



**Digital Commons@**

Loyola Marymount University  
LMU Loyola Law School

---

Psychological Science Faculty Works

Psychological Science

---

2014

## Relational Aggression, Positive Urgency and Negative Urgency: Predicting Alcohol Use and Consequences among College Students

Joseph W. LaBrie

*Loyola Marymount University*, [jlabbrie@lmu.edu](mailto:jlabbrie@lmu.edu)

Elizabeth Grimaldi

*Loyola Marymount University*, [egrimald@lmu.edu](mailto:egrimald@lmu.edu)

Lucy Napper

*Loyola Marymount University*, [lucy.napper@lmu.edu](mailto:lucy.napper@lmu.edu)

Follow this and additional works at: [https://digitalcommons.lmu.edu/psyc\\_fac](https://digitalcommons.lmu.edu/psyc_fac)



Part of the [Psychology Commons](#)

---

### Digital Commons @ LMU & LLS Citation

LaBrie, Joseph W.; Grimaldi, Elizabeth; and Napper, Lucy, "Relational Aggression, Positive Urgency and Negative Urgency: Predicting Alcohol Use and Consequences among College Students" (2014).

*Psychological Science Faculty Works*. 12.

[https://digitalcommons.lmu.edu/psyc\\_fac/12](https://digitalcommons.lmu.edu/psyc_fac/12)

This Article - post-print is brought to you for free and open access by the Psychological Science at Digital Commons @ Loyola Marymount University and Loyola Law School. It has been accepted for inclusion in Psychological Science Faculty Works by an authorized administrator of Digital Commons@Loyola Marymount University and Loyola Law School. For more information, please contact [digitalcommons@lmu.edu](mailto:digitalcommons@lmu.edu).



Published in final edited form as:

*Psychol Addict Behav.* 2014 September ; 28(3): 893–898. doi:10.1037/a0037354.

## Relational Aggression, Positive Urgency and Negative Urgency: Predicting Alcohol Use and Consequences among College Students

Elizabeth M. Grimaldi<sup>1</sup>, Lucy E. Napper<sup>1</sup>, and Joseph W. LaBrie<sup>1</sup>

<sup>1</sup>Loyola Marymount University, Department of Psychology, 1 LMU Drive, Suite 4700, Los Angeles, CA 90045, USA

### Abstract

Research on relational aggression (indirect and social means of inflicting harm) has previously focused on adolescent populations. The current study extends this research by exploring both the frequency of perpetrating and being the target of relational aggression as it relates to alcohol use outcomes in a college population. Further, this study examines whether positive urgency (e.g. acting impulsively in response to positive emotions) and negative urgency (e.g., acting impulsively in response to negative emotions) moderate the relationship between relational aggression and alcohol outcomes. In this study, 245 college students (65.7% female) completed an online survey. Results indicated greater frequency of perpetrating relational aggression, higher levels of positive urgency, or higher levels of negative urgency was associated with more negative consequences. Further, negative urgency moderated the relationship between frequency of perpetrating aggression and consequences such that aggression was more strongly associated with consequences for those high in urgency. Counter to the adolescent literature, the frequency of being the target of aggression was not associated with more alcohol use. These findings suggest that perpetrators of relational aggression may be at particular risk for negative alcohol-related consequences when they act impulsively in response to negative, but not positive, emotions. These students may benefit from interventions exploring alternative ways to cope with negative emotions.

### Keywords

relational aggression; impulsivity; college students; alcohol; consequences

---

Drinking among college students remains a serious health issue (Johnston, O'Malley, Bachman, & Schulenberg, 2012; Wechsler & Nelson, 2008). Excessive drinking poses a range of risks, from poor academic performance to serious injuries (Hingson, Edwards, Heeren, & Rosenbloom, 2009). Previous research has suggested that impulsive personality characteristics are important predictors of alcohol-related risk (Curcio & George, 2011; LaBrie, Kenney, Napper, & Miller, 2014). In addition, aggressive behavior is positively

associated with alcohol use among adolescents and college students (Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994; Wells, Graham, Speechley, & Koval, 2005). Although most of that research focused on physical aggression (Wechsler, Dowdall, Davenport, & Castillo, 1995; Wells et al., 2005), relational aggression (Forrest, Eatough, & Shevlin, 2005) is another important aspect of aggressive behavior. In an extension of previous research, the current study examines the interaction between relational aggression and the urgency (negative and positive) dimensions of impulsivity as predictors of alcohol use and negative consequences in college students. Understanding these relationships has the potential to identify high-risk groups and inform alcohol intervention content.

