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Personality and Relational Aggression in College Students: The Role of Social Anxiety and Rejection Sensitivity

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The University of Southern Mississippi

PERSONALITY AND RELATIONAL AGGRESSION IN COLLEGE STUDENTS:
THE ROLE OF SOCIAL ANXIETY AND REJECTION SENSITIVITY

by

Daniel Locke Deason

A Thesis
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Master of Arts

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ABSTRACT

PERSONALITY AND RELATIONAL AGGRESSION IN COLLEGE STUDENTS: THE ROLE OF SOCIAL ANXIETY AND REJECTION SENSITIVITY

by Daniel Locke Deason

May 2015

Relational aggression involves the intentional infliction of harm via damaging one's relationships or sense of belonging. Previous research suggests that relational aggression among children and early adolescents is correlated with social ostracism, poor psychological adjustment, anxiety, and depression in victims, and there is increasing evidence that many of these correlates apply to relational aggression among older adolescents and emerging adults. Efforts to identify predictors of relational aggression are underway; however, many variables which have been influential in understanding other forms of aggression have not yet been examined. The Five Factor Model (FFM) of personality is one example, as it has been identified as a solid predictor of overt physical aggression but has not been adequately examined in the context of peer and romantic relational aggression. This study aimed to assess how the FFM constructs, along with social anxiety and rejection sensitivity, function as predictors of relational aggression among college students. Hierarchical multiple regression were used to test hypotheses about the predictive utility of the FFM and whether the addition of social anxiety and/or rejection sensitivity offers incremental validity beyond the FFM in the prediction of general/peer and romantic relational aggression. Emotional stability emerged as predictors for both peer/general and romantic relational aggression, while Agreeableness only predicted peer/general relational aggression. Social anxiety was found to predict

both peer/general and romantic relational aggression over and above the FFM. Rejection sensitivity, however, did not account for a significant amount of variance beyond the FFM.

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CHAPTER I

INTRODUCTION

Aggression is defined as acting with the intent to harm, hurt, or injure another person (Dodge, Coie, & Lynam, 2006). *Relational aggression* refers to behaviors intended to harm others' social relationships or adversely affect their feelings of belonging (Archer & Coyne, 2005; Linder, Crick, & Collins, 2002). Research on relational aggression has identified a number of adverse correlates for perpetrators and victims. Among children, the experience of relational aggression has been associated with social withdrawal, symptoms of anxiety and depression, and somatic complaints (Archer & Coyne, 2005; Crick, Ostrov, & Werner, 2006; Olafsen & Viemerö, 2000). In young adults, both perpetrators and victims of relational aggression have shown decreased levels of interpersonal functioning and psychological adjustment (Crick & Grotpeter, 1996; Storch, Bagner, Geffken, & Baumeister, 2004; Storch, Werner, & Storch, 2003). There is also the possibility that what begins as relational aggression between peers may evolve into overt aggression and even violence (Leonard, Quigley, & Collins, 2002). Taken together, it is not surprising that there is some evidence that relational aggression can be as damaging to victims as overt physical aggression (Underwood, Galen, & Paquette, 2001).

Although most of the literature on relational aggression has focused on children and early adolescents (Werner & Crick, 1999), there is growing evidence that relational aggression may be relevant among older adolescents and emerging adults, particularly as they enter college. As individuals transition into adulthood, overt aggression becomes increasingly disruptive and less tolerated. To some degree, it may be replaced by

relational forms of aggression (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992). College is a time when many young adults form new friendships and intimate relationships, often living away from home for the first time. A form of aggression that harms relationships, social standing, reputation, and feelings of belongingness would be expected to have serious consequences for young adults making the transition to college. A growing number of studies on relational aggression among college students have found a number of adverse correlates (e.g., Bailey & Ostrov, 2007; Goldstein, 2011; Linder et al., 2002; Werner & Crick, 1999).

The proposed study seeks to inform our understanding of relational aggression among college students by examining the role of the Five Factor Model (FFM) of personality, social anxiety, and rejection sensitivity in predicting relationally aggressive behaviors toward peers and romantic partners. These variables and their relevance to relational aggression will be reviewed in the sections that follow.

Relational Aggression

Defining relational aggression is complicated by the use of multiple terms in the literature to refer to constructs without clear boundaries between different terms (e.g., indirect aggression, social aggression, and relational aggression). The difference between these terms largely appears to be a matter of which behaviors are emphasized (Coyne, Archer, & Eslea, 2006; Warren, Richardson, & McQuillin, 2011). While *indirect aggression* is sometimes used as a broad label to describe all forms of aggression that do not include overt physical aggression (Richardson & Green, 1997), narrower definitions emphasize the covert nature of the aggressive behavior. That is, indirect aggression can be defined as aggression carried out through covert or veiled tactics that are unlikely to

be traced back to the source (Bjorkqvist et al., 1992). Defined this way, indirect aggression emphasizes the manner in which the perpetrator can harm the victim while remaining unknown to the victim while relational aggression emphasizes the damage to the victim's reputation, status, and social relationships (Archer & Coyne, 2005). *Social aggression* overlaps with both indirect and relational aggression in that spreading rumors, manipulating one's relationships, and damaging one's reputation are often cited as examples of social aggression (Archer & Coyne, 2005; Galen & Underwood, 1997); however, social aggression generally includes direct – as well as indirect – forms of aggression (Cappella & Weinstein, 2006). Thus, fairly direct forms of body language or non-verbal communication (e.g., exaggerated sighs, rolling one's eyes, giving “dirty” looks, or turning one's back) would count as social aggression but not indirect aggression.

Unlike indirect aggression, *relational aggression* is typically defined as including both direct and indirect behaviors (Archer & Coyne, 2005). Examples of direct relational aggression would include explicitly stating one's intention to not be friends with someone else, threatening to tell lies or rumors about a person, or attempting to persuade peers to not be friends with the victim through direct negative discourse about the victim (Crick, 1996; Crick & Grotpeter, 1995; Richardson & Green, 1997). It should be noted that among emerging adults, relational aggression also occurs in the context of intimate partnerships (i.e., romantic relational aggression). In this context, relational aggression includes behaviors like flirting with another potential partner in order to make one's current partner jealous or intentionally ignoring one's partner when angry at them (Goldstein, 2011).

Relational Aggression Among Emerging Adults

Relationally aggressive behaviors are fairly common among children and adolescents (Herrenkohl et al., 2007), and considerable research has identified the correlates of relational aggression and victimization as including social ostracism and withdrawal, poor psychological adjustment and functioning, anxiety, depression, somatic complaints, and antisocial personality traits (Archer & Coyne, 2005; Crick et al., 2006; Olafsen & Viemerö, 2000; Underwood et al., 2001). A small but growing body of research on relational aggression and victimization in emerging adults has shown that some of the correlates identified among younger participants are still relevant into late adolescence and early adulthood (e.g., Bagner, Storch, & Preston, 2007), some new ones appear, and there appear to be some changes in the role of certain demographic variables (e.g., gender).

