

NEGATIVE URGENCY AND INTERPERSONAL CONFLICT: THE MEDIATING ROLE OF
DEPRESSIVE SYMPTOMS

A Thesis

Presented to the Faculty of the Graduate School
of Cornell University

In Partial Fulfillment of the Requirements for the Degree of
Master of Arts

by

Sabrina Elyse Porcelli

August 2019

© 2019 Sabrina Elyse Porcelli

ABSTRACT

The present study explored the relationships between negative urgency, interpersonal conflict, and depressive symptoms. While associations of negative urgency with psychopathology are well-established, the relationship between negative urgency and other aspects of functioning, such as conflict with parents and peers, are less certain. Since distressing emotions are what ignite action in individuals high in negative urgency, depressive symptoms may play a key role in the relationship between negative urgency and conflict. Youth ($N=293$; $M_{age}=11.70$ years) reported on their level of negative urgency, conflict with peers and parents, and depressive symptoms. Results of multiple regression models suggested that individuals who reported higher levels of negative urgency also reported more conflict with peers, mothers, and fathers. Depressive symptoms significantly mediated this association for each type of conflict. These findings support the importance of negative urgency in understanding interpersonal conflict in youth.

BIOGRAPHICAL SKETCH

Sabrina Elyse Porcelli is a graduate student in the department of Human Development at Cornell University. Her research interests revolve around understanding emotion regulation during adolescence and its role in the varying developmental trajectories of individuals. She received her Bachelor of Arts in psychology from The George Washington University in 2018.

To my parents, without whom I would not be where or who I am.

ACKNOWLEDGMENTS

I would like to thank Drs. Jane Mendle, Felix Thoemmes, and Anthony Ong for serving as advisors on my committee. I would also like to thank Mary Kate Koch for her work on data collection for and her guidance on the present research, as well as the Bronfenbrenner Center for Translational Research and the Program for Research on Youth Development and Engagement for providing resources and funding necessary for the success of this project.

TABLE OF CONTENTS

LIST OF TABLES.....	viii
Negative Urgency and Interpersonal Conflict: The Mediating Role of Depressive Symptoms	1
Negative Urgency and Psychopathology	2
Externalizing.....	2
Internalizing.....	5
Other related constructs.....	6
Negative Urgency and Non-clinical Behaviors	8
Developmental Perspective	13
Present Study	14
Method	16
Participants	16
Measures.....	17
Negative Urgency	17
Depressive Symptoms.....	17
Peer Conflict.....	17
Parent Conflict.....	18
Additional Covariates.....	18
Data Analysis Plan.....	18
Missing Data.....	19
Results.....	19
Preliminary Analyses.....	20
Do individuals who are high in negative urgency report greater interpersonal conflict?.....	20
Do depressive symptoms mediate the relationship between negative urgency and interpersonal conflict?.....	21
Discussion	23
References	27

LIST OF TABLES

Table 1. Descriptive statistics..... 37

Table 2. Intercorrelation matrix..... 38

Table 3. Bootstrapped multiple regression of conflict on negative urgency..... 39

Table 4. Bootstrapped multiple regressions of conflict on depressive symptoms and depressive symptoms on negative urgency 40

Table 5. Bootstrapped multiple regression of conflict on negative urgency and depressive symptoms 41

Negative Urgency and Interpersonal Conflict: The Mediating Role of Depressive Symptoms

Historically, impulsivity has been defined in a multitude of ways. Measures of impulsivity in psychological research have ranged from capturing aspects of extraversion to psychoticism (Eysenck & Eysenck, 1977). In an attempt to consolidate the existing research on impulsivity and create a more cohesive measure of this trait, Whiteside and Lynam (2001) conducted a study examining how existing impulsivity measures mapped onto the five-factor-model of personality, focusing specifically on neuroticism, extraversion, and conscientiousness. Whiteside and Lynam (2001) discovered a four-factor structure of existing measures of impulsivity. The factors included urgency, (lack of) premeditation, (lack of) perseverance, and sensation seeking. The resulting measure of these factors was termed the UPPS Impulsive Behavior Scale (Whiteside & Lynam, 2003). The facets identified by Whiteside and Lynam (2001) are related to each other, but each construct measures a distinct aspect of impulsivity and is related to different behavioral outcomes.

As urgency was the only aspect of the UPPS model that captured emotion-based impulsivity, and was also the most understudied aspect at the time the model was created, subsequent research sought to understand this construct better. Specifically, work by Cyders (2005) and Cyders and Smith (2007) identified the existence of both negative and positive mood-based impulsivity. Cyders (2005) highlighted that, when in a positive mood, one may engage in impulsive behaviors that have negative consequences, and posited that this facet is best considered as a part of the urgency construct proposed in the UPPS model. Thus, urgency is now conceptualized as a construct with two facets: one positive, and one negative. While positive urgency refers to the tendency to act rashly in response to positive emotions, negative urgency is

that tendency in response to negative emotions (Whiteside & Lynam, 2001; Cyders & Smith, 2007).

When individuals high in negative urgency experience negative emotions, they struggle to consider the long-term consequences of their actions. These individuals fail to consider the impact of their behavior as they focus on alleviating their negative emotions. As a result, negatively urgent individuals' actions may not only be ill-advised but also harmful to themselves and others.

Negative Urgency and Psychopathology

Research on Whiteside and Lynam's (2001) facets of impulsivity – (negative) urgency, (lack of) premeditation, (lack of) perseverance, and sensation seeking (UPPS) – along with Cyders' (2005) and Cyders & Smith's (2007, 2008) positive urgency has demonstrated that negative urgency is the component of impulsivity most robustly related to psychopathology. Negative urgency has been associated with both internalizing and externalizing symptoms, covering a range of psychological disorders.

Externalizing

The most abundant research on negative urgency focuses on its relationship with substance use. Multiple studies have found an association between negative urgency and drinking to cope (Anestis, Selby, & Joiner, 2007; Cyders & Smith, 2007). Despite the presumed association between sensation seeking and alcohol use, when all UPPS items were considered, only urgency significantly explained variance in alcohol abuse symptoms (Fisher & Smith, 2008).

Among college students, negative urgency is a significant predictor of weekly alcohol consumption (Kaiser, Milich, Lynam, & Charnigo, 2012) as well as illegal drug use and problem

drinking (Settles et al., 2012). Negative urgency also mediates the relationship between anxiety and substance use problems, including both problem drinking and problem cannabis use (Wolitzky-Taylor et al., 2016). Important for understanding the development of substance use problems, adolescents high in negative urgency tend to associate greater positive thoughts and images with substance use and, in turn, are more likely to decide to use substances themselves (Stautz & Cooper, 2015). Negative urgency prospectively predicts substance use from elementary to high school (Riley, Rukavina, & Smith, 2015), from early to late middle school (Guller & Smith, 2014), and over a one-year period in college (Doran et al., 2013; Kaiser, Bonsu, Charnigo, Milich, & Lynam, 2016).

In addition to the associations found in samples from the general population, negative urgency has been related to substance use among substance-dependent individuals. Compared to depressed, subclinical, and control women, those who were considered alcohol-dependent had significantly higher negative urgency (Settles et al., 2012). In studies of substance use disorder patients, patients with comorbid post-traumatic stress disorder (PTSD) tended to engage in a greater number of impulsive behaviors and scored higher on negative urgency than patients without PTSD (Weiss, Tull, Viana, Anestis, & Gratz, 2012, Weiss, Tull, Anestis, & Gratz, 2013). Further, negative urgency was able to differentiate alcohol abusers with a high degree of antisocial personality disorder (APD) symptoms, alcohol abusers low in APD symptoms, and controls, with alcohol abusers who reported high levels of APD symptoms exhibiting the highest levels of negative urgency (Whiteside & Lynam, 2003). Smith and Cyders (2016) conducted a review of substance use and negative urgency, which suggested that this aspect of trait-impulsivity is an important predictor of problematic alcohol consumption, and is the best

impulsivity-related predictor of problematic consumption. Overall, there is a clear and consistent relationship between impulsive reactions to negative emotions and substance use.

Another form of psychopathology that has been consistently related to negative urgency is disordered eating. Disordered eating, especially binge eating, is considered an impulsive act. This conceptualization has inspired many researchers to explore the link between negative urgency and eating behaviors since the establishment of this trait. Among college students, out of all facets of the UPPS impulsivity items, only urgency was significant in predicting variation in bulimic symptoms (Fischer & Smith, 2008). Similar to relationships established between negative urgency and drinking to cope, among women high in negative urgency, the expectation that eating would reduce negative affect was strongly related to binge eating (Fischer & Smith, 2008). Eating problems, such as restricting caloric intake and dissatisfaction with one's weight, have also been significantly related to urgency (Miller, Flory, Lynam, & Leukfeld, 2003).