Relational aggression includes indirect aggression (Archer & Coyne, 2005; Warren, Richardson, & McQuillin, 2011) and other social means of causing harm (Feshbach, 1969). More specifically, relational aggression refers to a perpetrator (i.e., the aggressor) socially excluding, rejecting, or avoiding an individual (i.e., the target) and can include behaviors such as name-calling, public mocking, verbal criticism, and social exclusion and avoidance (Forrest et al., 2005). Currently, most research on relational aggression and alcohol risk focuses on adolescents (Skara et al., 2008; Sullivan, Farrell, & Kliewer, 2006). During this developmental period, both being the perpetrator and being the target of relational aggression is positively associated with greater alcohol and drug use (Skara et al., 2008; Sullivan et al., 2006). This may reflect aggressors being more likely to associate with delinquent peers, while both aggressors and victims may use alcohol to cope with negative emotions associated with aggressive behaviors (Reyes, Foshee, Bauer, & Ennett, 2012; Sullivan et al., 2006). Although relational aggression is commonly reported by college students (Werner & Crick, 1999), only a few studies have examined the relationship between relational aggression and alcohol use in this population (Storch, Bagner, Geffken, & Baumeister, 2004; Storch, Werner, & Storch, 2003). For instance, Wechsler and colleagues (1994) found that college students who endorsed frequent heavy episodic drinking were more likely to report relationally aggressive behavior, such as arguing with friends, than non-heavy episodic drinkers. Further, being the victim of relational aggression is associated with alcohol-related problems, such as driving after drinking and engaging in unprotected sex (Dahlen, Czar, Prather, & Dyess, 2013).

Thus, the association between relational aggression and drinking may extend beyond adolescence into emerging adulthood. While past research has focused on being the aggressor or victim independently, the current study aims to extend past research by simultaneously exploring both the roles of target and aggressor as they relate to alcohol use and consequences in a college population. This approach has the benefit of examining the effects of both roles while controlling for instances where people may be engaged in exchanges in which they are both the victim and perpetrator of aggression (Dahlen et al., 2013).

In addition to relational aggression, impulsivity is also strongly associated with alcohol use and related consequences (Dick et al., 2010; Verdejo-Garcia, Lawrence, & Clark, 2008). In general, impulsivity refers to a tendency to act rashly, take risks, and a lack of self-control over both behavior and emotions (Whiteside & Lynam, 2001). Impulsivity is a multifaceted construct (Cyders et al., 2007) and the dimension of negative urgency, the tendency to

respond impulsively to negative emotions such as anger or frustration, is one of the strongest predictors of the severity of alcohol problems (Adams, Kaiser, Lynam, Charnigo, & Milich, 2012; Curcio & George, 2011; Dir, Karyadi, & Cyders, 2013; Verdejo-Garcia, Bechara, Recknor, & Perez-Garcia, 2007). Similarly, positive urgency, the tendency to respond impulsively to positive emotions, has also been identified as a predictor of problematic drinking and consequences (LaBrie et al., 2014; Shin, Hong, & Jeon, 2012).

Individuals with higher levels of negative urgency may engage in impulsive behaviors as a way of coping with negative affect (Smith & Tran, 2007; Whiteside & Lynam, 2001). Indeed, experiencing negative emotions may lead to reduced cognitive resources and poorer decision making (Dick et al., 2010) and thereby increase alcohol risk. Further, given that relational aggression is associated with a number of negative emotions (Reyes et al., 2012; Werner & Crick, 1999), relational aggression might be more strongly associated with alcohol risk for individuals with higher levels of negative urgency. In contrast, impulsivity associated with positive emotions may be less likely to moderate the aggression and alcohol relationship.

Although urgency and relational aggression are independently positively related to alcohol use and consequences, the current study sought to expand previous research by examining how these factors interact to predict alcohol use outcomes. We predict that negative urgency will moderate the relationship between relational aggression (either as the target or aggressor) such that the frequency of perpetrating or being the target of relational aggression will be more strongly positively related to alcohol use and consequences for those high in negative urgency. In contrast, we predict that positive urgency will not moderate the relationship between relational aggression and alcohol outcomes.

## Method

### Participants and Procedure

Participants consisted of 245 students recruited through a psychology department subject pool office at a midsized, west-coast university. Students were emailed a link to the study and after providing consent, completed an online survey for which they received course credit. Overall, 92.9% of invited students completed the online survey. Consistent with campus demographics, the racial composition of the student sample was 51.2% Caucasian, 14.9% Hispanic, 12.9% Multiracial, 10.5% Asian, 5.6% African American, 8% Other, and 0.8% Hawaiian/Pacific Islander. The students were 65.7% female with a mean age of 18.9 ( $SD = 1.03$ ).

### Measures

**Demographics**—Demographic information such as student age, sex, and race was collected at the beginning of the online survey.

**Relational Aggression**—The Indirect Aggression Scale (IAS; Forrest et al., 2005) measures the frequency with which participants exhibit indirect (relational) aggressive behavior (aggressor;  $\alpha = .94$ ) as well as the frequency of experiencing relational aggression from other people (target;  $\alpha = .96$ ). Twenty-five items assessed the frequency of perpetrating

aggression (e.g., “Used emotional blackmail”) and 25 analogous items assessed the frequency of being the target of such behavior, (e.g., “Belittled me”). Responses were scored on a 5-point Likert scale with options ranging from 1 (*Never*) to 5 (*Regularly*). The IAS has been found to be reliable and valid in populations of college students (Forrest et al., 2005).