Studies of college students have found evidence that many of the social and emotional correlates noted in the child literature remain relevant (e.g., impaired interpersonal functioning, poor psychological adjustment, antisocial personality traits, depression, and anxiety) among emerging adults (Bagner et al., 2007; Crick & Grotpeter, 1995; Czar, Dahlen, Bullock, & Nicholson, 2011; Dahlen, Czar, Prather, & Dyess, 2013). Results from Werner and Crick's (1999) suggest that in emerging adults, higher levels of relational aggression are highly correlated with rejection from peers, antisocial personality features, borderline personality features, and lower levels of pro-social behavior. These findings are consistent with similar studies on children and adolescents with growing evidence of relational aggression use being correlated with loneliness,

depression, and peer rejection (Crick, 1996; Crick & Bigbee, 1998; Crick & Grotpeter, 1995, 1996).

Given the developmental and transitional tasks faced by emerging adults, the increased importance of peers as providing support, and the need to make more complex social and academic decisions (Storch et al., 2004), it is reasonable to expect that relational aggression might be even more disruptive here. Thus, it should come as no surprise that additional correlates of relational aggression and victimization among emerging adults have been identified. Relational aggression and/or victimization have been linked to low prosocial behavior, borderline personality features, problematic alcohol use, anger, and bulimic symptoms (Crick & Grotpeter, 1995; Dahlen et al., 2013; Goldstein, 2011; Prather, Dahlen, Nicholson, & Bullock-Yowell, 2012; Werner & Crick, 1999). As intimate relationships become more prominent during emerging adulthood (Arnett, 2000; Goldstein, 2011), romantic relational aggression emerges as an added concern. In young adulthood, romantic relationships are prominent and pivotal at this stage of development (Arnett, 2000) and behavior learned during interactions in these relationships may affect romantic relationships developed later in life (Goldstein, 2011; Hill, Rubin, & Peplau, 1976; Sprecher, 2001). Relationally aggressive behavior takes a different form in the context of a romantic relationship compared to platonic friendships; including behaviors like withholding affection from a partner, purposeful flirtation with others to evoke jealousy from a partner, or infidelity (Goldstein, Chesir-Teran, & McFaul, 2008). While research concerning relational aggression in a romantic context is relatively sparse (Goldstein, 2011), there is evidence that romantic relational aggression is associated with harming relationship quality, psychological maladjustment, and

problem behavior (Goldstein et al., 2008; Leadbeater, Banister, Ellis, & Yeung, 2008; Linder et al., 2002).

The primary demographic variable that has been studied in the context of relational aggression and victimization is gender, and this is an area where there appears to be an important difference between childhood and early adolescence and emerging adulthood. Prior to adolescence, relational aggression is more common in girls (Bonica, Yeshova, Arnold, Fisher, & Zeljo, 2003; Crick & Grotpeter, 1995; Ostrov, 2006), this difference is far less clear in late adolescence and early adulthood. Most studies with emerging adults have found either no gender differences in relational aggression or small gender differences suggesting that relationally aggressive behaviors are more likely to be committed by men than women (Dahlen et al., 2013; Linder et al., 2002; Loudin, Loukas, & Robinson, 2003).

The Five Factor Model of Personality

Personality in its simplest form can be characterized as the way an individual thinks, feels, and behaves (Jones, Miller, & Lynam, 2011). The Five Factor Model of Personality (FFM) has been used to understand the role of personality in a wide array of psychological constructs, including aggression (Jones et al., 2011). Developed through factor analysis, the FFM found that adjectives used to describe personality have five latent factors (Goldberg, 1990). The FFM breaks down general personality functioning into five broad domains, further subdivided into 30 facets (Botwin, 1995). Each of these domains is measured on a continuous scale and refers to personality traits at the broadest level. The five broad domains, or factors, are: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Costa & McCrae, 1992). Neuroticism

refers to the tendency to experience negative affects like anger, sadness, and embarrassment (Costa & McCrae, 1992). Individuals high in neuroticism tend to have a harder time controlling impulses, have irrational ideas, and to have more difficulty coping with stress. The extraversion domain refers to sociability, assertiveness, and activity. Openness includes personality traits like having an appreciation for the arts, attention to feelings, and dislike of routine. Similar to extraversion, the agreeableness domain is made up of interpersonal personality characteristics. A person high in agreeableness is one that is altruistic, sympathetic, and has a belief that others are fundamentally good. The final domain, conscientiousness, refers to personality traits that revolve around self-control, i.e. being organized, determined, and planning out tasks (Costa & McCrae, 1992).

Most of the research using the FFM to understand the role of personality in aggression has focused on overt physical aggression. Several relationships have been reported between the *Big Five* factors and physical aggression, the strongest of which involved neuroticism, agreeableness, and conscientiousness (Miller & Lynam, 2001). Miller and Lynam (2006) found an inverse relationship between agreeableness and both instrumental and reactive forms of overt aggression (i.e., those low in agreeableness were more likely to aggress against others). Those high in neuroticism have also been found to be more likely to engage in aggressive behaviors (Bettencourt, Talley, Benjamin, & Valentine, 2006; Egan & Lewis, 2011; Miller, Zeichner, & Wilson, 2012). An individual high in neuroticism is more apt to experience emotional states like anger and anxiety, thus it is reasonable to assume they are more prone to aggressive behavior. Similarly, a person low in the agreeableness domain could be described as being antagonistic, a

naturally hostile emotional state (Miller et al., 2012; Seibert, Miller, Pryor, Reidy, & Zeichner, 2010).

Compared to overt aggression, far less is known about the relevance of the FFM to relational aggression (Loudin et al., 2003). Burton, Hafetz, and Henninger (2007) found that higher neuroticism and lower agreeableness were associated with relational aggression among college students. Unexpectedly, they also found that conscientiousness was inversely correlated with relational aggression. A similar study by Hines and Saudino (2008), also conducted with a college student sample, found high neuroticism and low agreeableness were more likely to be present among perpetrators of psychological aggression. It is important to note that *psychological aggression*, while somewhat similar to RA, can be considered characteristically different from RA. Different from Burton et al. (2007), Hines and Sudino (2008) found that conscientiousness was *positively* correlated with relationally aggressive behaviors. Thus, there is some support for the potential role of neuroticism, agreeableness, and conscientiousness in relational aggression among college students, even though the direction of the relationship between conscientiousness and relational aggression is unclear.

Social Anxiety and Sensitivity to Rejection

Rejection sensitivity and social anxiety represent more specific dimensions of personality within the five domains of the FFM. Both social anxiety and rejection sensitivity are related to the neuroticism domain, empirically (Downey & Feldman, 1996; Rosellini & Brown, 2011), and given that neuroticism refers to a proneness to feelings like anxiety and anger (Costa & McCrae, 1992), social anxiety and rejection sensitivity conceptually represent more narrow aspects of neuroticism as well. Feelings of this

nature could potentially affect one's ability to gain and maintain friendships. The desire for belonging and acceptance is a fundamental motivation for humans (Baumeister & Leary, 1995). Considering the importance of social inclusion, belongingness, and acceptance, it is understandable that people could suffer negative consequences from real or perceived social rejection, exclusion, or avoidance (Leary, 2001).