Additionally, in a sample of undergraduates, the combination of high negative urgency and low distress tolerance was the strongest predictor of bulimic symptoms (Anestis, Selby, Fink, & Joiner, 2007). In two meta-analyses of negative urgency, the trait was found to have significant effects on symptoms of bulimia nervosa (Berg, Latzman, Bliwise, & Lilienfeld, 2015; Fischer, Smith, & Cyders, 2008). This work has been extended to youth between the ages of 8 and 13, such that higher negative urgency was related to greater emotional eating behavior (Munsch et al., 2017). Furthermore, in a review of risk for bulimia nervosa, Pearson, Riley, Davis, and Smith (2014) proposed two pathways to binge eating and purging, one of which posits that girls who are higher in the personality trait negative urgency are at higher risk for bulimic symptoms. Their review highlighted relationships between negative urgency and binge eating in girls from elementary school through college (Pearson et al., 2014).

Internalizing

While externalizing behaviors may have a more obvious link with negative urgency, a variety of internalizing problems have also been related to this type of trait-impulsivity. In a meta-analysis by Berg et al. (2015), researchers found significant effect sizes for the relationship between negative urgency and anxiety. Johnson, Carver, and Joormann's (2013) study explored relationships between a broad construct capturing poor control over emotional responses and a variety of psychopathological symptoms. Negative urgency significantly loaded on two higher-order factors: pervasive influence of feelings (the tendency for an individual's emotions to influence his or her worldview) and feelings trigger action (impulsive responses to emotions), and both constructs significantly predicted anxiety symptoms in their study of undergraduate students (Johnson et al., 2013). Negative urgency has been significantly related to multiple measures of intrusive thoughts, a key feature in many anxiety disorders, and was the best predictor of scores on these measures (Gay, Schmidt, & Van der Linden, 2011).

In a study focused specifically on obsessive compulsive disorder (OCD) and negative urgency, Cogle, Timpano, and Goetz (2012) found that greater negative urgency was significantly related to obsessions, and that the combination of low distress tolerance and high negative urgency predicted the greatest amount of obsessions. Obsessions can be considered a specific type of intrusive thoughts, and intrusive thoughts more broadly are an impulsive response to one's experiences. The association between such thoughts and negative urgency suggests that impulsive responses to negative emotions extend beyond overt behaviors to internal processes. Taken together, these studies indicate a significant relationship between responding impulsively to the experience of negative emotions and symptoms of anxiety.

Among young adults, negative urgency is significantly correlated with depressive symptoms, and higher levels of negative urgency predict a greater amount of depressive symptoms (Miller et al., 2003). Further, in a study of cognitive distortions commonly associated with depressive symptoms, negative urgency was significantly associated with cognitive distortions related to thought processing, such as all-or-none thinking and jumping to conclusions (Gagnon, Daelman, McDuff, & Kocka, 2013). This group of cognitive distortions, termed premature processing, may inhibit cognitive capabilities in a way that makes impulsive action more likely, especially among those high in negative urgency (Gagnon et al., 2013). d'Acremont and Van der Linden (2007) extended the exploration of negative urgency and depression to a sample of youth ages 13 to 16 and 15 to 19 years old. Not only was negative urgency related to the use of more maladaptive and less adaptive emotion regulation strategies, but it was also the strongest impulsivity-related predictor of depression (d'Acremont & Van der Linden, 2007). In an even younger sample, Smith, Guller, and Zapolski (2013) explored the ability of negative urgency to prospectively predict depressive symptoms. They found that urgency scores in fifth grade significantly predicted higher levels of depression at the end of sixth grade, even after controlling for fifth grade depression and early pubertal onset, among other covariates (Smith et al., 2013). Thus, there is a significant connection between a prolonged experience of distress (depression) and negative mood-based impulsivity (negative urgency).

Other related constructs

Borderline personality disorder (BPD) was one of the first disorders hypothesized to have a connection with negative urgency (Cyders & Smith, 2008). Since existing measures of BPD include impulsivity, it is not surprising that empirical work has supported this prediction. Despite the connection between broad impulsivity and BPD, a study exploring the facets described by

Whiteside and Lynam (2001; urgency, [lack of] premeditation, [lack of] perseverance, and sensation seeking) found that the strongest predictor of BPD symptoms was negative urgency (Miller et al., 2003). In an early validation of the UPPS model, Whiteside, Lynam, Miller, & Reynolds (2005) tested the ability of the UPPS scale to differentiate between alcoholics, BPD patients, and gamblers. Urgency emerged as the strongest unique predictor of BPD symptoms and no other UPPS facets were significant predictors (Whiteside et al., 2005).

In the study by Johnson et al. (2013) study, both higher order constructs – pervasive influence of feelings (the tendency for an individual’s emotions to influence his or her worldview) and feelings trigger action (impulsive responses to emotions) – significantly predicted BPD. Gagnon, Daelman, and McDuff (2013) connected dysfunctional beliefs related to BPD with negative urgency. After controlling for numerous covariates as well as general BPD symptoms, dysfunctional beliefs were the only significant predictor of negative urgency and explained an additional 7.1% of the variance in this trait (Gagnon, Daelman, & McDuff, 2013). This could be driven mainly by the component of dysfunctional beliefs concerning pre-emptive attempts to protect oneself from pain inflicted by others.

Negative urgency has also been related to suicidality. In the Johnson et al. (2013) study, pervasive influence of feelings, which negative urgency was a component of, significantly predicted suicidality. Auerbach, Stewart, & Johnson (2017) applied the model described by Johnson et al. (2013) to a sample of adolescents; however, in this study, negative urgency only loaded on the feelings trigger action item. Feelings trigger action was significantly related to suicide attempts but not plans or ideation, and was the only significant predictor of greater odds of attempting suicide in the prior month among girls (Auerbach et al., 2017). The distinct association of negative urgency items with suicide attempts rather than plans is indicative of this

trait's association with impulsive *action*. Lockwood, Daley, Townsend, & Saya (2017) conducted a review of impulsivity and non-suicidal self-injury (NSSI), noting that mood-based impulsivity was related to lifetime NSSI and, more specifically, to initiating self-harm. NSSI and negative urgency have also been related to depressive symptoms and distress tolerance, such that higher levels of depression and negative urgency are significant predictors of NSSI among those low in distress tolerance (Peterson, Davis-Becker, & Fischer, 2014).

Negative Urgency and Non-clinical Behaviors

While exploring links between negative urgency and various forms of psychopathology is an important endeavor, one of the key features of negative urgency is its conceptualization as a trait. This means that it exists in all people to varying degrees. The manifestation of this type of trait-impulsivity takes on many forms, some clinical and some not. For example, gambling behaviors, which exist at both clinical and non-clinical levels, have been consistently related to negative urgency. Canale, Vieno, Griffiths, Rubaltelli, & Santinello (2015) explored gambling behaviors, negative urgency, and decision-making in adolescents and young adults. High levels of negative urgency were related to greater problem gambling behaviors, and this relationship was mediated by lower levels of deliberative decision-making (Canale et al., 2015). This demonstrates the theoretical assumption that acting impulsively in response to negative emotions is facilitated by reduced consideration of the long-term consequences of a decision.

In a study of college students, only urgency was a significant predictor of pathological gambling when considering other facets of the UPPS scale (Fisher & Smith, 2008). This finding is consistent with an original validation study of the UPPS scale, in which urgency was the most consistent predictor of pathological gambling (Whiteside et al., 2005). Pathological gamblers have also been found to have higher levels of negative urgency than controls (Whiteside et al.,

2005). In a meta-analysis of the personality of pathological gamblers, MacLaren, Fugelsang, Harrigan, & Dixon (2011) found significant effects of negative urgency on gambling behaviors and that pathological gamblers exhibited higher levels of negative urgency than non-pathological gamblers. This collection of studies suggests that negative urgency is predictive of both subclinical behaviors and clinical problems, and may be especially useful in differentiating between the two.

