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## Longitudinal Validation of the Urgency Traits Over the First Year of College

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### Abstract

Research has identified 2 emotion-based dispositions to rash action, referred to as *positive urgency* and *negative urgency*. They are thought to reflect tendencies to engage in rash acts when in extremely positive and extremely negative moods, respectively. In this article, we describe the first direct test of this hypothesis. We measured the urgency traits and risky behavior involvement while in extremely positive and negative moods over the course of the first year of college for 292 students. After controlling for sex, typical mood state, and prior mood-based rash behavior, positive urgency predicted increases in positive mood-based rash action, and negative urgency predicted increases in negative mood-based rash action during the first year of college. These results provide further evidence for the validity of the theory of emotion-based rash action and for the measures of positive and negative urgency.

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One focus of recent research on the personality underpinnings of rash or impulsive behavior has been on two emotion-based dispositions to rash action. *Positive urgency* refers to the tendency to engage in rash, ill-advised actions when experiencing intensely positive emotions; and *negative urgency* refers to the tendency to engage in rash, ill-advised actions when distressed (Cyders & Smith, 2007, 2008b; Whiteside & Lynam, 2001). These two traits are thought to reflect processes by which intense emotional states lead to risky, maladaptive behavior (Cyders & Smith, 2008b). The two traits are thought to be separate facets of an overall emotion-based disposition to rash action (Cyders & Smith, 2007, 2008b). Numerous cross-sectional and longitudinal studies have indicated their importance in predicting problematic involvement in risky behaviors such as alcohol use, drug use, unprotected sex, and binge eating. The results of these studies have consistently shown that the urgency traits predict problematic involvement in a variety of risky behaviors better than do other traits related to impulsive acts such as sensation seeking, lack of planning, and lack of perseverance in both our laboratory (cf. Cyders, Flory, Rainer, & Smith, 2009; Cyders & Smith, 2007, 2008a; Cyders et al., 2007; Fischer, Anderson, & Smith, 2004; Fischer & Smith, 2008; Fischer, Smith, & Anderson, 2003; Fischer, Smith, Annus, & Hendricks, 2007; Fischer, Smith, & Cyders, 2008; Settles, Cyders, & Smith, in press; Smith et al., 2007; Zapolski, Cyders, & Smith, 2009) and other laboratories (cf. Anestis, Shelby, Fink, & Joiner, 2007; Anestis, Shelby, & Joiner, 2007;

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Billieux, Van der Linden, & Ceschi, 2007; Billieux, Van der Linden, D'Acremont, Ceschi, & Zermatten, 2007; Breen & Zuckerman, 1999; Claes, Vandereycken, & Vertommen, 2005; Gay, Rochat, Billieux, D'Acremont, & Van der Linden, 2008; Miller, Flory, Lynam, & Leukefeld, 2003; Whiteside & Lynam, 2001, 2003; Whiteside, Lynam, Miller, & Reynolds, 2005). However, no prospective study has yet tested the validity of the basic distinction between positive and negative urgency: that positive urgency predicts rash action when in a positive mood and negative urgency predicts rash action when in a negative mood. The aim of this investigation was to provide the first longitudinal test of this question.

It is important to test whether there is differential prediction as a function of reported mood state for positive and negative urgency for both theoretical and applied reasons. First, as facets of an overall disposition, the two traits are related to each other: correlations between them ranged from .37 to .62 in prior studies (Cyders & Smith, 2008a; Cyders et al., 2007). Is it necessary to distinguish between them? Are the personality processes underlying impulsive behavior better understood if one posits two, separate, emotion-based dispositions? Second, the two traits may lead to different interventions by clinicians. There is an extensive body of literature on how to reduce rash, impulsive action in response to distress (e.g., Linehan, 1993). Often, such interventions include strategies to attenuate the intensity of the negative mood. If some individuals engage in rash, impulsive acts when experiencing very positive emotions, interventions will likely be different: Clinicians are unlikely to advocate for attenuation of positive affective states. Similarly, prevention strategies may be implicated. Is there a need to develop prevention strategies specific to positive moods and times of celebration? For these reasons, we tested whether the two traits differentially predicted positive mood-based and negative mood-based rash action. To introduce this empirical test, we briefly review urgency theory and the predictive roles of positive and negative urgency.