Social anxiety is a relatively common problem (Kessler, Chiu, Demler, & Walters, 2005), involving the avoidance of social engagement and the fear of negative evaluation from others (Goldstein, 2011; Siegel, La Greca, & Harrison, 2009; Watson & Friend, 1969). In turn, this social avoidance may make having social opportunities and positive social interactions more difficult to come by, leading to more difficulties within interpersonal relationships (Siegel et al., 2009). There is some evidence that social anxiety is a problem that compounds upon itself (Siegel et al., 2009). For example, Siegel and colleagues (2009) described the case of an adolescent who is excluded from social gatherings by peers and thus becomes more withdrawn and anxious around close friends, resulting in more negative interactions with closer friends that lead to further social exclusion.

A relationship between social anxiety and relational aggression has long been posited. Watson and Friend (1969) suggested that because socially anxious individuals fear being negatively evaluated, they will engage in relationally aggressive behaviors in order to deflect attention away from themselves and focus instead on the weaknesses of peers. More recently, Loudin et al. (2003) suggested that individuals may use relational aggression to remove persons from whom they anticipate negative evaluation from their

peer group. That is, they proposed a cyclical relationship in which the fear of being negatively evaluated by peers feeds an avoidance of social situations.

The research on social anxiety and relational aggression is sparse, but results generally suggest a relationship. Relational aggression is associated with peer rejection and reduced pro-social behavior among college students, two characteristics associated with social anxiety (Werner & Crick, 1999). Loudin et al. (2003) found that college students who feared negative evaluation tended to engage in more relationally aggressive behaviors. They suggested that students high in social anxiety are quick to assume they are being evaluated in social situations, even when this is not the case, and that these false attributions can lead to relational aggression. Storch et al. (2004) had similar findings in that the use of relational aggression by college students was found to predict social anxiety, loneliness, depression, and substance abuse. In light of previous findings, some researchers have proposed that college students who are experiencing psychological maladjustment tend to suffer from a social information processing bias in their misinterpretation of peer behavior that causes their retaliatory aggression (Crick, Grotpeter, & Bigbee, 2002; Lochman & Dodge, 1994). Storch et al.'s (2004) findings are consistent with this possibility, suggesting that relationally aggressive college students are possibly peer rejected due to exhibiting negative behavior towards peers. Last, there is some evidence that individuals victimized by relational aggression are at greater risk for developing social anxiety (Gros, Stauffacher-Gros, & Simms, 2010). In adolescents, researchers have found that being victimized by peers via relationships is strongly associated with the development of social anxiety (La Greca & Harrison, 2005; Storch, Brassard, & Masia-Warner, 2003). Among college students, researchers have found that

both aggressors and those victimized by relational aggression report having elevated levels of social anxiety (Loudin et al., 2003).

While an aspect of social anxiety is the fear of rejection, rejection sensitivity refers to an individual's reactivity towards real or perceived rejection (Ayduk, Gyurak, & Luerssen, 2008). Specifically, how one expects, perceives, and how harshly one reacts to rejection encapsulates rejection sensitivity as a construct (Downey & Feldman, 1996). Peer rejection predicts future relational difficulty, including social anxiety and aggression (Boivin, Hymel, & Burkowski, 1995; Buhs & Ladd, 2001; Coie & Asher, 1990; Dodge et al., 2003; Parker & Asher, 1987). In children, researchers have found that experiences of rejection can lead to conditioning the individual to future situations in which rejection is possible (Downey, Lebolt, Rincon, & Freitas, 1998). *Rejection sensitivity* refers to (1) bias towards perceiving another person's actions as rejection, (2) an anxious expectation of rejection, and (3) heightened reactivity to perceived rejection from others (Downey & Feldman, 1996; Downey, Feldman, & Ayduk, 2000).

Rejection sensitivity has been categorized as having increased expectations of rejection and overreacting with feelings and behaviors that can cause dejection and anger; emotional states that may later evolve into loneliness, hostility, and aggression (Downey & Feldman, 1996; Levy, Ayduk, & Downey, 2001; Watson & Nerdale, 1984). By developing a tendency to readily expect and react harshly to rejection, rejection sensitivity can impair one's ability to foster and maintain positive relationships (Downey, Freitas, Michaelis, & Khouri, 1998; Levy et al., 2001). Further, rejection sensitivity has been linked to poor self-concept, psychopathology, and interpersonal problems (McDougall, Hymel, Vaillancourt, & Mercer, 2001). Downey and Feldman (1996)

reported that children who experience peer rejection go on to show interpersonal difficulties later in life. The literature also shows that rejection sensitivity develops into anticipation of rejection in interpersonal situations that produce defensive emotional states via anger to defend themselves against rejection (Downey, Bonica, & Rincon, 1999; Downey & Feldman, 1996). This sensitivity can develop into one becoming hypersensitive to the possibility of rejection during interactions, and primes an overly defensive reaction in the form of aggression (Ayduk, Gyurak, & Castriotta, 2005).

Little published research exists concerning the potential role of rejection sensitivity in relational aggression, and the existing research is focused primarily on women. In a study of adolescent girls, Sitjsema, Shoulberg, and Murray-Close (2011) found that, within the context of a blunted parasympathetic nervous system, the most relationally aggressive girls were those with high levels of rejection sensitivity. Furthermore, rejection sensitivity has been found to predict negative feelings about peer supportiveness and negative beliefs about peer motivations (London, Downey, Bonica, & Paltin, 2007). Though little empirical data can be found linking rejection sensitivity and relational aggression, conceptually they should have some relationship between them. For example, rejection sensitivity has also been observed by previous researchers to produce angry expectations of rejection in college aged students, and that these angry expectations of rejection reliably predict aggressive behavior (London, et al., 2007; Downey et al., 1998). Lastly, there is research suggesting that within the relationship between rejection and aggression rejection sensitivity serves as a moderator by representing the association between hostile thoughts and rejection (Ayduk, Downey, Testa, Yen, & Shoda, 1999).

The Present Study

The present study aimed to assess how personality, social anxiety, and rejection sensitivity functioned as predictors of relational aggression in college students. Initially, we planned to determine whether the Five Factor Model (FFM) of personality predicts general/peer and romantic relational aggression. Given the lack of research using the FFM to understand its potential relevance to relational aggression, we examined the predictive power of the full FFM. However, we limited our specific predictions to two of the five factors. Based on evidence of gender and race differences in relational aggression in some studies of college students (e.g., Dahlen et al., 2013), participant gender and race were taken into account in testing the following hypotheses:

H1a: Emotional Stability will predict general/peer relational aggression, independent of participant gender and race.

H1b: Emotional Stability will predict romantic relational aggression, independent of participant gender and race.

H2a: Agreeableness will predict general/peer relational aggression, independent of participant gender and race.

H2b: Agreeableness will predict romantic relational aggression, independent of participant gender and race.