Similar results have been found for compulsive buying and negative urgency. In a community sample, negative urgency was significantly related to compulsive buying even after controlling for psychological distress (Alemis & Yap, 2013). Out of all UPPS measures of impulsivity, only negative urgency significantly predicted compulsive buying in one study (Billieux, Rochat, Rebetez, & Van der Linden, 2008). Negative urgency has also been established as a mediator of the relationship between the ability to make advantageous choices on the Iowa Gambling Task and buying behaviors, such that lower ability to make decisions under risk is related to higher levels of negative urgency and, in turn, to greater buying behavior (Billieux, Gay, Rochat, & Van der Linden, 2010). This again highlights the association between negative urgency and worse decision-making skills.

A review study of personality correlates of compulsive buying found a positive relationship between the propensity to engage in impulsive behaviors in response to distressing experiences and compulsive buying (Claes & Müller, 2017). Further, in a sample of adults, both facets of urgency (positive and negative) were significant predictors of compulsive buying (Rose & Segrist, 2014). One study focused specifically on differences between compulsive buyers who exhibit hoarding behaviors, such as acquisition and difficulties discarding items, and found that hoarding compulsive buyers scored significantly higher on negative urgency than non-hoarding

compulsive buyers (Vogt, Hunger, Pietrowsky, & Gerlach, 2015). This is indicative of negative urgency as a link between multiple maladaptive behaviors and as a risk factor for various negative outcomes, rather than any single behavior or disorder.

Another impulsive behavior related to negative urgency is risky sexual behavior. Deckman and DeWall (2011) examined undergraduate students' engagement in risky sex – defined as one-night stands, sex with a stranger or prostitute, and sex in exchange for money, among other behaviors. Negative urgency was a significant predictor of lifetime engagement in risky sexual behavior, and the only other UPPS item that significantly predicted such behavior was sensation seeking (Deckman & DeWall, 2011). In another sample of college students, only negative urgency significantly predicted risky sex out of the UPPS items (Settles et al., 2012). This study conceptualized risky sex in a different way, including behaviors such as anal sex and sex without birth control or a condom (Settles et al., 2012). These types of risky sexual behaviors may be more common than the behaviors described by Deckman and DeWall (2011), suggesting the association between negative urgency and risky behaviors that are more normative as well as those that are more unconventional or atypical.

Peers appear to play a key role in the association between negative urgency and behavior. For example, in a study exploring urgency in relationships, peer relationships evoked greater negative urgency than mother-child relationships (Quick & Lakey, 2017). Additionally, higher negative urgency in peer relationships was related to internalizing symptoms and drinking to cope (Quick & Lakey, 2017). Negative urgency is also predictive of greater difficulty resisting peer influence (Stautz & Cooper, 2014) and greater reassurance seeking in relationships, a behavior characteristic of interpersonal relationships of individuals suffering from depression (Anestis, Selby, & Joiner, 2007). Furthermore, perceived peer approval was identified as a

mediator between negative urgency and likelihood of substance use such that individuals who exhibited a greater tendency to react rashly when experiencing negative emotions also tended to believe their peers approve of substance use more and, because of this perceived approval, these high urgency individuals were more likely to report that they would use substances themselves (Stautz & Cooper, 2015).

Aggression is robustly associated with negative urgency. One meta-analysis found that the effect sizes for the relationship between negative urgency and aggression were significantly greater than those for any other UPPS trait (Berg et al., 2015). This finding was also demonstrated in two studies of college students (Miller et al., 2003; Settles et al., 2012) and a study of youth between the ages of 7 and 13 (Zapolski, Stairs, Settles, Combs, & Smith, 2010) such that, out of the UPPS facets, only negative urgency significantly predicted aggressive behavior. Miller, Zeichner, & Wilson (2012) examined impulsivity in relation to three forms of aggression: reactive, proactive, and relational. Negative urgency had significant positive correlations with each type of aggression, and was able to significantly predict both reactive and relational aggression (Miller et al., 2012). Johnson et al. (2013) explored anger, hostility, physical aggression, and verbal aggression in relation to two constructs that both contain items from negative urgency: pervasive influence of feelings and feelings trigger action. Pervasive influence of feelings significantly predicted all aggression-related items, while feelings trigger action was able to predict every aggression construct other than hostility (Johnson et al., 2013).

In a study of general violent behavior and intimate partner violent (IPV) behavior, negative urgency was able to predict IPV behaviors significantly better than general violent behavior (Derefinko, DeWall, Metzger, Walsh, & Lynam, 2011). Similarly, the Settles et al. (2012) study, which found a significant relationship between negative urgency and aggression,

operationalized aggressive behavior as how often one starts fights with others. Negative urgency is also significantly related to indirect hostile attribution bias, which measures an individual's tendency to believe that another's behavior was meant to make him feel badly about himself (Gagnon, McDuff, Daelman, & Fournier, 2015). Indirect hostile attribution bias serves as a mediator between negative urgency and impulsive behaviors such as substance use and risky sexual behavior, suggesting that for those who are likely to react impulsively when upset, perceiving that someone was trying to make them feel badly was enough to elicit rash action (Gagnon et al., 2015). Further, individuals high in negative urgency demonstrated greater displaced aggression such that, following a negative mood induction, they chose to allocate a greater amount of hot sauce for an unknown individual to consume (Scott, DiLillo, Maldonado, & Watkins, 2015). As a whole, these studies extend the work on peer relationships and negative urgency to aggressive behaviors, suggesting the existence of an association between negative urgency and a variety of interpersonal processes.

While none of the current research on negative urgency has connected this trait to interpersonal conflict specifically, studies of peer relationships and aggressive behaviors suggest that such a link may exist. Associations between negative urgency and aggression are not limited to physically aggressive behaviors, but include those with interpersonal components. Relational aggression, hostility, and verbal aggression can all create conflict within interpersonal relationships. Whether an individual is actively initiating arguments with another person – a behavior related to negative urgency in a study by Settles et al. (2012) – or is speaking negatively about an individual to another person – an act of relational aggression – such behavior can lead to real or perceived conflict between friends/peers or even parents and children. Since, as mentioned previously, both peer and parent relationships have been found to evoke negative

urgency (Quick & Lakey, 2017), it would make sense that if an individual high in negative urgency experiences distress in an interpersonal context, their tendency to act rashly could manifest as an argument or behaviors that create conflict within relationships.

Furthermore, it is possible that the plethora of maladaptive behaviors that negatively urgent individuals are likely to engage in could create conflict within interpersonal relationships. For example, if an individual high in negative urgency is also drinking to cope with negative emotions and becomes dependent on substances, such behavior may be frustrating to that individual's family, friends, coworkers, etc. Interpersonal theories of depression have examined a similar pattern such that depressed individuals tend to seek greater reassurance and require more from their close relationships, leading to frustration from their parents, peers, and friends (Coyne, 1976; Coyne, Burchill, & Stiles, 1991). Therefore, it is possible that negative urgency can predict interpersonal conflict through direct means (arguments) or through indirect means (maladaptive behaviors).

Developmental Perspective

Adolescence is a time when youths struggle to make sense of the vast changes they are experiencing and are emotionally vulnerable. Fluctuations in social relationships are common throughout this time as peer relationships become more and more important (reviewed in Conley & Rudolph, 2009), and parent-child relationships become increasingly difficult to navigate while youth search for their own autonomy (reviewed in Hazel, Oppenheimer, Technow, Young, & Hankin, 2014). Youth strive to match their own physical, emotional, and mental changes with their changing social environments. Such immense changes contribute to the proliferation of psychopathology throughout the transition into adolescence (reviewed in Mendle, 2014).

Cyders and Smith (2008) were the first to note that this developmental period could include increases in the trait negative urgency. It is well-documented that youth engage in many risky behaviors and that this engagement declines from adolescence to adulthood as the prefrontal cortex develops and changes, allowing for greater cognitive control (Steinberg, 2008). Many studies have observed these rash actions in adolescents particularly in response to intense emotions (reviewed in Cyders & Smith, 2008). It makes sense that a form of impulsivity tied to the experience of intense emotions (negative urgency) increases during this time and contributes to youths' involvement in risky behavior. Smith and Cyders' (2016) review of urgency noted that pubertal onset is highly related to negative urgency, such that, negative urgency is more stable prior to pubertal onset, but then increases linearly following pubertal onset. Furthermore, an accelerated longitudinal study found that negative urgency increased from age 11 to age 13 before leveling off (Littlefield, Stevens, Ellingson, King, & Jackson, 2016).

Changes in parent and peer relationships as youth transition from childhood into adolescence may also have important implications for negative urgency. One study found that peers evoked more negative urgency than parents (Quick & Lakey, 2017). While this study focused on college students, the salience of peer relationships increases during early adolescence, which could contribute to increases in negative urgency at this time and lead to ill-advised behavior. Additionally, if an individual is inherently more likely to react rashly to negative emotional experiences, changes in interpersonal relationships during this developmental period may generate distress, and he or she may cope with this distress through impulsive behavior.