**Negative & Positive Urgency**—The current study utilized the 12-item Negative Urgency subscale ( $\alpha = .88$ ) of the UPPS Impulsive Behavior Scale (Whiteside & Lynam, 2001) and the 14-item Positive Urgency Measure ( $\alpha = .93$ ; Cyders et al., 2007) to assess negative and positive urgency respectively. Response options ranged from 1 (*Agree Strongly*) to 4 (*Disagree Strongly*). Example items include “When I feel bad, I will often do things I later regret in order to make myself feel better now” (negative urgency) and “When I get really happy about something, I tend to do things that can have bad consequences” (positive urgency).

**Alcohol Use**—The Daily Drinking Questionnaire (DDQ; Collins, Parks, & Marlatt, 1985) assessed the typical amount of alcohol students consumed during one week in the past month. Participants were provided with a definition of a standard drink (“One 12-oz beer, one 4-oz glass of wine, or one half ounce of pure ethyl alcohol, which is contained in one 1.5-oz shot of 80-proof liquor”). Then, for each day of the week, participants reported the average number of drinks they consumed and these responses were summed to obtain average drinks per week.

**Alcohol Consequences**—Negative alcohol-related consequences were examined using the Rutgers Alcohol Problem Index (RAPI; White & Labouvie, 1989). Participants were asked whether they had experienced each of the 23 consequences as a result of alcohol use within the past month, such as “neglected your responsibilities”. Participants rated the frequency with which each consequence occurred using a 5-point scale ranging from “*Never*” to “*More than 10 times*”. The RAPI scores showed excellent inter-item reliability in this sample ( $\alpha = .91$ ).

## Results

### Bivariate Relationships

The distributional properties of all measures were examined and variables with outliers greater than three standard deviations from the mean were set at one unit larger than the next most extreme value (Tabachnick & Fidell, 2013). Overall, 95.5% of the sample reported behaving aggressively in a relational context ( $M = 1.57$ ,  $SD = 0.49$ ). In addition, 91.4% reported being the target of such aggressive behavior ( $M = 1.74$ ,  $SD = 0.65$ ). As shown in the bivariate correlation matrix (Table 1), students’ reported alcohol use was positively associated with frequency of perpetrating relational aggression ( $p < .01$ ), and positive urgency ( $p < .05$ ), but not frequency of being the target of aggressive behavior or negative urgency. Additionally, alcohol-related consequences were positively associated with perpetrating relational aggression ( $p < .001$ ), being the target of relational aggression ( $p < .01$ ), positive urgency ( $p < .001$ ), and negative urgency ( $p < .001$ ).

## Relational Aggression and Impulsivity in Predicting Alcohol Outcomes

Predictors were standardized prior to calculation of interactions. Alcohol use and consequence variables were positively skewed. Thus, negative binomial (NB) regression procedures were employed. A Lagrange multiplier test indicated that the negative binomial model was a better fit to the data than the Poisson model for both alcohol use,  $\chi^2(1, N = 245) = 245.49, p < .001$ , and consequences,  $\chi^2(1, N = 245) = 99.61, p < .001$ . At Step 1, race (0 = white, 1 = non-white) and sex were entered as covariates. In the regression predicting consequences, alcohol use was also included as a covariate at Step 1. At Step 2, frequency of aggressive behavior, frequency of being the target of aggressive behavior, negative urgency, and positive urgency were entered. Finally, at Step 3 interaction terms involving negative urgency, positive urgency and both forms of aggression were entered into the models.

Table 2 presents the NB regression model predicting alcohol use. Greater frequency of being the perpetrator of relational aggression ( $\beta = 0.31, p < .05$ ), and lower frequency of being the target of relational aggression ( $\beta = -0.26, p < .05$ ) predicted greater alcohol use. However, neither negative urgency, positive urgency, nor the interactions terms predicted alcohol use.

Table 3 shows the NB regression model predicting alcohol-related consequences. After controlling for alcohol use, greater negative urgency predicted more alcohol consequences ( $\beta = 0.26, p < .05$ ). Further, the interaction between negative urgency and frequency of engaging in aggression ( $\beta = 0.29, p < .05$ ) as well as the interaction between positive urgency and frequency of being the target of aggression ( $\beta = -0.35, p < .05$ ) were significant.

Simple slopes were graphed at one standard deviation below (low urgency) and above (high urgency) the means (Aiken & West, 1991). Among participants with high levels of negative urgency, perpetrating relational aggression predicted more consequences (Figure 1). In addition, being the target of relational aggression was associated with greater consequences for those low, but not high, in positive urgency (Figure 2).