Next, analyses aimed to determine whether rejection sensitivity and social anxiety would predict general/peer and romantic relational aggression over and above the effects of the FFM while controlling for participant gender and race (i.e., will rejection sensitivity and/or social anxiety demonstrate evidence of incremental validity beyond the FFM in predicting relational aggression?).

H3a: Rejection sensitivity will predict general/peer relational aggression over and above the FFM, independent of participant gender and race.

H3b: Rejection sensitivity will predict romantic relational aggression over and above the FFM, independent of participant gender and race.

H4a: Social anxiety will predict general/peer relational aggression over and above the FFM, independent of participant gender and race.

H4b: Social anxiety will predict romantic relational aggression over and above the FFM, independent of participant gender and race.

CHAPTER II

METHOD

Participants

The sample for this study included 456 college student volunteers age 18-25 from the University of Southern Mississippi. The gender distribution of participants included in data analysis was comprised of 143 males (42%) and 199 females (58%). The racial makeup of the sample is as follows: 34% African American/Black, 62% White, 2% Hispanic/Latino, 1% Asian, and 1% American Indian/Alaskan Native. Participants were recruited through the web-based system used by the Department of Psychology (Sona Systems Ltd.). Those who completed the study received course credit consistent with departmental policies. We expected that approximately 60 minutes would be required for participants to complete the study. Based on the nature of the subject pool, we expected that the sample would be predominately female, so some oversampling of male participants was implemented to provide greater balance.

Instruments

The following instruments were administered along with a brief demographic questionnaire to participants who signed up via the Sona system to participate in the study (see Appendix A).

International Personality Item Pool Big-Five Factor Marker Scales

Public domain items from the International Personality Item Pool Big-Five Factor Marker Scales (IPIP-BFFM; Goldberg, 1992; Goldberg et al., 2006) were used to measure the FFM domains. The BFFM measures 5 domains that represent the FFM domains: Extraversion, Agreeableness, Conscientiousness, Emotional Stability (regarded

as the inverse of Neuroticism), and Intellect/Imagination (regarded as equivalent to Openness to Experience). The IPIP-BFFM is available for public use without permission from the authors via the internet and consists of 10 items for each of the 5 FFM domains amounting to a total of 50 items. Participants respond to each item on a 5-point Likert scale ranging from 1 (*very inaccurate*) to 5 (*very accurate*) yielding scores that range from 10 to 50 for each of the 5 FFM factors.

In a sample of adults, internal reliability and internal consistency coefficients were found to be .84 (Saucier & Goldberg, 2002) and ($\alpha = .84$) (Goldberg, 1999; Gow, Whiteman, Pattie, & Deary, 2005) respectively. The IPIP-BFFM has evidence of correlating highly with other empirically established measures of the FFM (for example, the NEO PI and NEO-FFI) providing construct validity evidence (Gow et al., 2005).

Self-Report Measure of Aggression and Social Behavior Measure (SRASMB)

Four subscales from the SRASMB developed by Morales and Crick (1998) were used to assess general/peer relational aggression (7 items), romantic relational aggression (4 items), general/peer relational victimization (4 items), and romantic relational victimization (4 items). Responses range from 0 (“not at all true”) to 7 (“very true”). These subscales have demonstrated acceptable internal consistency in college student samples, with alpha coefficients ranging from .71 to .87 (Bailey & Ostrov, 2008; Czar et al., 2011; Dahlen et al., 2013; Linder et al., 2002). Support for the construct validity of these four SRASMB subscales comes from relationships with other measures of relational aggression and other theoretically relevant constructs identified in previous literature (Bagner et al., 2007; Czar et al., 2011; Linder et al., 2002; Ostrov & Houston, 2008).

Social Interaction Anxiety Scale (SIAS)

Social anxiety was assessed using the 20-item SIAS developed by Mattick and Clarke (1998). The SIAS was constructed to measure social anxiety in a variety of interpersonal situations (e.g., “I have difficulty talking to attractive persons of the opposite sex,” “I am nervous mixing with people I don’t know well”). Items are scaled on a 5-point Likert scale ranging from 0 (“Not at all characteristic of me”) to 4 (“Extremely characteristic of me”). Total scores on the SIAS have strong 3-month test-retest reliability (.93) and have been found to be internally consistent (.88-.94) (Mattick & Clarke, 1998). Furthermore, item-total correlations lend additional support to the unitary nature of the construct (Mattick & Clarke, 1998). The SIAS has also displayed convergent validity through comparisons with other measures of social anxiety. Lastly, the SIAS has been found useful in differentiating between social anxiety disorder (SAD) and healthy anxiety, as well as SAD and other anxiety disorders (Heimberg, Mueller, Holt, Hope, & Liebowitz, 1992; Mattick & Clarke, 1998).

Social Phobia Scale (SPS)

The SPS measures fear related to being negatively evaluated when engaging in ordinary activities like eating, drinking, or writing in front of other people (Mattick & Clarke, 1998). It consists of 20 items that present hypothetical situations in which one is performing a routine activity in the presence of others (e.g., “I become anxious if I have to write in front of other people”). Participants rate how characteristic the statement is of them, ranging from 0 (Not at all characteristic or true of me) to 4 (Extremely characteristic or true of me). The SPS has displayed high levels of internal consistency (.94) and test-retest reliability for both 4 weeks (.91) and 12 weeks (.93) (Mattick &

Clarke, 1998). The SPS has also displayed evidence of validity in being able to differentiate between clinical groups and between social phobia and undiagnosed samples (Mattick & Clarke, 1998).

Rejection Sensitivity Questionnaire (RSQ)

The RSQ measures anxious expectations of rejection (Downey & Feldman, 1996). It presents 18 hypothetical situations in which the participant may be rejected (e.g., “You ask your friend to do you a large favor”). Participants rate how anxious they feel about the given situation ranging from 1 (very unconcerned) to 6 (very concerned) and how likely the participant thinks the other person will be accepting from 1 (very unlikely) to 6 (very likely). The RSQ has high internal consistency (.83) with all items correlated above .30 with the correlated item total (Downey & Feldman, 1996). Downey and Feldman (1996) found evidence of the short and long term test-retest reliability of the RSQ measures, with test-retest coefficients of .83 over three weeks and .78 over 4 months. Support for the validity of the RSQ was provided by Downey and Feldman’s (1996) study in which the RSQ predicted feelings of rejection in participants from neutral ambiguous stimuli.

Procedure

Potential participants were recruited from the University of Southern Mississippi using the Department of Psychology’s web-based research system (Sona Systems Ltd.). Those who signed up for the study were provided with a URL to the consent form (see Appendix B) hosted on the Qualtrics system. Potential participants who read and electronically signed the online consent form were entered into the study and directed to complete all measures online. Those who completed the study received research credit.