Present Study

The present study sought to explore associations among negative urgency, interpersonal conflict, and depressive symptoms in youth. Specifically, two questions were addressed. First, do

individuals who are high in negative urgency report greater interpersonal conflict? Interpersonal conflict is a normative occurrence, meaning almost all people experience interpersonal conflict regardless of whether they are experiencing symptoms of psychopathology or not. While negative urgency has been related to many forms of psychopathology, it has been linked with fewer types of everyday behavior. Establishing negative urgency as an influence on not only psychopathology but also more normative behaviors is important for understanding the multifinality of this trait.

In this study, greater interpersonal conflict was assessed in terms of conflict with: (1) peers; (2) mothers; and (3) fathers. Interpersonal conflict can occur in all relationships, and demonstrating a link in all domains would confirm the pervasiveness of negative urgency in everyday life. However, if negative urgency is only related to interpersonal conflict in one domain, such as with mothers but not peers or fathers, this may provide important insight into how negatively urgent individuals cope with negative emotions, or which relationships may be the most distressing.

The second question addressed by this study was if depressive symptoms mediate the relationship between negative urgency and interpersonal conflict? Prior research has demonstrated a link between negative urgency and depressive symptoms. However, no existing studies have explored how depressive symptoms may create conditions that bring out negative urgency. Negative urgency requires the occurrence of negative emotions to lead to impulsive behaviors, and, as a trait, negative urgency is more stable and exists prior to a negative mood state. Thus, the occurrence of depressive symptoms may elicit this trait and, through this emotional experience, individuals may engage in impulsive behaviors in an attempt to alleviate their depressive symptoms. While everyday emotional experiences are presumably enough to

activate negative urgency, it is possible that a prolonged state of distress (depressive symptoms) is another way for negative urgency to result in impulsive behavior.

As discussed previously, youth in late childhood and early adolescence undergo numerous changes externally and internally that put them at risk for the development of psychopathology. Negative urgency also increases during this time, and changing circumstances and relationships may spark conflict between emotionally impulsive youth and their parents and peers. Investigating these variables at both an early and risky age is useful for understanding variation in developmental trajectories of individuals. This combination of factors makes youth an especially important age period to explore the associations among negative urgency, interpersonal conflict, and depressive symptoms.

Method

Participants

The sample comprised 293 youth between the ages of 8 and 15 years old ($M=11.70$, $SD=1.05$) recruited through youth summer programs and a local middle school from 2015 to 2018. Participants self-identified mainly as European American (82.11%), with the remainder identifying as Hispanic/Latino (2.81%), African American (2.46%), American Indian/Native American (3.16%), East Asian/Pacific Islander (1.05%), Southeast Asian (2.46%) and biracial or another race (5.96%). The majority of the sample (78.08%) identified as female, with the remainder of the sample (21.92%) identifying as male. The study was approved by the Institutional Review Board at Cornell University (Protocol # 1207003173). Parents or legal guardians provided informed consent prior to youth participation in the study, and all youth provided assent at the time of the study.

Measures

Negative Urgency

The Negative Urgency subscale of the UPPS-P Impulsive Behavior Scale for Children (Zapolski et al., 2010), adapted from Whiteside and Lynam's (2001) UPPS Impulsive Behavior Scale, is an 8-item self-report measure of youth's tendency to act rashly when experiencing negative emotions. For example, "When I'm upset I often act without thinking," and "When I feel rejected, I often say things I later regret" are two items in the subscale. Items are rated on a Likert scale ranging from 1 ("not at all like me") to 4 ("very much like me"). Resulting scores are averaged with higher scores indicating greater negative urgency. Cronbach's α in the current sample was .88.

Depressive Symptoms

Depressive symptoms were assessed using the Center for Epidemiological Studies Depression Scale Child version (CES-DC; Weissman, Orvaschel, & Padian, 1980). The CES-DC includes 20 self-report items measuring depressive symptoms in children. Respondents indicate their agreement to the statements using a 4-point Likert scale ranging from 0 ("not at all") to 3 ("a lot"). Sample items include, "I felt down and unhappy," and "I was bothered by things that don't usually bother me," and respondents are asked to consider their feelings over the past week. Higher scores indicate more depressive symptoms, with a score of 15 indicating significant depressive symptoms. Cronbach's α in the current sample was .91.

Peer Conflict

Peer conflict was assessed using the Index of Peer Relations (Forte & Green, 1994), a 25-item self-report measure of the degree to which youth have problems with their peers. Sample items include, "I really feel like kids my age dislike me," and "It is harder for me to make new

friends.” Youth respond using a 7-point Likert scale ranging from “None of the time” (1) to “All of the time” (7). Cronbach’s α in the current sample was .95.

Parent Conflict

Conflict with parents was assessed using the Parental Conflict Scale (Lucas-Thompson, 2009), which was adapted from the Conflict subscale of the Braiker-Kelly Partnership Questionnaire (Braiker & Kelly, 1979). The scale is a 5-item self-report measure of conflict in parent-child relationships. Youths completed the scale twice – once regarding conflict with one’s mother and once regarding conflict with one’s father. Items are rated using a Likert scale ranging from 1 (“Not at all”) to 9 (“Very much”). Sample items include, “How often do you and your mother argue with one another?” and “To what extent do you communicate negative feelings toward your father (e.g., anger, dissatisfaction, frustration, etc.)?” Cronbach’s α in the current sample was .80 for mother conflict items and .81 for father conflict items.

Additional Covariates

Age, sex, race, parent education, and pubertal status were all included as covariates in the analyses, to account for age trends in interpersonal conflict (Laursen, Coy, & Collins, 1998) and/or depressive symptoms (Kessler, Foster, Webster, & House, 1992); sex differences in depression that emerge during adolescence (Hankin & Abramson, 2001; Hankin et al., 1998); potential racial and socioeconomic discrepancies; and the possible impact of pubertal status on mood, emotionality, and interpersonal interactions (Conley & Rudolph, 2009; Mendle, Harden, Brooks-Gunn, & Graber, 2010).

Data Analysis Plan

To examine the relationships among negative urgency, interpersonal conflict, and depressive symptoms, a series of bootstrapped multiple regression models were analyzed using

Mplus version 7.4 (Muthén & Muthén, 1998-2017). The first set of analyses explored the relationship between negative urgency and each type of interpersonal conflict. All covariates (age, sex, race, parent education, and pubertal status) along with negative urgency were included as predictors of each type of conflict (peer, mother, and father) individually. These models establish the direct effects of negative urgency on the three types of interpersonal conflict.

To test whether depressive symptoms mediated associations of negative urgency with interpersonal conflict, several additional analyses were conducted. First, negative urgency was considered as a predictor of depressive symptoms. Second, models estimated the effect of depressive symptoms on each type of conflict individually. All covariates were included in both analyses. Finally, depressive symptoms were added to the direct effects models described above as an additional predictor for each type of conflict. Percentage mediated was then calculated for the indirect effect of negative urgency on each type of conflict through depressive symptoms using the direct and indirect effects models. Bootstrapped estimates of the indirect effects for each type of conflict were also obtained. Recommendations by Preacher and Hayes (2008) were followed, which indicate that an indirect effect is considered significant if the resulting confidence intervals (CIs) do not include 0.

Missing Data

Missingness on key variables ranged from N=10 (3.41%) for peer conflict to N= 39 (13.31%) for father conflict. Missing data was addressed in *Mplus* using full information maximum likelihood (FIML) estimation with bias-corrected bootstraps.

Results

Preliminary Analyses

Table 1 presents the descriptive statistics of the variables of interest in this study. The mean level of depressive symptoms in the sample was 15.61 ($SD = 11.59$), which is considered above the clinical cutoff in children and adolescents. Self-reported peer conflict showed the most variability of the conflict variables in this sample, with a standard deviation of 17.06.

Table 2 presents Pearson correlation coefficients for the main variables. The correlation between mother conflict and father conflict was the highest (0.66), which may be due to consistencies in parenting. Peer conflict was also significantly correlated with both mother conflict (0.37) and father conflict (0.25), suggesting that greater conflict in one relationship is related to greater conflict in other relationships. All types of conflict correlated significantly with negative urgency, with father conflict showing the lowest correlation (0.16) and mother conflict (0.31) and peer conflict (0.30) about equally correlated with negative urgency. Higher levels of depressive symptoms were related to greater conflict with peers (0.53) mothers (0.29) and fathers (0.18). The high correlation between peer conflict and depressive symptoms may be indicative of the increased salience of peers during this developmental period. As expected based on prior research, negative urgency and depressive symptoms were significantly positively correlated (0.41).