## Emotion-Based Rash Action and Positive and Negative Urgency

Although emotions are fundamentally adaptive in that they signal a need to be fulfilled (Frijda, 1986; Lang, 1993; Saami, Mumme, & Campos, 1998), intense emotions do appear to increase the likelihood of risky behavior involvement for at least two reasons (Cyders & Smith, 2008b). First, the experience of intense emotions can lead one to focus on the immediate circumstance or immediate precipitant of the emotion, sometimes to the neglect of other considerations such as one's long-term interests (Davidson, 2003). A focus on one's current anger at one's boss or a focus on one's sexual attraction to a coworker can, in the absence of a co-occurring focus on one's long term interests and goals, increase the likelihood of ill-advised acts. Intense emotions tend to interfere with rational, advantageous decision making (Bechara, 2004, 2005; Dolan, 2007; Driesbach, 2006; Shiv, Loewenstein, & Bechara, 2005).

Second and relatedly, emotional experience can interfere with one's self-regulatory processes (Muraven & Baumeister, 2000; Tice, Bratslavsky, & Baumeister, 2001). Emotions require efforts to regulate them, either through behaviors designed to meet the precipitating need or through behaviors designed to change the emotional experience. These efforts may require significant enough levels of cognitive resources to compromise the ability to maintain focus on other priorities such as long-term goals or self-control (Muraven & Baumeister, 2000; Tice et al., 2001).

Indeed, intense emotional states can lead to higher rates of rash action and hence risky behavior. Negative emotions, such as anxiety and stress, relate to increased drinking (Swendson et al., 2000), substance abuse (Colder & Chassin, 1997; Cooper, 1994; Cooper, Agocha, & Sheldon, 2000; Martin & Sher, 1994; Peveler & Fairburn, 1990), and increased binge eating and purging behaviors (Agras & Telch, 1998; Jeppson, Richards, Hardman, & Granley, 2003; Smyth et al., 2007). Positive emotions relate to risky behavior involvement as well. College students are

more likely to drink on days of celebration than during the academic week; that drinking is associated with negative outcomes such as unwanted sexual intercourse, increased physical violence, and alcohol-related injuries and deaths (Del Boca, Darkes, Greenbaum, & Goldman, 2004; Kornefel, 2002). Some individuals drink to enhance an existing positive mood and do so in problematic ways (Cooper et al., 2000). Positive mood is a temptation to resume gambling among pathological gamblers (Holub, Hodgins, & Peden, 2005), and positive mood generally increases risk taking (Yuen & Lee, 2003).

Positive and negative urgency are understood to be personality traits that reflect individual differences in this tendency to respond in rash, ill-advised ways to the experience of intense emotions (Cyders & Smith, 2008b). Recent longitudinal work has produced findings consistent with the urgency theory prediction that the two traits predict different forms of risky behavior.<sup>1</sup> For example, negative urgency appears important for bulimic behaviors (Anestis, Selby, & Joiner, 2007; Cyders et al., 2007; Fischer et al., 2008), but positive urgency does not: Binge eating behavior by bulimic women tends to follow intensely negative, but not intensely positive, mood states (Smyth et al., 2007). Positive urgency predicts increases in risky sexual practices, but negative urgency does not (Zapolski, Cyders, et al., 2009): Sexual behavior is more likely to follow positive mood states than negative mood states (Mitchell, DiBartolo, Brown, & Barlow, 1998). Of particular importance for this study, cross-sectional research has shown that positive and negative urgency uniquely relate to self-reported risky behaviors undertaken while in a positive or negative emotional state, respectively (Cyders & Smith, 2007).