## Discussion

The current study advances past research by investigating the impact of both being the perpetrator and being the victim of relational aggression on alcohol use and consequences and examining whether impulsivity moderates these relationships in college students. In partial support of our hypotheses, negative urgency moderated the relationship between being the aggressor and consequences, but not the relationship between being the target and consequences. Perpetrating relational aggression was more strongly related to consequences for students with higher levels, as opposed to lower levels, of negative urgency. Contrary to our hypotheses, positive urgency did moderate the relationship between being the target of aggression and consequences, such that being the target of relational aggression was negatively associated with consequences for those high in positive urgency. Being the target of aggression may actually have decreased alcohol consequences by reducing positive emotions. Neither of the impulsivity variables moderated the relationships between relational aggression and alcohol use.

Although previous research indicates that aggressors tend to experience more alcohol problems (Storch et al., 2004), possibly as a result of using alcohol to cope with negative emotions (Reyes et al., 2012), the current findings suggest that this relationship is strongest for those who act impulsively to reduce negative emotions. Given that positive urgency did not moderate this relationship, the combination of poor impulse control and aggressive behavior alone may not increase risk, but more specifically acting impulsively when experiencing negative emotions increases the influence of aggressive behavior on alcohol consequences.

Negative urgency did not moderate the relationship between being the victim of aggression and alcohol consequences. Though there may be some overlap in their emotional responses, student aggressors are likely to experience a different range of negative emotions (e.g., anger, frustration; Werner & Crick, 1999) than those who are the targets of aggression (e.g., sadness, hurt; Prinstein, Boergers, & Vernberg, 2010). These different patterns of emotional responses may help explain the current findings. Past research indicates that different affective states may interact with negative urgency in unique ways to predict alcohol outcomes (Karyadi, Coskunpinar, Dir, & Cyders, 2013). For example, Karyadi and colleagues suggested that negative urgency only appears to be associated with alcohol use for those with more stable levels of anxiety-depression, but not for those who have fluctuating levels of these emotions; whereas it is positively related to risky alcohol outcomes regardless of whether anger is experienced intermittently or consistently. Further research is needed to explore how different types of negative emotions interact with negative urgency to predict alcohol outcomes.

While adolescent research indicates that being the target of relational aggression may be an important risk factor for alcohol problems (Sullivan et al., 2006), the current study suggests that this may not be the case in college students. First, there was no significant bivariate relationship between frequency of being the target of aggression and alcohol use. After controlling for demographics, negative urgency, positive urgency and the frequency of perpetrating aggressive acts, students who were more frequently the subject of relational aggression tended to drink less alcohol than those who experienced little relational aggression. This finding may reflect a suppression effect (McNemar, 1969). It may be that targets of relational aggression tend to withdraw from, or are deliberately excluded from, social activities where alcohol use is taking place. Alternatively, in comparison to younger adolescents, college students may have developed better coping skills for dealing with relational aggression and social exclusion; therefore, experiencing this form of aggression may not contribute importantly to alcohol use.

Given the interaction between negative urgency and perpetrating aggression, college counseling staff may consider screening students who report problems associated with aggression and impulsivity for alcohol problems and implementing targeted alcohol interventions with this population. These interventions might examine how students deal with negative emotions, such as aggression, hostility, frustrations, and help students recognize the links between aggression, impulsive behaviors and alcohol consequences. Research among adolescents suggests that personality-targeted interventions may be

beneficial for reducing alcohol (Conrod, Castellanos-Ryan, & Mackie, 2011). Expanding this line of research to address alcohol use among college students may also be beneficial.

The current study has a number of limitations including the use of cross-sectional data that does not allow for inferences about temporal order. It is possible that there is a bidirectional relationship between relational aggression and alcohol problems, such that students not only use alcohol to deal with the negative emotions associated with relational aggression, but that alcohol use also facilitates aggressive behavior. Additionally, although students were assured of the confidentiality of their responses, they may have underreported the frequency with which they perpetrated and/or experienced relational aggression. While the current study adds to the limited research exploring alcohol use and relational aggression among college students, research exploring this association among non-college attending emerging adults is also needed. It may be that that social environment of college, where alcohol use is prevalent and students often live, socialize and study together in close quarters may increase the likelihood of relational aggression and related alcohol problems. Finally, past research suggests that it may be important to consider the context of relational aggression (Murray-Close, Ostrov, Nelson, Crick, & Coccaro, 2010). For example, being the target of romantic as opposed to peer relational aggression may be more strongly associated with alcohol problems. This, too, needs further exploration.