Do individuals who are high in negative urgency report greater interpersonal conflict?

The first regression model examined the relationship between negative urgency and self-reported conflict with peers. As presented in Table 3, negative urgency significantly predicted youths' self-reported peer conflict ($b = 6.15$, 95% CI [3.09, 9.17]), with youth who reported more negative urgency also reporting greater difficulty getting along with peers. Of the

covariates, age also significantly predicted peer conflict ($b = 2.04$, 95% CI [0.11, 4.22]), suggesting that older participants reported greater conflict with peers.

Second, a regression model predicting conflict with mothers was analyzed. Negative urgency significantly predicted youth's self-reported conflict with their mothers ($b = 2.86$, 95% CI [1.39, 4.43]). Of the covariates, only pubertal status emerged as a significant predictor ($b = 0.47$, 95% CI [0.08, 0.83]), with more physically mature girls reporting greater conflict with their mothers.

The third regression model predicted father conflict from the same covariates as well as negative urgency. Negative urgency was not a significant predictor of youth's self-reported conflict with their fathers ($b = 1.30$, 95% CI [-0.16, 2.79]), nor did any of the covariates significantly predict father conflict. Though the causal steps approach (Baron & Kenny, 1986) posits that the effect of the independent variable (negative urgency) on the dependent variable (father conflict) without the potential mediator (depressive symptoms) needs to be significant, this approach has been scrutinized due to its limited ability to detect indirect effects in comparison to other methods (reviewed in Hayes, 2009). It is still possible that part of the effect of negative urgency on conflict with fathers operates through depressive symptoms, so potential mediation effects were explored.

Do depressive symptoms mediate the relationship between negative urgency and interpersonal conflict?

To understand and calculate the full indirect effects, several additional models of direct effects were analyzed, as shown in Table 4. First, negative urgency was considered as a predictor of depressive symptoms, with youth higher in negative urgency also reporting higher levels of depressive symptoms ($b = 5.63$, 95% CI [3.61, 7.83]). Second, depressive symptoms were

considered as predictors of each type of interpersonal conflict individually. Depressive symptoms significantly predicted peer conflict ($b = 0.74$, 95% CI [0.57, 0.88]), mother conflict ($b = 0.17$, 95% CI [0.08, 0.26]), and father conflict ($b = 0.12$, 95% CI [0.03, 0.20]). Pubertal status was the only significant covariate in any model; youth with more advanced physical development also reported more conflict with mothers ($b = 0.44$, 95% CI [0.07, 0.79]).

In the full models, depressive symptoms were added to the direct effects models as a predictor of each type of conflict (see Table 5). Depressive symptoms significantly predicted peer conflict ($b = 0.68$, 95% CI [0.53, 0.85]); with depressive symptoms in the model, negative urgency was no longer a significant predictor ($b = 2.19$, 95% CI [-1.09, 5.29]), suggesting a mediation effect. The estimate of the indirect effect of negative urgency on peer conflict through depressive symptoms was significant ($b = 4.17$, 95% CI [2.63, 6.07]), accounting for 67.74% of the direct effect (see Table 5).

In the model predicting mother conflict, depressive symptoms did emerge as a significant predictor ($b = 0.43$, 95% CI [0.05, 0.77]). However, this model differed from the model of peer conflict in that pubertal status ($b = 2.15$, 95% CI [0.60, 3.66]) and negative urgency ($b = 0.13$, 95% CI [0.04, 0.22]) remained significant predictors of conflict with mothers even when depressive symptoms were included. Despite this, the indirect effect of negative urgency on mother conflict through depressive symptoms was significant ($b = 0.77$, 95% CI [0.22, 1.49]), accounting for 33.47% of the direct effect.

Lastly, depressive symptoms significantly predicted conflict with fathers ($b = 0.10$, 95% CI [0.02, 0.19]), with negative urgency not reaching significance once depressive symptoms were included in the model ($b = 0.70$, 95% CI [-0.77, 2.28]). The estimated indirect effect of

negative urgency on father conflict through depressive symptoms was significant ($b = 0.62$, 95% CI [0.10, 1.24]), accounting for 51.97% of the direct effect.

Discussion

Individuals who tend to respond impulsively to the experience of negative emotions are more likely to report conflict in their close relationships. Negative urgency significantly predicted youth's self-reported conflict with peers and mothers. The association of negative urgency with conflict in all three interpersonal relationships demonstrates the pervasiveness of this trait across contexts. Negative urgency, therefore, is not context-dependent, but represents a more global disposition that influences action in many different situations. The lack of a significant association between negative urgency and father conflict may be due to the higher amount of missing responses on this variable than peer conflict and mother conflict. Exploring this relationship in a sample where father conflict has a similar sample size to peer conflict and mother conflict would be useful in understanding whether this relationship truly does not exist or is simply an artifact of the present sample.

The way in which negative urgency is related to self-reported conflict is unclear. That relationship may be a result of those high in negative urgency arguing with their peers and parents because of negative emotions caused by parents and peers, or because of negative emotions experienced outside of those relationships. Future studies could explore the way in which the relationship between negative urgency and interpersonal conflict unfolds through observed interactions between individuals high in negative urgency and their parents and peers.

This study also establishes one mechanism through which negative urgency influences behavior. Depressive symptoms served as a significant mediator of the association between negative urgency and interpersonal conflict with peers, mothers, and fathers. Thus, the

experience of a distressing state (depressive symptoms) elicits a trait (negative urgency) and results in increased conflict. Since these results are from a cross-sectional study, it is unclear which of these variables occurs first or exactly how the associations among them unfold.

Observing interactions among peers or parents and children would help elucidate how negative urgency influences interpersonal conflict through the experience of negative emotions.

Longitudinal explorations of these variables through self-report measures could also aid in understanding the nature of these associations.

One possible explanation for the relationship between negative urgency, depressive symptoms, and interpersonal conflict is that negatively urgent individuals who experience depressive symptoms initiate more arguments with their friends and family than individuals who are low in negative urgency. Coyne's (1976) interpersonal theory of depression provides another possible explanation. Individuals who experience depressive symptoms tend to have worse relationships, which Coyne (1976) and Coyne and colleagues (1991) explain as a result of depressed individuals' tendency to seek reassurance and excessive support from their friends and family. Thus, it is possible that, rather than initiating arguments, individuals who are high in negative urgency and experience depressive symptoms seek greater reassurance from their peers and parents, which is difficult for these peers and parents to deal with and creates conflict. Alternatively, those high in negative urgency who experience depressive symptoms may also engage in behaviors that those they are close to do not approve of, such as substance use or NSSI, which can cause tension and conflict within those relationships.

While depressive symptoms significantly mediated the association between negative urgency and interpersonal conflict in all three types of relationships, symptoms mediated the largest proportion of this association with peer conflict. This could be indicative of the increased

salience of peer relationships in early adolescence. Youth spend greater portions of their time with their peers, creating more time for conflict to occur. This association could also be due to the stability and security of parent-child relationships. Youth may feel more comfortable and less distressed with their parents because parents have a greater obligation to their children than peers do to each other. While this may not be true of every parent-child relationship, it is generally the case that parents remain in their child's life for a greater amount of time than peers. The instability of peer relationships in general and especially during the transition into adolescence may influence the amount of perceived conflict youth report.

The developmental period of late childhood to early adolescence represents a time in which interpersonal relationships are changing as individuals seek greater autonomy and require less of parents and more of peers. This period is also fraught with emotional vulnerability, as many forms of psychopathology increase during this time (reviewed in Mendle, 2014), setting the stage for future developmental paths (Mendle, Ryan, & McKone, 2018). Youth struggle to make sense of their emotions as these feelings become more complex and prominent (Kranzler et al., 2016). Additionally, at this time, individuals tend to focus less on their future goals and consider the consequences of their actions less, leading to increased participation in various types of risky behavior (Steinberg, 2008). As a result, the association between negative urgency and interpersonal conflict found in this study may be specific to the developmental period of late childhood and early adolescence. While it is unlikely that such a relationship is unique to youth, the association may be stronger in youth groups than in older age groups. Further research on the association between negative urgency and interpersonal conflict in multiple age groups is required to address these possibilities.

