiosity itself could be either a cause or effect of drinking.²⁸ Alternatively, it is possible that both narcissism and alcohol use run in families and this is a learned behavior.

Grandiose narcissism was also a significant predictor of a positive alcohol problem evaluation, over and above alcohol use, social desirability and vulnerable narcissism. In other words, grandiose narcissists are more likely to regard the alcohol problems that they may encounter as good. This may be because of the social benefits they bring (e.g., holding one’s liquor might be seen as a good quality and doing risky things while intoxicated could be seen as “cool” in some circles). It is also possible that grandiose narcissism gives one the illusion of invulnerability, especially when drunk. Additionally, consistent with previous research, grandiose narcissists simply may be more defensive of their personal problems and lives.⁴³ Alternatively, it is possible that grandiose narcissists discount any lessons that might come from negative consequences in an effort to maintain their positive self-image. Thus, by not learning from negative experiences, they might continue to see alcohol consequences as positive. Although the overall R^2 was small for problem evaluations, this result is novel since no other study has examined a narcissist’s perceptions of alcohol-related problems.

Vulnerable Narcissism and Alcohol Outcomes

Vulnerable narcissism, but not grandiose narcissism, was a significant predictor of alcohol-related problems. The full model of this regression had a particularly high R^2 (.36) indicating that the predictors in our model account for a sizeable amount of the variance in alcohol-related problems. It is possible that vulnerable narcissists drink to deal with dysregulated negative affect or conform rather than show off. Drinking to deal with negative affect has been directly associated with alcohol problems in previous studies.⁴⁴ The relationship between conformity motives and alcohol problems is less clear.^{45, 46} Vulnerable narcissists might also simply be more honest in admitting problems compared to grandiose narcissists.

Vulnerable narcissism was a significant predictor of problem recognition. This means that vulnerable narcissists tended to recognize the existence of alcohol problems. This is consistent with previous research showing that people who score high on narcissism often readily admit problems with substance use and that specifically vulnerable narcissists are not as concerned with impression management.^{15, 43} Vulnerable narcissists are often unsure about their beliefs and therefore have little motivation or reason to deny problems when they

exist.²⁶ They are also very sensitive to other's evaluation of them, so they may believe that honesty about undeniable, visible problems (i.e., hangovers, passing out, getting into physical fights) might lead to greater approval from their peers.²⁷ Alternatively, vulnerable narcissists might be more sensitive to punishment, which might make them more sensitive to recognizing problems. Future research could test some of these alternative explanations.

Lastly, vulnerable narcissism was a significant predictor of problem expectations. Though it is against our prediction, it isn't completely surprising that vulnerable narcissists expect to experience problems. Their insecurity and low self-esteem might lead them to expect bad situations to occur.²⁷ It is also possible that vulnerable narcissists expect problems to happen to them based on their previous experiences with alcohol problems.

Conclusion and Limitations

The current study contributed to the literature in the following ways. First, it further explored the relationship between narcissism and alcohol use in a college population which only two studies have done.^{19, 20} Second, the current study additionally evaluated the relationship between narcissism and alcohol problems, problem recognition, evaluation, and expectation of problems which no previous study has done. Third, this study differentially evaluated the relationship between grandiose and vulnerable narcissism and alcohol outcomes. The findings of this study have potential implications for future treatment and research. For example, different prevention and treatment methods can be developed for individuals high in either grandiose or vulnerable narcissism. Treatment programs for vulnerable narcissists might focus on negative expectations while grandiose narcissists might need to focus more on recognition of problems. Future research should evaluate potential mechanisms driving these associations, such as mediators that might explain associations or moderators that might strengthen relationships found in this study. For example, perhaps types of drinking motives (e.g., conformity or coping) differentially mediate the relationship between narcissism subtypes and alcohol outcomes. Moderators such as positive or negative affect or reward sensitivity might affect the strength of the associations found in this study. In addition, future research could include more ethnically diverse samples to determine if the associations found here differ for students of diverse racial and ethnic backgrounds.

One limitation of this study is the lack of diversity in the sample's age (18–25) and race (88% Caucasian). This limits the generalizability of the findings of the study. Some research has found racial differences in regards to college drinking. For example, compared to African American students, White students typically drink 1.4 days more per month and report drinking 3 more drinks the last time they drank.⁴⁷ Also, White people have higher rates of alcohol use disorder than Black and Hispanic individuals.⁴⁸ Our sample was a fairly homogenous sample (88% Caucasian), so racial diversity was too small to replicate these racial differences in alcohol outcomes. However, a sample of college students can be considered a strength since most previous research on narcissism and alcohol use was conducted on clinical or prison samples and both narcissism and alcohol use are prevalent in college-aged samples.

Overall, the results of this study demonstrate the difference between the two types of narcissism and how they relate to alcohol outcomes in a college sample. Grandiose

narcissism is a personality factor contributing to the likelihood of alcohol consumption and a good evaluation of alcohol problems. Vulnerable narcissism, on the other hand, emerged as a risk factor for alcohol-related problems. Vulnerable narcissism also contributes to people's expectation and recognition of alcohol problems. This study highlights the importance of individual differences in alcohol-related outcomes in a high risk population of college students.

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Table 1

Descriptive Statistics and Correlation Matrix of the Analysis Sample.