Consistent with research demonstrating that relational aggression is common among college students (Werner & Crick, 1999), the majority of participants in the current study indicated that they had both been the victim and perpetrator of some form of relational aggression. In an extension of past research, the current study examines the influence of being both the target and perpetrator of relational aggression in college students, and the interaction of relational aggression and urgency. The findings indicate that the frequency of engaging in relational aggression is a stronger predictor of alcohol use than being the target of relational aggression. Further, engaging in relational aggression was associated with more alcohol problems for those who had trouble controlling their behavior when experiencing negative emotions. College alcohol interventions examining effective approaches for coping with negative emotions and impulsive personality traits may be more beneficial for the perpetrators, rather than targets, of relational aggression.

## Acknowledgments

This research was supported by Grant R21 AA021870-01 and Grant R01 AA014576-09 from the National Institute of Alcohol Abuse and Alcoholism (NIAAA). Support for Dr. Napper was provided by ABMRF/The Foundation for Alcohol Research. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIAAA or the National Institutes of Health.

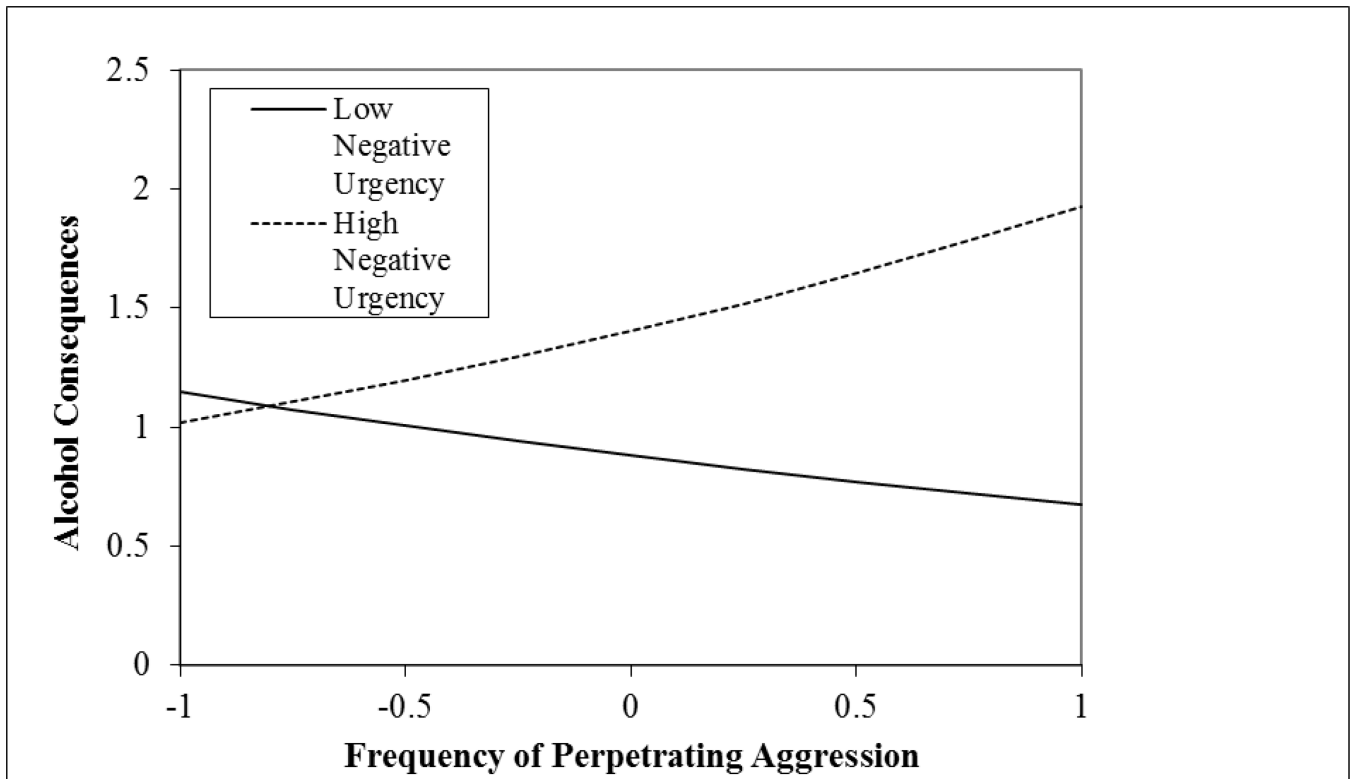
## References

- Adams ZW, Kaiser AJ, Lynam DR, Charnigo RJ, Milich R. Drinking motives as mediators of the impulsivity-substance use relation: Pathways for negative urgency, lack of premeditation, and sensation seeking. *Addictive Behaviors*. 2012; 37:848–855. [PubMed: 22472524]
- Aiken, LS.; West, SG. *Multiple regression: Testing and interpreting interactions*. Thousand Oaks CA, US: Sage Publications, Inc.; 1991.
- Archer J, Coyne SM. An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review*. 2005; 9:212–230. [PubMed: 16083361]