While youth's self-reports are a generally reliable and important indicator of their experiences, in the context of relationships, these data provide a purely one-sided view. Perhaps individuals high in negative urgency perceive greater conflict with others due to their discomfort with negative emotions, but those around them do not feel the relationship is quite as contentious. Using reports from parents and close friends would help validate the experience of greater interpersonal conflict in negatively urgent youth's relationships. Exploring the association between negative urgency and conflict through observed interactions between youth and parents or peers would also help provide information about the extent to which conflict is perceived only by the negatively urgent individual or is occurring through arguments within dyads.

The results presented here are limited by the characteristics of the sample, such as the limited number of non-European American and non-female participants. Replications in more diverse samples are required to support the generalizability of these results. The cross-sectional nature of this study prohibits any causal inferences about the associations among the variables. Additionally, while the use of youth self-report provides useful insight into the perception individuals have of their experiences, it limits the ability to understand if the conflict reported by participants is consistent with that of the other party involved (i.e., the participant's mother, peer). Self-report measures also prohibit knowledge of the way in which conflict is initiated. Negatively urgent youth may cause conflict through something they say or do to their peers or parents, or their peers or parents may say or do something that initiates conflict.

Despite these limitations, the current results constitute a preliminary exploration of the associations among negative urgency, depressive symptoms, and interpersonal conflict. Understanding these associations in youth is especially important as experiences during this

developmental period are informative for the remainder of the life span. Exploring how negative urgency relates to interpersonal conflict – a more normative behavior that is also a risk factor for the development of psychopathology – may prove useful in understanding the way in which negative urgency is related to psychopathology over time. The results presented here provide clear support for the existence of a relationship between the tendency to act rashly in response to negative emotions, the experience of depressive symptoms, and interpersonal conflict in youth.

References

- Alemis, C. M., & Yap, K. (2013). The role of negative urgency impulsivity and financial management practices in compulsive buying. *Australian Journal of Psychology, 65*, 224-231. doi:10.1111/ajpy.12025.
- Anestis, M. D., Selby, E. A., Fink, E. L., & Joiner, T. E. (2007). The multifaceted role of distress tolerance in dysregulated eating behaviors. *International Journal of Eating Disorders, 40*, 718-726. doi:10.1002/eat.20471.
- Anestis, M. D., Selby, E. A., & Joiner, T. E. (2007). The role of urgency in maladaptive behaviors. *Behaviour Research and Therapy, 45*, 3018-3029. doi:10.1016/j.brat.2007.08.012.
- Auerbach, R. P., Stewart, J. G., & Johnson, S. L. (2017). Impulsivity and suicidality in adolescent inpatients. *Journal of Abnormal Child Psychology, 45*, 81-103. doi:10.1007/s10802-016-0146-8.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182. doi:10.1037/0022-3514.51.6.1173.

- Berg, J. M., Latzman, R. D., Bliwise, N. G., & Lilienfeld, S. O. (2015). Parsing the heterogeneity of impulsivity: A meta-analytic review of the behavioral implications of the UPPS for psychopathology. *Psychological Assessment, 27*, 1129-1146. doi:10.1037/pas0000111.
- Billieux, J., Rochat, M., Rebetez, M. M. L., & Van der Linden, M. (2008). Are all facets of impulsivity related to self-reported compulsive buying behavior? *Personality and Individual Differences, 44*, 1432-1442. doi:10.1016/j.paid.2007.12.011.
- Billieux, J., Gay, P., Rochat, L., & Van der Linden, M. (2010). The role of urgency and its underlying psychological mechanisms in problematic behaviours. *Behaviour Research and Therapy, 48*, 1085-1096. doi:10.1016/j.brat.2010.07.008.
- Braiker, H., & Kelley, H. (1979). Conflict in the development of close relationships. In R. Burgess & T. Huston (Eds.), *Social Exchange and Developing Relationships* (p. 135-168). San Diego, CA: Academic Press.
- Canale, N., Vieno, A., Griffiths, M. D., Rubaltelli, E., & Santinello, M. (2015). Trait urgency and gambling problems in young people by age: The mediating role of decision-making processes. *Addictive Behaviors, 46*, 39-44. doi:10.1016/j.addbeh.2015.02.020.
- Claes, L., & Müller, A. (2017). Resisting temptation: Is compulsive buying an expression of personality deficits? *Current Addiction Reports, 4*, 237-245. doi:10.1007/s40429-017-0152-0.
- Conley, C. S., & Rudolph, K. D. (2009). The emerging sex difference in adolescent depression: Interacting contributions of puberty and peer stress. *Developmental Psychopathology, 21*, 593-620. doi:10.1017/S0954579409000327.

- Cougle, J. R., Timpano, K. R., & Goetz, A. R. (2012). Exploring the unique and interactive roles of distress tolerance and negative urgency in obsessions. *Personality and Individual Differences, 52*, 515-520. doi:10.1016/j.paid.2011.11.017
- Coyne, J. C. (1976). Toward an interactional description of depression. *Psychiatry, 39*, 28-40.
- Coyne, J. C., Burchill, S. A. L., & Stiles, W. B. (1991). An interactional perspective on depression. In C. R. Snyder & D. O. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective*. New York: Pergamon.
- Cyders, M. A. (2005). *The development and validation of a measure of positive urgency*. (Unpublished master's thesis). University of Kentucky, Lexington, Kentucky.
- Cyders, M. A., & Smith, G. T. (2007). Mood-based rash action and its components: Positive and negative urgency. *Personality and Individual Differences, 43*, 839-850. doi:10.1016/j.paid.2007.02.008.
- Cyders, M. A., & Smith, G. T. (2008). Emotion-based disposition to rash action: Positive and negative urgency. *Psychological Bulletin, 134*, 807-828. doi:10.1037/a0013341.
- d'Acremont, M., & Van der Linden, M. (2007). How is impulsivity related to depression in adolescence? Evidence from a French validation of the cognitive emotion regulation questionnaire. *Journal of Adolescence, 30*, 271-282. doi:10.1016/j.adolescence.2006.02.007.
- Deckman, T., & DeWall, C. N. (2011). Negative urgency and risky sexual behaviors: A clarification of the relationship between impulsivity and risky sexual behavior. *Personality and Individual Differences, 51*, 674-678. doi:10.1016/j.paid.2011.06.004.

- Derefinko, K., DeWall, N., Metze, A. V., Walsh, E. C., & Lynam, D. R. (2011). Do different facets of impulsivity predict different types of aggression? *Aggressive Behavior, 37*, 223-233. doi:10.1002/ab.20387.
- Doran, N., Khoddam, R., Sanders, P. E., Schweizer, C. A., Trim, R. S., & Myers, M. G. (2013). A prospective study of the acquired preparedness model: The effects of impulsivity and expectancies on smoking initiation in college students. *Psychology of Addictive Behaviors, 27*, 714-722. doi:10.1037.a0028988.
- Eysenck, S. B. G., & Eysenck, H. J. (1977). The place of impulsiveness in a dimensional system of personality description. *British Journal of Social and Clinical Psychology*
- Fischer, S., & Smith, G. T. (2008). Binge eating, problem drinking, and pathological gambling: Linking behavior to shared traits and social learning. *Personality and Individual Differences, 44*, 789-800. doi:10.1016/j.paid.2007.10.008.
- Fischer, S., Smith, G. T., & Cyders, M. A. (2008). Another look at impulsivity: A meta-analytic review comparing specific dispositions to rash action in their relationship to bulimic symptoms. *Clinical Psychology Review, 28*, 1413-1425. doi:10.1016/j.cpr.2008.09.001.
- Forte, J. A., & Green, R. G. (1994). The reliability and validity of the Index of Peer Relations with a clinical and nonclinical sample of adolescents. *Journal of Social Service Research, 19*, 49-65. doi: 10.1300/J079v19n01_03.
- Gagnon, J., Daelman, S., & McDuff, P. (2013). Correlations of impulsivity with dysfunctional beliefs associated with borderline personality. *North American Journal of Psychology, 15*, 165-178.