Variable	M	SD	Range	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Gender	-	-	95 (M), 248 (F)	1.00								
2. Age	19.6	1.47	18 – 25	.08	1.00							
3. Alcohol Use	7.2	8.97	0 – 43	.23**	.10	1.00						
4. Alcohol Problems	8.56	9.25	0 – 42	.01	.07	.58**	1.00					
5. Problem Recognition	3.02	3.09	1 – 11	-.04	.16*	.18*	.46**	1.00				
6. Problem Evaluation	1.82	0.60	1 – 4.17	.07	-.00	.14*	.16*	.05	1.00			
7. Problem Expectancies	1.79	0.82	1 – 4.42	-.05	-.02	.20*	.49**	.35**	.15*	1.00		
8. Vulnerable Narcissism	2.75	0.46	1.27 – 4	-.00	-.02	-.00	.27**	.26**	.14*	.14*	1.00	
9. Grandiose Narcissism	1.97	0.37	1 – 2.77	.32**	-.04	.27**	.21*	.08	.29**	.05	.28**	1.00
10. Social Desirability	0.24	0.15	-0.36 – 0.64	.04	-.04	-.02	.17*	.08	-.02	.12*	.11	.08

Note. Gender (Male = 1, Female = 0).

* p < .05,

** p < .001

Table 2

Regression Analyses for Alcohol Use and Alcohol-related Problems.

Predictor Variables	b	SE	P-value	Beta	95% Confidence Interval (b)
Outcome: Alcohol Use					
<u>Step 1</u>					
Gender	4.37	1.10	.000	0.23	2.19 – 6.54
Social Desirability	-1.79	3.25	.583	-0.03	-8.18 – 4.61
<u>Step 2</u>					
Gender	2.96	1.14	.010	0.16	0.72 – 5.20
Social Desirability	-2.18	3.20	.497	-0.04	-8.47 – 4.12
Vulnerable Narcissism	-1.51	1.13	.183	-0.08	-3.73 – 0.72
Grandiose Narcissism	5.71	1.48	.000	0.24	2.80 – 8.63
<i>Note. N = 281. Full Model R² = .10, F(4, 276) = 7.90, p < .001</i>					
Outcome: Alcohol-related Problems					
<u>Step 1</u>					
Gender	-3.07	1.27	.017	-0.15	-5.58 – -0.56
Social Desirability	12.38	3.62	.001	0.21	5.24 – 19.52
Alcohol Use	0.54	0.06	.000	0.53	0.41 – 0.66
<u>Step 2</u>					
Gender	-2.64	1.27	.038	-0.13	-5.14 – -0.15
Social Desirability	9.81	3.52	.006	0.16	2.87 – 16.76
Alcohol Use	0.57	0.06	.000	0.55	0.44 – 0.69
Vulnerable Narcissism	5.81	1.25	.000	0.28	3.34 – 8.28
Grandiose Narcissism	-0.58	1.63	.723	-0.02	-3.79 – 2.64
<i>Note. N = 203. Full Model R² = .36, F(5, 197) = 21.96, p < .001</i>					

Table 3

Regression Analyses for Problem Recognition, Evaluation and Expectancies.

Predictor Variables	b	SE	P-value	Beta	95% Confidence Interval (b)
Outcome: Problem Recognition					
<u>Step 1</u>					
Gender	-0.87	0.45	.055	-0.12	-1.75 - 0.02
Social Desirability	1.91	1.30	.144	0.09	-0.66 - 4.47
Alcohol Use	0.07	0.02	.000	0.19	0.02 - 0.12
<u>Step 2</u>					
Gender	-0.68	0.45	.134	0.10	-1.58 - 0.21
Social Desirability	1.27	1.28	.323	0.06	-1.26 - 3.80
Alcohol Use	0.08	0.02	.001	0.21	0.03 - 0.12
Vulnerable Narcissism	1.72	0.44	.000	0.25	0.85 - 2.59
Grandiose Narcissism	-0.38	0.60	.527	-0.04	-1.55 - 0.80
<i>Note. N = 251. Full Model R² = .10. F(5, 245) = 5.62. p < .001</i>					
Outcome: Problem Evaluation					
<u>Step 1</u>					
Gender	0.00	0.08	.960	0.00	-0.15 - 0.16
Social Desirability	-0.08	0.23	.735	-0.02	-0.52 - 0.37
Alcohol Use	0.01	0.00	.159	0.09	-0.00 - 0.01
<u>Step 2</u>					
Gender	-0.07	0.08	.382	-0.05	-0.23 - 0.09
Social Desirability	-0.17	0.22	.452	-0.04	-0.61 - 0.27
Alcohol Use	0.00	0.00	.512	0.04	-0.01 - 0.01
Vulnerable Narcissism	0.10	0.08	.213	0.08	-0.06 - 0.25
Grandiose Narcissism	0.38	0.11	.000	0.23	0.17 - 0.58
<i>Note. N = 280. Full Model R² = .07. F(5, 274) = 3.99. p = .002</i>					
Outcome: Problem Evaluation					
<u>Step 1</u>					
Gender	-0.20	0.11	.07	-0.11	-0.42 - 0.02
Social Desirability	0.69	0.32	.03	0.13	0.07 - 1.32

Predictor Variables	b	SE	P-value	Beta	95% Confidence Interval (b)
Alcohol Use	0.01	0.01	.014	0.15	0.00 – 0.03
<u>Step 2</u>					
Gender	-0.17	0.11	.136	-0.09	-0.40 – 0.05
Social Desirability	0.64	0.32	.047	0.12	0.01 – 1.26
Alcohol Use	0.02	0.01	.009	0.16	0.00 – 0.03
Vulnerable Narcissism	0.26	0.11	.024	0.13	0.03 – 0.48
Grandiose Narcissism	-0.13	0.15	.395	-0.06	-0.43 – 0.17

Note. N = 279. Full Model R² = .06, F(5, 273) = 3.46, p = .005