## This Study

This study provides the first prospective test of whether positive and negative urgency differentially predict positive mood-based and negative mood-based rash action, respectively. Previous research with the urgency traits has utilized mainly cross-sectional data, and we have chosen to utilize longitudinal data to examine prospective role of these traits in the development of rash behaviors. Our intent was not to show that the two traits predict different behaviors as has been shown previously. Rather, we sought to provide one test of the more basic question of whether the two, putatively different traits really do predict differently as a function of emotional state. In our view, this latter question is more fundamental: If positive urgency is not the preferred predictor of rash action when experiencing positive affect and if negative urgency is not the preferred predictor of rash action when experiencing negative affect, the claimed distinction between the traits may not be necessary.

To test this question, we predicted the same criterion variable with the two traits: whether one did something one normally would not do, and did something one later regretted, when experiencing intense emotions. Participants were first year college students reporting on their involvement in risky behavior during the transitional first year of college. They responded to this criterion twice: once referring to times when they had experienced intensely positive emotions and once referring to times when they had experienced intensely negative emotions. We hypothesized that positive urgency, measured at the start of college, would predict increased positive, mood-based, rash behavior involvement at the end of the first year of college, after controlling for the following: sex, the tendency to experience positive moods, and positive, mood-based, rash behavior at the start of college. Negative urgency would not predict this criterion. Similarly, we hypothesized that negative urgency, measured at the start

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<sup>1</sup>Some of the past longitudinal work has used this sample. Studies with this sample have demonstrated that different impulsivity-related constructs (positive urgency, negative urgency, sensation seeking, lack of planning, and lack of perseverance) predict different types of risky behaviors (Cyders & Smith, 2008b; Cyders et al., 2009; Zapolski, Cyders et al., 2009). Each of those studies assessed behavior in general (alcohol consumption, gambling, drug use, risky sex); none assessed involvement in those behaviors when experiencing intense emotion. None used the criterion measure used in this study.

of college, would predict increased negative, mood-based, rash behavior involvement at the end of the first year of college, after controlling for the following: sex, the tendency to experience negative moods, and negative, mood-based, rash behavior at the start of college. Positive urgency would not predict this criterion.

## Methods

### Participants

Participants were 292 first-year students at a large Midwestern university. Of the sample, 75% was female. Age ranged from 18 to 21 ( $M = 18.2$ , median = 18.0;  $SD = 0.76$ ); 88% of the sample was White, 8% African American, 2% Asian American, 1% Hispanic American, and 2% other. A total of 418 students began the study, 292 (70%) completed the second wave at the end of the first year of college. As noted previously, this sample has been used in prior studies and is further described in those publications.

### Measures

**The Mood Based Questionnaire (MBQ; Cyders & Smith, 2007)**—The MBQ is designed to measure an individual's self-reported participation in risky behaviors during both a positive and a negative mood state. Evidence for the overall reliability and validity of the MBQ is provided in Cyders and Smith (2007). Individuals are first asked to report on their experiences of being in intensely positive moods, including how many times in a typical month they experience an extremely good mood (rated on a 5-point scale ranging from 1 [*never experiencing the good mood, experiencing a slight good mood*] to 5 [*experiencing the good mood almost all the time, experiencing an extremely good mood*]). They then report, by checklist, their involvement in a series of behaviors when experiencing a very good mood. Subsequent to that, they report their experiences of being in an unusually bad mood, including how many times in a typical month they experience an extremely bad mood. They then report, using the same checklist, their involvement in a series of behaviors when experiencing a very bad mood. To measure having engaged in rash, regrettable behavior, we summed two items: “did something you normally wouldn't do” and “did something you later regretted.” Thus, participants responded to the two items once with respect to being in a very good mood and once with respect to being in a very bad mood. They completed the MBQ at the start of the first year of college and again at the end of the first year. The two items in this index (each dichotomous) correlated with each other (for positive mood,  $r$  was .38 at Time 1 and .45 at Time 2; for negative mood,  $r$  was .48 at Time 1 and .54 at Time 2;  $p < .001$  in each case).