- Gagnon, J., Daelman, S., McDuff, P., & Kocka, A. (2013). UPPS dimensions of impulsivity: Relationships with cognitive distortions and childhood maltreatment. *Journal of Individual Differences, 34*, 48-55. doi:10.1027/1614-0001/a000099.
- Gagnon, J., McDuff, P., Daelman, S., & Fournier, S. (2015). Is hostile attribution bias associated with negative urgency and impulsive behaviors? A social-cognitive conceptualization of impulsivity. *Personality and Individual Differences, 72*, 18-23. doi:10.1016/j.paid.2014.08.011.
- Gay, P., Schmidt, R. E., & Van der Linden, M. (2011). Impulsivity and intrusive thoughts: Related manifestations of self-control difficulties? *Cognitive Therapy and Research, 35*, 293-303. doi:10.1007/s10608-010-9317-z.
- Guller, L., & Smith, G. T. (2014). Integrating externalizing and internalizing pathways to problem drinking across adolescence. Paper presented at the 37th annual Research Society on Alcoholism.
- Hankin, B. L., & Abramson, L. Y. (2001). Development of gender differences in depression: An elaborated cognitive vulnerability-transactional stress theory. *Psychological Bulletin, 127*, 773-796. doi:10.1037/0033-2909.127.6.773.
- Hankin, B. L., Abramson, L. Y., Moffitt, T. E., Silva, P. A., McGee, R., & Angell, K. E. (1998). Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology, 107*, 128-140. doi:10.1037/0021-843X.107.1.128.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs, 76*, 408-420. doi:10.1080/03637750903310360.

- Hazel, N., Oppenheimer, C., Technow, J., Young, J., & Hankin, B. (2014). Parent relationship quality buffers against the effect of peer stressors on depressive symptoms from middle childhood to adolescence. *Developmental Psychology, 50*, 2115-2123. doi:10.1037/a0037192.
- Johnson, S. L., Carver, C. S., & Joormann, J. (2013). Impulsive responses to emotion as a transdiagnostic vulnerability to internalizing and externalizing symptoms. *Journal of Affective Disorders, 150*, 872-878. doi:10.1016/j.jad.2013.05.004.
- Kaiser, A., Bonsu, J. A., Charnigo, R. J., Milich, R., & Lynam, D. R. (2016). Impulsive personality and alcohol use: Bidirectional relations over one year. *Journal of Studies on Alcohol and Drugs, 77*, 473-482. doi:10.15288/jsad.2016.77.473.
- Kaiser, A. J., Milich, R., Lynam, D. R., & Charnigo, R. J. (2012). Negative urgency, distress tolerance, and substance abuse among college students. *Addictive Behaviors, 37*, 1075-1083. doi:10.1016/j.addbeh.2012.04.017.
- Kessler, R. C., Foster, C., Webster, P. S., & House, J. S. (1992). The relationship between age and depressive symptoms in two national surveys. *Psychology and Aging, 7*, 119-126. doi:10.1037/0882-7974.7.1.119.
- Kranzler, A., Young, J. F., Hankin, B. L., Abela, J. R. Z., Elias, M. J., & Selby, E. A. (2016). Emotional awareness: A transdiagnostic predictor of depression and anxiety for children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 45*, 262-269. doi:10.1080/15374416.2014.987379.
- Laursen, B., Coy, K. C., & Collins, W. A. (1998). Reconsidering changes in parent-child conflict across adolescence: A meta-analysis. *Child development, 69*, 817-832.

- Littlefield, A. K., Stevens, A. K., Ellingson, J. M., King, K. M., & Jackson, K. M. (2016). Changes in negative urgency, positive urgency, and sensation seeking across adolescence. *Personality and Individual Differences, 90*, 332-337. doi:10.1016/j.paid.2015.11.024.
- Lockwood, J., Daley, D., Townsend, E., & Saya, K. (2017). Impulsivity and self-harm in adolescence: A systematic review. *European Child and Adolescent Psychiatry, 26*, 387-402. doi:10.1007/s00787-016-0915-5.
- Lucas-Thompson, R. (2009). *Interparental conflict and adolescent physiological functioning, health, and adjustment*. (Unpublished dissertation). University of California, Irvine, California.
- MacLaren, V. V., Fugelsang, J. A., Harrigan, K. A., & Dixon, M. J. (2011). The personality of pathological gamblers: A meta-analysis. *Clinical Psychology Review, 31*, 1057-1067. doi:10.1016.j.cpr.2011.02.002.
- Mendle, J. (2014). Beyond pubertal timing: New directions for studying individual differences in development. *Current Directions in Psychological Science, 23*, 215-219. doi:10.1177/0963721414530144.
- Mendle, J., Harden, K. P., Brooks-Gunn, J., & Graber, J. A. (2010). Development's tortoise and hare: Pubertal timing, pubertal tempo, and depressive symptoms in boys and girls. *Developmental Psychology, 46*, 1341-1353. doi:10.1037/a0020205.
- Mendle, J., Ryan, R. M., & McKone, K. M. P. (2018). Age at menarche, depression and antisocial behavior in adulthood. *Pediatrics, 141*. doi:10.1542/peds.2017-1703.

- Miller, J., Flory, K., Lynam, D., & Leukfeld, C. (2003). A test of the four-factor model of impulsivity-related traits. *Personality and Individual Differences, 34*, 1403-1418. doi:10.1016/S0191-8869(02)00122-8.
- Miller, J. D., Zeichner, A., & Wilson, L. F. (2012). Personality correlates of aggression: Evidence from measures of the Five-Factor Model, UPPS Model of Impulsivity, and BIS/BAS. *Journal of Interpersonal Violence, 27*, 2903-2919. doi:10.1177/0886260512438279.
- Munsch, S., Dremmel, D., Kurz, S., De Albuquerque, J., Meyer, A. H., & Hilbert, A. (2017). Influence of parental expressed emotions on children's emotional eating via children's negative urgency. *European Eating Disorders Review, 25*, 36-43. doi:10.1002/erv.2489.
- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus User's Guide*. Eighth Edition. Los Angeles, CA: Muthén & Muthén.
- Pearson, C. M., Riley, E. N., Davis, H. A., & Smith, G. T. (2014). Research review: Two pathways toward impulsive action: An integrative risk model for bulimic behavior in youth. *Journal of Child Psychology and Psychiatry, 55*, 852-864. doi:10.1111/jcpp.12214
- Peterson, C. M., Davis-Becker, K., & Fischer, S. (2014). Interactive role of depression, distress tolerance, and negative urgency on non-suicidal self-injury. *Personality and Mental Health, 8*, 151-160. doi:10.1002/pmh.1256.
- Quick, E., & Lakey, B. (2017). Social relations in sensation seeking and urgency: An SRM approach. *Personality and Individual Differences, 111*, 37-45. doi:10.1016/j.paid.2017.01.044
- Riley, E. R., Rukavina, M., & Smith, G. T. (2015). The reciprocal predictive relationship between personality and risky behaviors: An 8-wave longitudinal study in early

adolescents. Paper presented at the annual meeting of the Research Society on Alcoholism.

Rose, P., & Segrist, J. (2014). Negative and positive urgency may both be risk factors for compulsive buying. *Journal of Behavioral Addictions, 3*, 128-132.

doi:10.1556/JBA.3.2014.011.

Scott, J. P., DiLillo, D., Maldonado, C. R., & Watkins, L. E. (2015). Negative urgency and emotion regulation strategy use: Associations with displaced aggression. *Aggressive Behavior, 41*, 502-512. doi:10.1002/ab.21588.

Settles, R. E., Fischer, S., Cyders, M. A., Combs, J. L., Gunn, R. L., & Smith, G. T. (2012). *Journal of Abnormal Psychology, 121*, 160-172. doi:10.1037/a0024948.

Smith, G. T., Guller, L., & Zapolski, T. C. B. (2013). A comparison of two models of urgency: Urgency predicts both rash action and depression in youth. *Clinical Psychological Science, 1*, 266-275. doi:10.1177/2167702612470647.

Smith, G. T., & Cyders, M. A. (2016). Integrating affect and impulsivity: The role of positive and negative urgency in substance use risk. *Drug and Alcohol Dependence, 163*, S3-S12. doi:10.1016/j.drugalcdep.2015.08.038.

Stautz, K., & Cooper, A. (2014). Brief report: Personality correlates of susceptibility to peer influence in adolescence. *Journal of Adolescence, 37*, 401-405. doi:10.1016/j.adolescence.2014.03.006.

Stautz, K., & Cooper, A. (2015). Trait urgency and substance use decision making in adolescents and young adults: The role of socio-affective factors. *Personality and Individual Differences, 81*, 174-179. doi:10.1016/j.paid.2014.07.010.

- Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. *Developmental Review, 28*, 78-106. doi:10.1016/j.dr.2007.08.002.
- Vogt, S., Hunger, A., Pietrowsky, R., & Gerlach, A., L. (2015). Impulsivity in consumers with high compulsive buying propensity. *Journal of Obsessive-Compulsive and Related Disorders, 7*, 54-64. doi:10.1016/j.jorcd.2015.10.002.
- Weiss, N. H., Tull, M. T., Anestis, M. D., & Gratz, K. L. (2013). The relative and unique contributions of emotion dysregulation and impulsivity to posttraumatic stress disorder among substance use dependent inpatients. *Drug and Alcohol Dependence, 128*, 45-51. doi:10.1016/j.drugalcdep.2012.07.017.
- Weiss, N. H., Tull, M. T., Viana, A. G., Anestis, M. D., & Gratz, K. L. (2012). Impulsive behaviors as an emotion regulation strategy: Examining associations between PTSD, emotion dysregulation, and impulsive behaviors among substance dependent inpatients. *Journal of Anxiety Disorders, 26*, 453-458. doi:10.1016/j.janxdis.2012.01.007.
- Weissman, M. M., Orvaschel, H., & Padian, N. (1980). Children's symptom and social functioning self-report scales: Comparison of mothers' and children's reports. *The Journal of Nervous and Mental Disease, 168*, 736-740. doi:10.1097/00005053-198012000-00005.
- Whiteside, S. P., & Lynam, D. R. (2001). The Five Factor Model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences, 30*, 669-689. doi:10.1016/S0191-8869(00)00064-7.
- Whiteside, S. P., & Lynam, D. R. (2003). Understanding the role of impulsivity and externalizing psychopathology in alcohol abuse: Application of the UPPS Impulsive

Behavior Scale. *Experimental and Clinical Psychopharmacology*, *11*, 210-217.

doi:10.1037/1064-1297.11.3.210.

Whiteside, S. P., Lynam, D. R., Miller, J. D., & Reynolds, S. K. (2005). Validation of the UPPS Impulsive Behaviour Scale: A four-factor model of impulsivity. *European Journal of personality*, *19*, 559-574. doi:10.1002/per.556.

Wolitzky-Taylor, K., McBeth, J., Guillot, C. R., Stone, M. D., Kirkpatrick, M. G., Zvolensky, M. J., ... & Leventhal, A. M. (2016). Transdiagnostic processes linking anxiety symptoms and substance use problems among adolescents. *Journal of Addictive Diseases*, *35*, 266-277. doi:10.1080/10550887.2016.1207969.

Zapolski, T. C. B., Stairs, A. M., Settles, R. F., Combs, J. L., & Smith, G. T. (2010). The measurement of dispositions to rash action in children. *Assessment*, *17*, 116-125. doi:10.1177/1073191109351372.

Appendix A

Table 1. *Descriptive statistics*

Variable	<i>M</i>	<i>SD</i>	<i>N</i>
Peer Conflict	28.11	17.06	283
Mother Conflict	15.83	7.69	282
Father Conflict	13.82	7.42	254
Negative Urgency	2.23	0.76	263
Depressive Symptoms	15.61	11.59	277

Appendix B

Table 2. *Intercorrelation matrix*

	PC	MC	FC	NU	DS
PC	1.00				
MC	0.37***	1.00			
FC	0.25***	0.66***	1.00		
NU	0.30***	0.31***	0.16*	1.00	
DS	0.53***	0.29***	0.18**	0.41***	1.00

Note. * $p < .05$; ** $p < .01$; *** $p < .001$. PC = peer conflict; MC = mother conflict; FC = father conflict; NU = negative urgency; DS = depressive symptoms.

Appendix C

Table 3. *Bootstrapped multiple regression of conflict on negative urgency*

Variable	<i>b</i>	SE	95% CI	
			LCL	UCL
<i>Dependent variable: Peer Conflict</i>				
Age	2.04	1.06	0.11	4.22
Pubertal Status	0.47	0.49	-0.47	1.39
Parent education	-0.92	1.40	-3.71	1.78
Race	-0.49	0.46	-1.39	0.41
Sex	3.34	2.91	-2.46	8.71
Negative Urgency	6.15	1.59	3.09	9.17
<i>Dependent variable: Mother Conflict</i>				
Age	-0.89	0.54	-1.96	0.23
Pubertal Status	0.47	0.20	0.08	0.83
Parent education	-0.76	0.66	-2.03	0.65
Race	0.20	0.27	-0.32	0.77
Sex	0.06	1.34	-2.58	2.60
Negative Urgency	2.86	0.75	1.39	4.43
<i>Dependent variable: Father Conflict</i>				
Age	-0.69	0.58	-1.85	0.43
Pubertal Status	0.29	0.20	-0.12	0.70
Parent education	-0.68	0.62	-1.95	0.57
Race	0.47	0.35	-0.18	1.21
Sex	-1.40	1.40	-4.21	1.31
Negative Urgency	1.30	0.77	-0.16	2.79

Note. Bolding indicates estimate is significant at $p < 0.05$

Appendix D

Table 4. *Bootstrapped multiple regressions of conflict on depressive symptoms and depressive symptoms on negative urgency*

Variable	<i>b</i>	SE	95% CI	
			LCL	UCL
<i>Dependent variable: Depressive Symptoms</i>				
Age	0.61	0.65	-0.62	1.92
Pubertal Status	0.39	0.29	-0.18	0.93
Parent education	-1.22	1.07	-3.31	1.01
Race	-0.58	0.35	-1.24	0.16
Sex	3.30	1.83	-0.61	6.88
Negative Urgency	5.63	1.02	3.61	7.83
<i>Dependent variable: Peer Conflict</i>				
Age	1.69	0.89	-0.11	3.45
Pubertal Status	0.23	0.41	-0.55	1.05
Parent education	-0.32	1.33	-2.94	2.39
Race	-0.06	0.47	-1.00	0.83
Sex	0.72	2.41	-4.21	5.44
Depressive Symptoms	0.74	0.08	0.57	0.88
<i>Dependent variable: Mother Conflict</i>				
Age	-0.94	0.55	-2.02	0.14
Pubertal Status	0.44	0.18	0.07	0.79
Parent education	-0.79	0.66	-2.07	0.57
Race	0.29	0.27	-0.26	0.82
Sex	-0.82	1.25	-3.28	1.55
Depressive Symptoms	0.17	0.05	0.08	0.26
<i>Dependent variable: Father Conflict</i>				
Age	-0.80	0.58	-1.94	0.31
Pubertal Status	0.26	0.20	-0.14	0.64
Parent education	-0.61	0.60	-1.85	0.53
Race	0.57	0.34	-0.08	1.26
Sex	-1.86	1.36	-4.52	0.81
Depressive Symptoms	0.12	0.05	0.03	0.20

Note. Bolding indicates estimate is significant at $p < 0.05$

Appendix E

Table 5. *Bootstrapped multiple regression of conflict on negative urgency and depressive symptoms*

Variable	<i>b</i>	SE	95% CI	
			LCL	UCL
<i>Dependent variable: Peer Conflict</i>				
Age	1.70	0.92	-0.08	1.70
Pubertal Status	0.22	0.41	-0.59	1.01
Parent education	-0.22	1.28	-2.78	2.22
Race	-0.08	0.46	-0.99	-0.78
Sex	1.42	2.45	-3.63	6.08
Negative Urgency	2.19	1.58	-1.09	5.29
Depressive Symptoms	0.68	0.08	0.53	0.85
<i>Indirect Effect</i>	4.17	0.88	2.63	6.07
<i>Dependent variable: Mother Conflict</i>				
Age	-0.98	0.54	-2.05	0.13
Pubertal Status	0.43	0.19	0.05	0.77
Parent education	-0.65	0.65	-1.91	0.70
Race	0.28	0.27	-0.24	0.81
Sex	-0.32	1.31	-2.91	2.18
Negative Urgency	2.15	0.78	0.60	3.66
Depressive Symptoms	0.13	0.05	0.04	0.22
<i>Indirect Effect</i>	0.77	0.32	0.22	1.49
<i>Dependent variable: Father Conflict</i>				
Age	-0.78	0.58	-1.95	0.35
Pubertal Status	0.25	0.20	-0.16	0.67
Parent education	-0.62	0.62	-1.86	0.63
Race	0.56	0.56	-0.08	1.26
Sex	-1.66	1.38	-4.35	0.99
Negative Urgency	0.70	0.79	-0.77	2.28
Depressive Symptoms	0.10	0.04	0.02	0.19
<i>Indirect Effect</i>	0.62	0.28	0.10	1.24

Note. Bolding indicates estimate is significant at $p < 0.05$