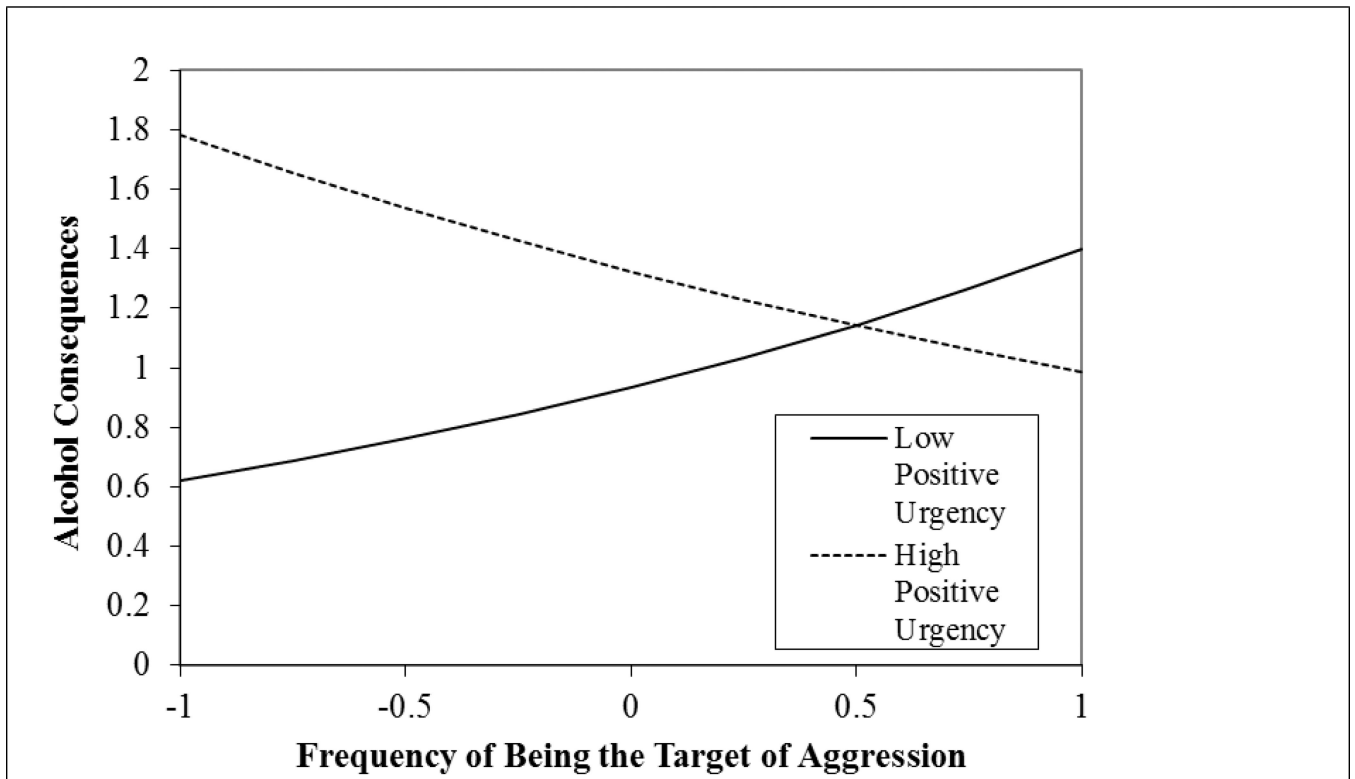


- Collins RL, Parks GA, Marlatt GA. Social determinants of alcohol consumption: The effects of social interaction and model status on the self-administration of alcohol. *Journal of Consulting and Clinical Psychology*. 1985; 53:189–200. [PubMed: 3998247]
- Conrod PJ, Castellanos-Ryan N, Mackie C. Long-term effects of a personality-targeted intervention to reduce alcohol use in adolescents. *Journal of Consulting and Clinical Psychology*. 2011; 79:296–306. [PubMed: 21500886]
- Curcio AL, George AM. Selected impulsivity facets with alcohol use/problems: The mediating role of drinking motives. *Addictive Behaviors*. 2011; 36:959–964. [PubMed: 21665369]
- Cyders MA, Smith GT, Spillane NS, Fischer S, Annus AM, Peterson C. Integration of impulsivity and positive mood to predict risky behavior: Development and validation of a measure of positive urgency. *Psychological Assessment*. 2007; 19:107–118. [PubMed: 17371126]
- Dahlen ER, Czar KA, Prather E, Dyess C. Relational aggression and victimization in college students. *Journal of College Student Development*. 2013; 54:140–154.
- Dick DM, Smith G, Olausson P, Mitchell SH, Leeman RF, O'Malley SS, Sher K. Understanding the construct of impulsivity and its relationship to alcohol use disorders. *Addiction Biology*. 2010; 15:217–226. [PubMed: 20148781]
- Dir AL, Karyadi K, Cyders MA. The uniqueness of negative urgency as a common risk factor for self-harm behaviors, alcohol consumption, and eating problems. *Addictive Behaviors*. 2013; 38:2158–2162. [PubMed: 23454879]
- Feshbach ND. Sex differences in children's modes of aggressive responses toward outsiders. *Merrill-Palmer Quarterly of Behavior and Development*. 1969; 15:249–258.
- Forrest S, Eatough V, Shevlin M. Measuring adult indirect aggression: The development and psychometric assessment of the indirect aggression scales. *Aggressive Behavior*. 2005; 31:84–97.
- Hingson RW, Edwards EM, Heeren T, Rosenbloom D. Age of drinking onset and injuries, motor vehicle crashes, and physical fights after drinking and when not drinking. *Alcoholism: Clinical and Experimental Research*. 2009; 33:783–790.
- Johnston, LD.; O'Malley, PM.; Bachman, JG.; Schulenberg, JE. *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2011*. Ann Arbor: Institute for Social Research, The University of Michigan; 2012.
- Karyadi K, Coskunpinar A, Dir AL, Cyders MA. The interactive effects of affect lability, negative urgency, and sensation seeking on young adult problematic drinking. *Journal of Addiction*. 2013; 2013:1–7.
- LaBrie JW, Kenney SR, Napper LE, Miller K. Impulsivity and alcohol-related risk among college students: Examining urgency, sensation seeking and the moderating influence of beliefs about alcohol's role in the college experience. *Addictive Behaviors*. 2014; 39:159–164. [PubMed: 24120644]
- McNemar, Q. *Psychological Statistics*. London: Wiley; 1969.
- Murray-Close D, Ostrov JM, Nelson DA, Crick NR, Coccaro EF. Proactive, reactive, and romantic relational aggression in adulthood: Measurement, predictive validity, gender differences, and association with intermittent explosive disorder. *Journal of Psychiatric Research*. 2010; 44:393–404. [PubMed: 19822329]
- Prinstein MJ, Boergers J, Vernberg EM. Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child and Adolescent Psychology*. 2010; 30:479–491.