**Positive urgency (PUR)**—PUR was measured using the Positive Urgency Measure (Cyders et al., 2007). The measure is a 14-item scale and uses a 4-point, Likert-type scale ranging from 1 (*agree strongly*) to 4 (*disagree strongly*). Items include “When I get really happy about something, I tend to do things that can have bad consequences”; “I tend to act without thinking when I am really excited”; and “Others would say I make bad choices when I am extremely happy about something.” This scale has been shown to be unidimensional and internally consistent in past and current research ( $\alpha = 0.94$  in developmental sample,  $\alpha = 0.96$  for both administrations in this sample). Scores are convergent across assessment method, there is good discriminant validity in comparison to measures of other impulsivity-like constructs, and the scale correlates with external variables as predicted by theory (Cyders & Smith, 2007, 2008a, 2008b; Cyders et al., 2007).

**Negative urgency (NUR)**—NUR was measured using the NUR subscale of the revised version of the UPPS–R Impulsive Behavior Scale (Whiteside & Lynam, 2001). NUR is a 12-item subscale and uses a 4-point Likert-type scale ranging from 1 (*agree strongly*) to 4 (*disagree strongly*). Coefficient alphas were .85 on both measurement occasions, which is consistent

with past research. Sample items for the scales are as follows: “When I feel bad, I will often do things I later regret in order to make myself feel better now”; “When I am upset I often act without thinking”; and “I often make matters worse because I act without thinking when I am upset.” There is an extensive body of evidence supporting the validity of the scale. As is true with positive urgency, the scale has repeatedly emerged as unidimensional, scores converge across assessment methods, there is good discriminant validity in comparison to measures of other impulsivity-like constructs, and the scale correlates with external variables as predicted by theory (Anestis, Selby, Fink, et al., 2007; Anestis, Selby, & Joiner, 2007; Billieux, Van der Linden, & Ceschi, 2007; Billieux, Van der Linden, D'Acremont, et al., 2007; Cyders & Smith, 2007, 2008b; Cyders et al., 2007; Fischer & Smith, 2008; Fischer et al., 2004, 2003, 2007; Miller et al., 2003; Smith et al., 2007; Whiteside & Lynam, 2001, 2003; Whiteside et al., 2005).

## Procedure

**Participant recruitment**—We recruited participants through an online research participation Web site that advertised a longitudinal study for first year college students. Participants were sampled at the beginning of the fall semester (Time 1) and at the end of the spring semester (Time 2). All participants were enrolled in an introduction to psychology course at their first contact. On arrival for the in-person assessment, participants completed demographic information and the previously mentioned scales as part of a larger self-report questionnaire assessment. We assessed all participants using a group format. For their participation in the first session, participants received course credit for an introduction to psychology course. For their participation in the second session, participants were paid \$10.

## Data Analysis

We used ordinal multiple regression to predict changes in the rash action criterion across the first year of college. In all analyses, we controlled for sex. When predicting positive emotion-based rash action, we also controlled for how frequently individuals experienced very positive affect; and when predicting negative, emotion-based, rash action, we controlled for how frequently individuals experienced very negative affect. In our view, there is a distinction between the tendency to experience positive affect, for example, and the tendency to engage in rash acts when one does (Cyders & Smith, 2008b). We controlled for frequency of positive and negative affective experience to test whether our theoretical distinction between frequency of emotional experience and rash action while experiencing extreme emotions is warranted. In each analysis, we also controlled for the Time 1 tendency to engage in positive (or negative), emotion-based, rash action.

Scores on the two emotion-based, rash action indexes varied from 0 to 2 in which a score of 1 meant endorsement of one of the two items and a score of 2 meant endorsement of both. We thus saw the three possible scores as reflecting an ordinal increase in the index.<sup>2</sup> We present frequency data for the scales following.