The Analyses

Stage 1: Data Clean-Up and Preliminary Analyses

After downloading the electronic data file and converting it to an SPSS data file, raw data was examined for errors and missing data. All study variables were formed via SPSS syntax, and scale-level frequency distributions were examined to identify potential coding errors. Means, standard deviations, and alpha coefficients were computed for all study variables. Next, the interrelationships among variables were examined through correlations. Potential gender and race differences on the dependent variables (i.e., general/peer relational aggression and romantic relational aggression) were tested using one-way Analyses of Variance (ANOVAs). Finally, we explored the utility of the FFM in predicting relational aggression by regressing all five IPIP scales simultaneously on general/peer relational aggression and romantic relational aggression.

Stage 2: Primary Analyses

Statistical hypotheses were tested using a hierarchical multiple regression. H1a, H1b, H2a, and H2b focused on the role of neuroticism (H1a and H1b) and agreeableness (H2a and H2b) in predicting general/peer and romantic relational aggression, independent of participant gender and race. Two hierarchical multiple regressions were computed to test these hypotheses, one for each dependent variable (i.e., general/peer relational aggression and romantic relational aggression). In each, respondent gender and race were entered on Step 1 to control for their effects, and scores from the neuroticism and agreeableness scales of the IPIP were entered simultaneously on Step 2.

The remaining hypotheses focused on the degree to which rejection sensitivity (H3a and H3b) and social anxiety (H4a and H4b) demonstrated incremental validity over

and above the FFM in the prediction general/peer and romantic relational aggression. For these constructs to be useful, it is important that they account for additional variance in relational aggression beyond that already being captured by the FFM. Two hierarchical multiple regressions were computed to test these hypotheses, one for each dependent variable. In each, respondent gender and race were entered on Step 1 to control for their effects, all five IPIP scales were entered on Step 2, and rejection sensitivity (RSQ scores) and social anxiety (SIAS scores) were entered on Step 3.

CHAPTER III

RESULTS

Data Clean-Up and Preliminary Analyses

Data were downloaded from Qualtrics into SPSS. Of the 465 cases initially present in the data set, 20 containing no data were deleted ($N = 445$). Consistent with published recommendations for detecting careless responding on Internet surveys (e.g., Huang, Curran, Keeney, Poposki, & DeShon, 2011; Liu, Bowling, Huang, & Kent, 2013; Meade & Craig, 2012), multiple procedures were used to identify participants who responded carelessly. First, 89 participants who failed both of two bogus questions (e.g., “Please answer ‘strongly agree’ to this question”) included in the survey were identified. The amount of time in which these participants completed the survey ($M = 10$ minutes) was significantly less than the rest of the participants ($M = 18.87$ minutes), $F(1, 444) = 70.68, p < .0001, d = 1.03$. These 89 participants were removed from the data set ($N = 356$). Second, total survey completion time was examined for the remaining participants ($Mdn = 18$ minutes), and 6 outliers on this variable who completed the survey in less than 5 minutes were removed ($N = 350$).

The data set was then examined for cases with missing data on some variables. Missing data on at least one survey item were present for 12.29% of the sample, but only 0.55% of all items had missing data. Moreover, no item had missing data for more than 3.4% of participants. Little’s MCAR test indicated that the missing data were missing-at-random, $X^2(5205, N = 350) = 5205.99, p = .49$. For each variable, the number of items with missing data was calculated. For participants with less than 25% of the items that formed a scale missing, missing data were replaced with estimated values using linear

trend at point. Missing data were not replaced for participants who had missing data on more than 25% of the items that formed a scale because this would introduce too much potential distortion. At this point, 7 participants were identified who had more than 25% of their data missing on both dependent variables. These 7 participants were removed ($N = 343$). All remaining missing data were handled through the SPSS default procedure for each statistical test (i.e., listwise deletion).

All alpha coefficients exceeded .70 except for the romantic relational aggression (RA) scale of the SRASBM ($\alpha = .65$). One of the four items on this scale (i.e., “I give my romantic partner the silent treatment when s/he hurts my feelings in some way”) was found to reduce the internal consistency of this scale. This item was omitted from the scale, and the resulting 3-item romantic RA scale demonstrated satisfactory reliability ($\alpha = .72$). Alpha coefficients, means, and standard deviations for all variables are presented in Table 1.

Table 1

Scale Reliabilities, Means, Standard Deviations, and Univariate Gender Differences

Variable	α	Men		Women		F	d
		M	SD	M	SD		
BFFM							
Intellect	.78	37.6	5.91	36.1	6.03	2.81 ^a	.25
Conscientiousness	.74	34.04	5.54	35.03	6.11	1.45 ^a	.17
Extraversion	.86	31.86	8.05	31.17	7.9	.65 ^a	.09
Agreeableness	.80	36.3	6.32	39.88	6.11	13.92 ^{a**}	.58
Emotional Stability	.83	33.88	6.85	30.08	7.36	13.20 ^{a**}	.53

Table 1 (continued).

Variable	α	Men		Women		F	d
		M	SD	M	SD		
SRASBM							
General/Peer RA	.85	15.42	7.9	13.73	6.71	2.45 ^a	.23
Romantic RA	.72	5.73	4.07	4.43	2.29	5.67 ^{b*}	.39
RSQ	.88	9.04	3.38	9.16	3.99	1.27 ^c	.03
SIAS	.93	21.47	14.39	24.72	15.7	2.57 ^a	.22
SPS	.95	16.89	15.34	21.58	17.16	4.03 ^{d*}	.29
SA	.96	38.35	27.45	46.3	30.35	3.84 ^{d*}	.27

^a $F(2, 340)$, ^b $F(2, 263)$, ^c $F(2, 332)$, ^d $F(2, 339)$

Note. * $p < .05$. ** $p < .01$. BFFM = Big-Five Factor Markers; SIAS = Social Interaction Anxiety Scale; RA = relational aggression; SPS = Social Phobia Scale; SA = Social Anxiety (SPS + SIAS).

The dependent variables (i.e., general/peer and romantic RA) were examined for normality. Both showed significant skewness in their distributions and were transformed with a logarithmic transformation to reduce skewness. It should be noted that the distributions of both variables remained significantly skewed despite this transformation. Univariate outliers were identified (6 for general/peer RA and 5 for RA); however, they appeared to be meaningful data points and were retained. Next, all continuous independent variables were examined for normality. The following variables exhibited significant skewness in their distributions: agreeableness, the RSQ, and the SIAS + SPS composite score. The SIAS and SPS are two companion measures used together across a variety of studies in order to assess fears related to social interaction and negative evaluation from others during routine activities (Ham, 2009; Mattick & Clarke, 1998;

Norberg, Norton, & Olivier 2009; Norberg, Norton, Olivier, & Zvolensky, 2010; Terlecki, Buckner, Larimer, & Copeland, 2012). These variables were transformed using a square-root transformation, which effectively normalized their distributions. Unless otherwise noted, transformed scores were used in subsequent analyses.

Intercorrelations among variables were computed and are presented in Table 2. General/peer RA was positively correlated with agreeableness, rejection sensitivity, and social anxiety. Inverse correlations between general/peer RA and conscientiousness, emotional stability, and intellect/imagination were noted. Romantic RA was positively related to rejection sensitivity and social anxiety and was inversely related to agreeableness, conscientiousness, and emotional stability.