- Reyes HL, Foshee VA, Bauer DJ, Ennett ST. Developmental associations between adolescent alcohol use and dating aggression. *Journal of Research on Adolescence*. 2012; 22:526–541. [PubMed: 23589667]
- Shin SH, Hong HG, Jeon SM. Personality and alcohol use: The role of impulsivity. *Addictive Behaviors*. 2012; 37:102–107. [PubMed: 21955874]
- Skara S, Pokhrel P, Weiner MD, Sun P, Dent CW, Sussman S. Physical and relational aggression as predictors of drug use: Gender differences among high school students. *Addictive Behaviors*. 2008; 33:1507–1515. [PubMed: 18706767]
- Smith JP, Tran GQ. Does negative affect increase change readiness among college hazardous drinkers? *Addictive Behaviors*. 2007; 32:2281–2285. [PubMed: 17317023]

- Storch EA, Bagner DM, Geffken GR, Baumeister AL. Association between overt and relational aggression and psychosocial adjustment in undergraduate college students. *Violence and Victims*. 2004; 19:689–700. [PubMed: 16004070]
- Storch EA, Werner NE, Storch JB. Relational aggression and psychosocial adjustment in intercollegiate athletes. *Journal of Sport Behavior*. 2003; 26(2):155–167.
- Sullivan TN, Farrell AD, Kliewer W. Peer victimization in early adolescence: Association between physical and relational victimization and drug use, aggression, and delinquent behaviors among urban middle school students. *Development and Psychopathology*. 2006; 18:119–137. [PubMed: 16478555]
- Tabachnick, BG.; Fidell, LS. *Using multivariate statistics*. (6th ed.). Boston: Allyn and Bacon; 2013.
- Verdejo-Garcia A, Bechara A, Recknor EC, Perez-Garcia M. Negative emotion-driven impulsivity predicts substance dependence problems. *Drug and Alcohol Dependence*. 2007; 91:213–219. [PubMed: 17629632]
- Verdejo-Garcia A, Lawrence AJ, Clark L. Impulsivity as a vulnerability marker for substance-use disorders: Review of findings from high-risk research, problem gamblers and genetic association studies. *Neuroscience and Biobehavioral Reviews*. 2008; 32:777–810. [PubMed: 18295884]
- Warren P, Richardson DS, McQuillin S. Distinguishing among nondirect forms of aggression. *Aggressive Behavior*. 2011; 37:291–301. [PubMed: 21480293]
- Wechsler H, Davenport A, Dowdall G, Moeykens B, Castillo S. Health and behavioral consequences of binge drinking in college: A national survey of students at 140 campuses. *Journal of the American Medical Association*. 1994; 272:1672–1677. [PubMed: 7966895]
- Wechsler H, Dowdall GW, Davenport A, Castillo S. Correlates of college student binge drinking. *American Journal of Public Health*. 1995; 85:921–926. [PubMed: 7604914]
- Wechsler H, Nelson TF. What we have learned from the Harvard School of Public Health College Alcohol Study: Focusing attention on college student alcohol consumption and the environmental conditions that promote it. *Journal of Studies on Alcohol and Drugs*. 2008; 69:481–490. [PubMed: 18612562]
- Wells S, Graham K, Speechley M, Koval JJ. Drinking patterns, drinking contexts and alcohol-related aggression among late adolescent and young adult drinkers. *Addiction*. 2005; 100:933–944. [PubMed: 15955009]
- Werner NE, Crick NR. Relational aggression and social-psychological adjustment in a college sample. *Journal of Abnormal Psychology*. 1999; 108:615–623. [PubMed: 10609426]
- White HR, Labouvie EW. Towards the assessment of adolescent problem drinking. *Journal of Studies on Alcohol*. 1989; 50:30–37. [PubMed: 2927120]
- Whiteside SP, Lynam DR. The Five Factor Model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences*. 2001; 30:669–689.