## Results

### Participant Attrition

Individuals who participated in both waves did not differ from those who participated in only the first wave on any demographic, trait, or outcome variable. Thus, attrition did not appear to result in significant bias to the results we report. Therefore, we did not impute missing data using expectation maximization or another procedure. Monte Carlo studies do suggest that

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<sup>2</sup>We also dichotomized the emotion-based, rash action scale to reflect either endorsement of neither item or endorsement of one or more items, and we then reran each regression analysis using binary logistic regression. The results of those analyses were entirely consistent with what we report here: Each predictor that was significant using ordinal regression was significant using binary logistic regression.

imputed data provide more accurate estimates of population parameters, even with substantial missing data (Enders, 2006), but we did not impute because the bulk of our missing data was a function of attrition. Results were unchanged when calculated using imputed data.<sup>3</sup>

### Descriptive Statistics on Typical Emotional Experience and Emotion-Based Rash Action

At Time 1, the mean score for frequency of experiencing extremely good moods (3.42,  $SD = 1.06$ ) indicated that the average participant reported being in an extremely good mood between 3 and 4 times per month and more than once per week. The mean score for frequency of experiencing extremely bad moods at Time 1 (2.44,  $SD = .87$ ) indicated that the average participant reported being in an extremely bad mood between 1 and 2 times per month and 3 and 4 times per month. At Time 2, the reports were quite similar: For extremely good moods, the  $M = 3.35$  ( $SD = 1.0$ ); for extremely bad moods, the  $M = 2.42$  ( $SD = .86$ ). There was no difference in any of these reports by sex (Cohen's  $d = .04$  for both positive mood and negative mood).

At both Time 1 and Time 2, men reported higher rates of having engaged in positive, emotion-based, rash action. At Time 1, the male  $M = .62$  ( $SD = .77$ ) and the female  $M = .39$  ( $SD = .62$ );  $t(288) = -3.04$ ,  $p < .01$  (Cohen's  $d = .65$ ). At Time 2, the male  $M = .69$  ( $SD = .78$ ) and the female  $M = .45$  ( $SD = .66$ );  $t(288) = -2.46$ ,  $p < .01$  (Cohen's  $d = .55$ ). There was no sex difference in the Time 1 reports of having engaged in negative, emotion-based, rash action; the overall  $M = .56$  ( $SD = .77$ ). At Time 2, men had higher scores on this measure: male  $M = .71$  ( $SD = .80$ ), female  $M = .45$  ( $SD = .73$ );  $t(288) = -2.21$ ,  $p < .05$  (Cohen's  $d = .39$ ).

Table 1 provides the correlations between positive and negative urgency at Time 1 and both indexes of having engaged in emotion-based rash action. As the table shows, positive and negative urgency are highly correlated, as anticipated by their placement as facets of an overall urgency disposition. On the bivariate level, each of the two trait indexes correlates significantly with reports of having engaged in both types of emotion-based rash action. Indeed, there is no meaningful differentiation in the two traits' bivariate associations with the criterion measures.

**Prediction of Time 2 positive, mood-based, rash action**—Table 2 summarizes the ordinal multiple regression results of the prospective prediction of engaging in rash acts when experiencing intensely positive emotions. As the table shows, neither sex nor frequency of experiencing positive moods predicted significantly. Time 1 engagement in positive, mood-based, rash action predicted the same variable at Time 2 strongly. As hypothesized, positive urgency added significant new predictive power, and negative urgency did not.

**Prediction of Time 2 negative, mood-based, rash action**—As Table 3 shows, the prospective prediction of negative, mood-based, rash action was also consistent with our hypothesis. Frequency of experiencing intensely bad moods was unrelated to the criterion. Time 1 negative, mood-based, rash action was highly predictive of the same variable at Time 2. Again as hypothesized, negative urgency added significant predictive power, and positive urgency did not.