In order to explore the utility of the FFM in predicting relational aggression, two standard multiple regressions were computed. First, general/peer RA was regressed on the five IPIP Big-Five Factor Marker (BFFM) scales, entered simultaneously. The full model was significant, $R^2 = .19$ ($N = 342$, $p < .001$), with the following BFFM scales emerging as predictors of general/peer RA: extraversion, agreeableness, and emotional stability (see Table 3).

Table 2

Intercorrelations of Variables

	1	2	3	4	5	6	7	8	9
1. Peer RA	----								
2. Romantic RA	.50**	----							
3. BFFM-E	.02	.03	----						
4. BFFM-A	-.32**	-.21**	.22**	----					
5. BFFM-C	-.18**	-.21**	.07	.29**	----				
6. BFFM-ES	-.28**	-.23**	.21**	.07	.22**	----			
7. BFFM-I/I	-.18**	-.17	.21**	.40**	.29**	.19**	----		
8. RSQ	.18**	.13*	-.33**	-.13*	-.18**	-.25**	-.21**	----	
9. SA	.30**	.23**	-.55**	-.13*	-.25**	-.46**	-.25**	.52**	----

Note. Peer RA = Peer/General Relational Aggression; Romantic RA = Romantic Relation of Aggression; BFFM-E = Extraversion; BFFM-A = Agreeableness; BFFM-C = Conscientiousness; BFFM-ES = Emotional Stability; IP-IP NEO-I/I = Involvement/Imagination; RSQ = Rejection Sensitivity Questionnaire; SA = Social Anxiety total score (Social Phobia Scale + Social Interaction Anxiety Scale). SD = Standard Deviation * $p < .05$; ** $p < .01$

Table 3

Hierarchical Regression Analysis Summary for the Five BFFM Domains Predicting Peer/General Relational Aggression (N = 342)

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
BFFM					.19**	.19
Extraversion	.00	[.00, .01]	.00	.52*		
Agreeableness	-.06	[-.09, -.04]	.01	-.31**		
Conscientiousness	-.00	[-.01, .00]	.00	-.03		
Emotional Stability	-.01	[-.01, -.01]	.00	-.28**		
Intellect/Imagination	-.00	[-.00, .00]	.00	-.02		

Note. * $p < .05$. ** $p < .01$. CI = confidence interval for *B*; BFFM = Big-Five Factor Markers.

Extraversion was a positive predictor; agreeableness and emotional stability were negative predictors (i.e., higher agreeableness and emotional stability were associated with lower general/peer RA). Second, romantic RA was regressed on the five BFFM scales (see Table 4). The full model was significant, $R^2 = .11$ ($N = 265$, $p < .001$), with the same three BFFM scales emerging as significant predictors of romantic RA (i.e., extraversion, agreeableness, and emotional stability).

Table 4

Hierarchical Regression Analysis Summary for the Five BFFM Domains Predicting Romantic Relational Aggression (N = 265)

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
BFFM					.11**	.11

Table 4 (continued).

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Extraversion	.00	[.00, .01]	.00	.13*		
Agreeableness	-.04	[-.06, -.01]	.02	-.16*		
Conscientiousness	-.00	[-.01, .00]	.00	-.12		
Emotional Stability	-.01	[-.01, -.00]	.00	-.21*		
Intellect/Imagination	-.00	[-.01, .00]	.00	-.02		

Note. * $p < .05$. ** $p < .01$ CI = confidence interval for *B*; BFFM = Big-Five Factor Markers.

Primary Analyses

In order to determine whether emotional stability and agreeableness would predict general/peer and romantic relational aggression independent of respondent gender and race, two hierarchical multiple regressions were computed. First, general/peer RA was regressed on respondent gender, race, agreeableness, and emotional stability. Gender and race were entered on Step 1 to control for their effects, and agreeableness and emotional stability were entered on Step 2 (see Table 5). The model was significant $R^2 = .17$ ($N = 343$, $p < .001$) with gender, agreeableness, and emotional stability emerging as predictors. Both agreeableness and emotional stability were negative predictors (i.e., higher agreeableness and emotional stability scores is associated with lower amounts of general/peer RA). Second, romantic RA was regressed on the same variables, entered in the same order (see Table 6). The model was significant $R^2 = .12$ ($N = 266$, $p < .001$) with gender and emotional stability emerging as predictors.

In order to determine whether the rejection sensitivity and/or social anxiety would offer incremental validity above the full FFM in the prediction of relational aggression,

two additional hierarchical multiple regressions were conducted. First, general/peer RA was regressed on respondent gender and race, all five Big-Five Factor Marker (BFFM) domains, the RSQ, and the social anxiety composite (SIAS + SPS). Respondent gender and race were entered on Step 1 to control for their effects, the five BFFM scales were entered on Step 2, and the RSQ and social anxiety composite scores were entered on Step 3 (see Table 7). The full model was significant $R^2 = .25$ ($N = 334$, $p < .001$) with agreeableness, emotional stability, extraversion, and social anxiety as significant predictors. Agreeableness and emotional stability were found to be negative predictors, social anxiety and extraversion positive predictors. Second, romantic RA was regressed on the same combination of variables entered on the same steps. The full model was significant $R^2 = .20$ ($N = 262$, $p < .001$) with gender, emotional stability, extraversion, and social anxiety being significant predictors (see Table 8). Gender and emotional stability emerged as positive predictors, while extraversion and social anxiety were negative predictors

Table 5

Hierarchical Regression Analysis Summary for Gender, Race, Agreeableness, and Emotional Stability Predicting Peer Relational Aggression (N = 343)

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Step 1					.01	
Race	-.01	[-.06, .03]	.02	-.41		
Gender	-.04	[-.09, -.00]	.02	-.14*		
Step 2					.17	.15**
Agreeableness	-.05	[-.07, -.03]	.01	-.26**		

Table 5 (continued).

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Emotional Stability	-.01	[-.01, -.01]	.00	-.28**		

Note. * $p < .05$. ** $p < .01$. CI = confidence interval for *B*.

Table 6

Hierarchical Regression Analysis Summary for Gender, Race, Agreeableness, and Emotional Stability Predicting Romantic Relational Aggression (N = 266)

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Step 1					.04	
Race	-.05	[-.11, .00]	.03	-.12		
Gender	-.07	[-.12, -.02]	.03	-.17*		
Step 2					.12	.08**
Agreeableness	-.02	[-.05, .01]	.01	-.08		
Emotional Stability	-.01	[-.01, -.00]	.00	-.27**		

Note. * $p < .05$. ** $p < .01$. CI = confidence interval for *B*.

Table 7

Hierarchical Regression Analysis Summary for the Five Factors, Social Anxiety, Gender, Race, and Rejection Sensitivity Predicting General/Peer Relational Aggression (N = 334)

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Step 1					.01	
Race	-.04	[-.04, -.02]	.00	-.41**		

Table 7 (continued).