**Figure 1.** Interaction between frequency of perpetrating relational aggression and negative urgency with negative alcohol-related consequences. The frequency of perpetrating aggression is plotted from 1 *SD* below the mean to 1 *SD* above the mean.



**Figure 2.** Interaction between frequency of being the target of relational aggression and positive urgency with negative consequences. The frequency of being the target of aggression is plotted from 1 *SD* below the mean to 1 *SD* above the mean.

Table 1

## Summary of Intercorrelations

Variable	1	2	3	4	5	6
1 Alcohol consequences	--					
2 Alcohol use	.55***	--				
3 Aggressor	.31***	.20**	--			
4 Target	.17**	.00	.62***	--		
5 Negative urgency	.27***	.06	.27***	.24***	--	
6 Positive urgency	.22***	.14*	.30***	.20**	.65***	--

\*  $p < .05$ ,\*\*  $p < .01$ ,\*\*\*  $p < .001$

**Table 2**

Negative Binomial Regression Analyses Predicting Drinking

Step	Variable entered	Step 1 $\beta$	Step 2 $\beta$	Step 3 $\beta$	SE	Wald's $\chi^2$	Wald's 95% CI
1.	Sex	0.14	-0.04	-0.03	0.21	0.02	(-0.45, 0.39)
	Race	-0.34	-0.46*	-0.49*	0.19	6.44	(-0.87, -0.11)
2.	Relational aggression: Aggressor		0.31*	0.32*	0.14	5.46	(0.05, 0.59)
	Relational aggression: Target		-0.26*	-0.25*	0.13	3.86	(-0.51, 0.00)
3.	Negative urgency		-0.05	-0.05	0.14	0.13	(-0.32, 0.22)
	Positive urgency		0.21	0.21	0.14	2.37	(-0.06, 0.49)
	Negative Urgency $\times$ Aggressor			0.12	0.15	0.58	(-0.18, 0.41)
	Negative Urgency $\times$ Target			-0.08	0.16	0.23	(-0.39, 0.24)
	Positive Urgency $\times$ Aggressor			-0.09	0.15	0.39	(-0.39, 0.20)
	Positive Urgency $\times$ Target			0.04	0.14	0.08	(-0.24, 0.32)

Note: Standard errors are reported for the final step of the regression.

\*  $p < .05$

**Table 3**

Negative Binomial Regression Analyses Predicting Alcohol-Related Consequences

Step	Variable entered	Step 1 $\beta$	Step 2 $\beta$	Step 3 $\beta$	SE	Wald's $\chi^2$	Wald's 95% CI
1.	Sex	-0.59**	-0.57**	-0.53**	0.20	7.17	(-0.92, -0.14)
	Race	-0.11	-0.22	-0.25	0.18	1.94	(-0.61, 0.10)
	Student drinking	1.03***	0.98***	0.98***	0.11	80.05	(0.77, 1.20)
2.	Relational aggression: Aggressor		0.10	0.03	0.12	0.05	(-0.21, 0.26)
	Relational aggression: Target		0.05	0.06	0.11	0.26	(-0.16, 0.27)
	Negative urgency		0.26*	0.23	0.12	3.54	(-0.01, 0.48)
3.	Positive urgency		0.11	0.18	0.12	2.02	(-0.07, 0.42)
	Negative Urgency $\times$ Aggressor			0.29*	0.13	5.30	(0.04, 0.54)
	Negative Urgency $\times$ Target			-0.12	0.14	0.81	(-0.39, 0.15)
	Positive Urgency $\times$ Aggressor			0.08	0.13	0.36	(-0.17, 0.32)
	Positive Urgency $\times$ Target			-0.35*	0.14	6.58	(-0.62, -0.08)

Note. Standard errors are reported for the final step of the regression.

\*  $p < .05$ ,

\*\*  $p < .01$ ,

\*\*\*  $p < .001$