## Discussion

In the last several years, it has become clear that there are several different personality traits that play roles in rash or impulsive action: Researchers have distinguished between dispositions to act rashly (a) when experiencing intense emotions; (b) due to a failure to plan ahead; (c) due

<sup>3</sup>Prediction results using the fully imputed sample were the same: Positive urgency prospectively predicted Time 2 positive, mood-based, rash action, and negative urgency did not; negative urgency prospectively predicted Time 2 negative, mood-based, rash action, and positive urgency did not.

to an inability to maintain focus on tasks; and (d) out of a need to seek novel, thrilling stimulation (Smith et al., 2007; Whiteside & Lynam, 2001). The emotion-based dispositions appear to be particularly important in the prediction of problematic involvement in several risky behaviors including problem gambling, problem drinking, binge eating, illegal drug use, and risky sexual behavior (Cyders & Smith, 2008b).

Researchers have drawn a distinction between two such dispositions: Positive urgency refers to the tendency to act rashly when experiencing intensely positive emotion, and negative urgency refers to the tendency to act rashly when experiencing intensely negative emotion (Cyders et al., 2007; Cyders & Smith, 2008b). Measures of the two traits can be distinguished in multitrait, multimethod research, but the two traits are substantially correlated and considered facets of an overall urgency disposition (Cyders & Smith, 2007).

Prior to this investigation, no prospective study has investigated the validity of the hypothesis that the two traits have the different roles assigned to them by urgency theory, that is, that positive urgency is particularly predictive of positive, mood-based, rash action and negative urgency is particularly predictive of negative, mood-based, rash action. In this article, we have reported on the first test of this claim.

We examined self-reported rash acts across the transitional first year of college, and the urgency theory hypotheses were supported. Positive urgency added significant prospective prediction power to explain involvement in rash acts when experiencing intensely positive emotions at the end of the first year of college, after controlling such involvement at the start of college, typical frequency of experiencing intensely positive emotions, and sex. Negative urgency did not. Also, negative urgency predicted involvement in negative, mood-based, rash action 8 months later, after controlling for the same behavior at the start of college, typical frequency of intensely negative emotional states, and sex. Positive urgency did not. It should be noted that the magnitude of the predictive relationships from positive and negative urgency was relatively small; these findings should be replicated.

Although the effects were of small magnitude, this study was an important first step in examining the longitudinal and developmental role of the urgency traits across the first year of college. Should these findings prove stable in future replications, they would support the view that there is validity in distinguishing between the two facets of overall urgency. Together with findings that negative urgency predicts clinical behaviors thought to be undertaken while in negative moods, such as binge eating, and positive urgency predicts clinical behaviors thought to be undertaken while in positive moods, such as risky sex (Anestis, Selby & Joiner, 2007; Zapolski, Cyders, et al., 2009), this finding speaks to the merits of precise measurement of specific personality processes to best understand the personality contribution to the risk process.

With respect to application, this body of research could suggest that it may be useful to develop prevention and intervention techniques specific to the type of urgency that is increasing an individual's risk. Currently existing strategies to address negative, emotion-based, rash action emphasize strategies designed to reduce the intensity of the affective experience (Linehan, 1993). This strategy is likely to be less well-received with respect to positive, emotion-based, rash action: Clients are unlikely to accept the value of diminishing their intense positive affect. Instead, strategies designed to develop safer ways to enjoy one's positive affect and to develop reminder cues that help individuals maintain awareness of their long-term interests and goals when very happy, and behave accordingly, may need to be developed (Zapolski, Fried, Cyders, & Smith, 2009). However, although this study supports the discriminant validity of the urgency traits and the underlying theory of differential prediction, the significance of these effects for

clinical assessment may require further study and perhaps further development of the urgency measures.

More broadly, the body of research with positive and negative urgency supports the merit in differentiating among related but separable personality traits and in testing precise, theory-driven hypotheses on the distinctions between such traits (McGrath, 2005). Distinguishing among related traits is important for theory development and clinical prediction. Even traits on the same broad dimension of personality (e.g., depression and impulsiveness on the dimension of neuroticism: Costa & McCrae, 1992) have been shown to have different correlates of clinical importance. For example, Lynam and Widiger (2007) showed that high scores on certain facets of neuroticism are related to psychopathy, but high scores on other facets are not. There are at least five different traits related to impulsive action (two are positive and negative urgency); distinguishing among them has clarified theory and improved prediction (Cyders & Smith, 2008b; Smith et al., 2007; Whiteside & Lynam, 2001).