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Gender	-.02	[-.11, -.02]	.02	-.14*		
Step 2					.18	.17**
Extraversion	.00	[.00, .01]	.00	.11*		
Agreeableness	-.05	[-.02, -.01]	.00	-.40**		
Conscientiousness	.00	[-.00, .00]	.00	-.01		
Emotional Stability	-.01	[-.01, -.01]	.00	-.29**		
Intellect/Imagination	-.00	[-.01, .00]	.00	-.07		
Step 3					.25	.07**
Social Anxiety	.03	[.02, .04]	.01	.35**		
Rejection Sensitivity	.01	[-.03, .04]	.02	.02		

Note. * $p < .05$. ** $p < .01$. CI = confidence interval for *B*.

Table 8

Hierarchical Regression Analysis Summary for the Five Factors, Social Anxiety, Gender, Race, and Rejection Sensitivity Predicting Romantic Relational Aggression (N = 280)

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Step 1					.04	
Race	-.06	[-.11, .00]	.03	-.13*		
Gender	-.08	[-.13, -.02]	.03	-.18*		
Step 2					.16	.12**
Extraversion	.00	[.00, .01]	.00	.14*		

Table 8 (continued).

Variable	<i>B</i>	95% CI	<i>SE B</i>	β	R^2	ΔR^2
Agreeableness	-.01	[-.05, .02]	.02	-.06		
Conscientiousness	-.00	[-.01, .00]	.00	-.10		
Emotional Stability	-.01	[-.01, -.00]	.00	-.28**		
Intellect/Imagination	-.00	[-.01, .00]	.00	-.05		
Step 3					.20	.04*
Social Anxiety	.02	[.01, .04]	.01	.27*		
Rejection Sensitivity	-.00	[-.05, .04]	.02	-.01		

Note. * $p < .05$. ** $p < .01$. CI = confidence interval for *B*.

CHAPTER IV

DISCUSSION

The present study extended the literature on relational aggression (RA) in college students by examining the degree to which the Five Factor Model (FFM) personality domains, social anxiety, and rejection sensitivity predicted both general/peer and romantic RA after accounting for participant gender and race. First, it was hypothesized that two of the FFM domains (i.e., emotional stability and agreeableness) would predict both general/peer and romantic RA, independent of participant gender and race (H1 and H2). Second, it was hypothesized that social anxiety and rejection sensitivity would account for additional variance in general/peer and romantic RA over and above the full FFM while taking participant gender and race into account (H3 and H4). Findings provided mixed support for the hypotheses. Agreeableness and emotional stability predicted general/peer RA; emotional stability but not agreeableness predicted romantic RA. Social anxiety but not rejection sensitivity predicted general/peer RA and romantic RA.

Personality and Relational Aggression

Relationships among various FFM domains and relational aggression have been reported in the literature; however, relatively few studies have been conducted to date (Loudin et al., 2003), and the nature of the relationships among these constructs is not entirely consistent. The results of the present study provide support for the relevance of the FFM to both romantic and peer/general relational aggression. Prior to conducting the primary analyses, general/peer and romantic RA were each regressed on a common measure of the full FFM, the IPIP Big-Five Factor Markers. Both general/peer and

romantic RA were predicted by extraversion, agreeableness, and emotional stability. Respondents higher in extraversion and lower in agreeableness and emotional stability reported engaging in higher levels of RA.

The primary analyses focused on the two FFM domains that had been shown to relate to RA in previous research: emotional stability and agreeableness. As expected, emotional stability predicted both general/peer and romantic RA independent of participant gender and race, suggesting that individuals with low levels of emotional stability (or high levels of emotional instability/neuroticism) are more likely to engage in relationally aggressive behaviors toward both peers and romantic partners. This finding is consistent with previous research involving the FFM and relational aggression use in college student samples (Burton et al., 2007; Hines & Saudino, 2008; Miller et al., 2012). Thus, individuals who experience negative affect and psychological distress more intensely may report more relationally aggressive behaviors.

Agreeableness predicted general/peer RA as expected (i.e., agreeableness was inversely related to general/peer RA) but did not predict romantic RA. The relationship between agreeableness and general/peer RA was consistent with previous research (Burton et al., 2007; Miller et al., 2012) and provides additional support for the relevance of agreeableness in understanding RA in the peer relationships of emerging adults. While agreeableness was correlated with romantic RA, it did not emerge as a significant predictor in the regression analysis while accounting for participant gender and race. While this was somewhat surprising given Hines and Saudino's (2008) results, it is important to note that they measured psychological aggression rather than RA, making comparisons difficult. Specifically, Hines and Saudino (2008) assessed "psychological

romantic aggression” through endorsement of engaging in behaviors like swearing or insulting one’s partner. The present study measured romantic relational aggression through endorsement of behaviors like cheating on one’s partner or flirting with others to make one’s partner jealous. While the constructs assessed likely have some overlap, they are distinct and could reasonably be expected to have different correlates. Considering the analysis controlled for gender and race, it is possible that doing so may have impacted the results regarding the relationship between agreeableness and romantic RA. In other words, there may have been gender and/or race differences with regard to romantic RA that were not visible due to them being controlled in the analysis.

A relationship between extraversion and RA was not predicted because there was little support for such a relationship in the literature. Some studies found that extraversion was related to RA in college women but not men (Burton et al., 2007; Hines & Saudino, 2008); others found no relationship between extraversion and RA (Miller et al., 2012). In the present study, extraversion was related to both peer/general and romantic RA. Furthermore, in post-hoc analyses, extraversion was found to have a relationship with both forms of RA for men, while no relationship was found for women with respect to either type of RA. This is especially interesting, since social anxiety emerged as a significant predictor, one would not expect higher extraversion scores to predict relational aggression. Thus, it appears that further research may be helpful to clarify the potential role of extraversion in RA.

Similarly, no predictions were made about conscientiousness. The relationship between conscientiousness and RA in college students has been convoluted, with various studies finding conflicting results (Burton et al., 2007; Hines & Saudino, 2008). The

present study did not find a significant relationship between conscientiousness and either peer/general or romantic relational aggression.

Social Anxiety, Rejection Sensitivity, and Relational Aggression

Social anxiety and rejection sensitivity were both positively correlated with RA in peer and romantic contexts, indicating that participants who endorsed experiencing more social anxiety symptoms and/or were more sensitive to social rejection were more likely to engage in relationally aggressive behaviors. However, only higher social anxiety scores emerged as a predictor of general/peer and romantic RA over and above the full FFM after accounting for participant gender and race. This suggests that social anxiety may be a worthwhile addition to measures of the FFM for predicting RA (i.e., social anxiety may provide incremental validity beyond the FFM in the prediction of RA) and that future efforts to understand RA may benefit from the inclusion of measures of social anxiety.

Previous research conducted on the relationship between social anxiety and relational aggression is sparse; however, findings have been fairly consistent in documenting a positive relationship (Loudin et al., 2003; Storch et al., 2004). The present findings strengthen the case for the relevance of social anxiety to RA by demonstrating evidence of incremental validity beyond the FFM of personality. Social anxiety has been framed as a component of emotional instability (i.e., neuroticism), which is supported both empirically (Downey & Feldman, 1996; Rosellini & Brown, 2011) and conceptually (Costa & McCrae, 1992). The present findings suggest that additional information may be gained by exploring facets within some of the broad domains, and it appears that social anxiety might be a good place to start.