There are of course limitations to this study, which need to be noted. First, there was semantic overlap in the item content between the predictor and criterion measures in this study, which could lead to shared method variance and inflation of the true relationship between the urgency traits and risky behavior outcomes. Second, we measured positive, mood-based, rash action prior to negative, mood-based, rash action for all participants. Because we did not counterbalance, we cannot know whether order effects influenced the results. There is a need for additional investigations, using different methods and different measures, to strengthen confidence in the validity of these findings. Third, the representativeness of the sample is limited by the use of a group of predominantly female, White, U.S. college students, which could limit the ability to generalize this information to other groups. It is important to investigate the degree to which similar processes operate for members of different groups.

The core finding from this study was that the theoretical distinction between positive urgency and negative urgency was supported; measures of the two traits predicted subsequent mood-based, rash action as hypothesized. The theoretical conceptualization of two emotion-based dispositions toward rash action, together with the development of measures to test individual differences in those dispositions, is likely to prove worthwhile to researchers studying aspects of the risk process. These advances increase researchers' capacity to study affect-driven risky behaviors and to differentiate between the roles of positive and negative affect in the risk process.

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**Table 1**

Correlations among study scales.

	PUR	NUR	TIPRA	TINRA	T2PRA	T2NRA
PUR	.62*					
NUR		.27*		.24*	.30*	.32*
TIPRA			.29*	.32*	.32*	.37*
TINRA				.40*	.29*	.45*
T2PRA					.44*	.31*
T2NRA						.51*

*Note.* PUR = positive urgency; NUR = negative urgency; TIPRA = rash action undertaken while in a positive mood, Time 1; TINRA = rash action undertaken while in a negative mood, Time 1; T2PRA = rash action undertaken while in a positive mood, Time 2; T2NRA = rash action undertaken while in a negative mood, Time 2. Correlations are Spearman's rho correlations for ordinal variables, except for the correlation between PUR and NUR, which is a Pearson product-moment correlation.

\*  $p < .01$ .

**Table 2**

Multiple regression of engaging in rash acts when experiencing intensely positive emotions at Time 2.

Variable	Wald	Total $R^2$
Sex	.73	
Time 1 rash action	34.61**	
FREQ	.35	
PUR	3.61*	
NUR	1.77	
		.29**

*Note.* FREQ = reported frequency of intense positive emotions at Time 1; PUR = positive urgency; NUR = negative urgency. Time 1 rash action = endorsed frequency of doing something one later regretted and something one normally wouldn't do at Time 1. The Wald statistic is the square of the estimate of the regression coefficient to the square of the estimate of its standard error. It is distributed as chi-square with 1 *df*. The total  $R^2$  is the Nagelkerke estimate based on an overall  $\chi^2$  of 71.28,  $p < .001$ .

\*  $p < .05$ .

\*\*  $p < .001$ .

**Table 3**

Ordinal regression of engaging in rash acts when experiencing intensely negative emotions at Time 2.

Variable	Wald	Total $R^2$
Sex	2.45	
Time 1 rash action	35.62**	
FREQ	2.22	
PUR	2.38	
NUR	2.82*	
		.30**

*Note.* FREQ = reported frequency of intense negative emotions at Time 1; PUR = positive urgency; NUR = negative urgency. Time 1 rash action = endorsed frequency of doing something one later regretted and something one normally wouldn't do at time 1; The Wald statistic is the square of the estimate of the regression coefficient to the square of the estimate of its standard error. It is distributed as chi-square with 1 *df*. The total  $R^2$  is the Nagelkerke estimate based on an overall  $\chi^2$  of 82.46,  $p < .001$ .

\*  $p < .05$ .

\*\*  $p < .001$ .