Contrary to what was expected, rejection sensitivity did not predict RA over and beyond the FFM. Given that social anxiety and rejection sensitivity both represent aspects of emotional instability (Downey & Feldman, 1996; Rosellini & Brown, 2011), it is possible that they represent similar areas within the FFM domains regarding relationally aggressive behavior. However, rejection sensitivity still did not emerge as a predictor of RA in post hoc analyses in which social anxiety was removed from the regression analysis. This suggests that a more likely explanation is that variance related to relationally aggressive behavior that would be accounted for by rejection sensitivity is already accounted for by the FFM. That is, rejection sensitivity does not appear to account for additional variance in RA over and above what is already being explained by the FFM.

Limitations and Future Directions

The present study has some limitations that are important to consider. First, the sample was drawn from a single mid-sized university in the Southeast. There is some evidence to suggest that there may be regional differences in relational aggression among college students (Czar, 2012). Thus, the present findings should not be assumed to be representative of college students in general. Also, the study relied on self-report data, which limits the study because of participants' willingness to disclose relationally aggressive behavior. Given the covert and non-direct nature of relationally aggressive behavior, it could be argued that individuals may be unwilling to fully disclose their behavior. However, previous researchers have asserted, for young adult populations, measuring relational aggression through self-report is more appropriate compared to peer ratings (Björkqvist, Österman, & Kaukiainen, 1992; Green, Richardson, & Lago, 1996).

The relationship between personality and RA is important for several reasons. Firstly, given the sparse literature in this area, more exploratory research is necessary. Secondly, understanding how personality factors contribute to relationally aggressive behavior may be helpful for clinical and practical purposes. For example, a clinician who obtains their client's FFM profile may be able to gain insight about the client's reported difficulty interacting with others and/or maintaining romantic relationships. An employer could also use this research to gain insight into applicants who may be more likely to engage in relationally aggressive behavior toward co-workers or customers. Additional research is needed to further illuminate the connection between personality and relational aggression. Although the relevance of agreeableness and emotional stability to RA is becoming increasingly clear, divergent findings have been reported for other domains of the FFM, particularly extraversion and conscientiousness. One potential solution to provide more insight into these divergent findings may be through analyzing the facets of the extraversion and conscientiousness domains, as these represent more specific personality traits. For example, RA may be related to the "positive emotion" facet in extraversion, but unrelated to the other four facets.

Even less research exists involving the relationship between more precise unidimensional personality traits and relational aggression. At the time of this writing, only one study exists regarding the relationship between peer/general relationally aggressive behavior and the FFM domains at the facet level (Miller et al., 2012). Thus, more research into lower order personality traits associated with romantic and peer/general RA appears necessary. Given that the few studies regarding the FFM and relational aggression have reported agreeableness, emotional stability, and occasionally

extraversion as correlates of relational aggression, it would be beneficial to study these domains at the facet level (Burton et al., 2007; Hines & Saudino, 2008; Miller et al., 2012). Lastly, previous research has found conflicting results regarding the relationship between conscientiousness and peer/general and romantic relational aggression (Burton et al., 2007; Hines & Saudino 2008).

Another potential area for future research would be determining the developmental relationship between social anxiety and relational aggression. Previous researchers have reported relationships between social anxiety with the FFM domains (e.g., Rosellini & Brown, 2011) and social anxiety with relational aggression (e.g., Gros et al., 2010; Loudin et al., 2003). The present study is the first to observe the relationship between these three domains simultaneously. Individuals who are socially anxious are more apt to fear and perceive negative evaluation from others and may use relationally aggressive behaviors as a means of retaliation (Loudin et al., 2003). Further, relationally aggressive individuals are more likely to be rejected by peers, and may learn to fear or expect this negative evaluation from others (Werner & Crick, 1999). Thus, it is difficult to determine whether individuals who engage in relational aggression develop social anxiety due to the repercussions of their behavior, or if socially anxious individuals use relational aggression in response to the symptoms associated with social anxiety. The cross sectional nature of this study sheds little light into the developmental relationship between social anxiety and relational aggression, which suggests the need for a longitudinal study involving these constructs.

In summary, the present study observed several relationships between the variables studied. The findings of the present study suggest the FFM has the ability to

predict both peer/general and romantic relational aggression. Further, the results suggest that relationally aggressive behavior is characterized primarily by personality characteristics that are related to agreeableness, emotional instability/neuroticism, and extraversion. Social anxiety appears to also represent a factor in relationally aggressive behavior beyond what is predicted by these personality domains. Rejection sensitivity was not found to be a significant predictor of peer/general or romantic relational aggression, suggesting that rejection sensitivity does not represent a significant portion of relational aggression that is not already accounted for by the FFM.

APPENDIX A
STUDY QUESTIONNAIRES

Participant Demographic Questionnaire

The following questions will be used to gather information about participants in this study. Please answer the questions accordingly.

Gender: Male Female Other

Age: _____

Race/Ethnicity:

African American/Black

Caucasian/White

Hispanic/Latino

Native Hawaiian/Pacific Islander

American Indian/Alaska Native

Asian

_____ Other (specify)

College Status:

Freshman

Sophomore

Junior

Senior

Do you consider yourself to be

Heterosexual or Straight

Gay or lesbian

Bisexual

Other (specify)

In the past, who have you had sex with?

Men only

Women only

Men and Women

I have not had sex

People are different in their attraction to other people. Which best describes your feelings? Are you:

Only attracted to females

Mostly attracted to females

Equally attracted to females and males

Mostly attracted to males

Only attracted to males

Are you currently in a romantic relationship?

Yes

No

If you are currently in a romantic relationship, how long has it lasted?

With a male or a female? Male Female

Are you dating, cohabitating, engaged, or married? _____

If you are not currently in a romantic relationship, have you been in a romantic relationship within the last year?

___ Yes

___ No

If you are not currently in a romantic relationship but were in the last year, how long did it last? _____

With a male or a female? ___ Male ___ Female

Were you dating, cohabitating, engaged, or married? _____

International Personality Item Pool Big-Five Factor Markers (Goldberg, 1992).

Directions: Below are several phrases describing people's behaviors. Please indicate how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age.

	(1) Very Inaccurate	(2) Moderately Inaccurate	(3) Neither Inaccurate nor Accurate	(4) Moderately Accurate	(5) Very Accurate
1. Am the life of the party.	1	2	3	4	5
2. Feel little concern for others.	1	2	3	4	5
3. Am always prepared.	1	2	3	4	5
4. Get stressed out easily.	1	2	3	4	5
5. Have a rich vocabulary.	1	2	3	4	5
6. Don't talk a lot.	1	2	3	4	5
7. Am interested in people.	1	2	3	4	5
8. Leave my belongings around.	1	2	3	4	5
9. Am relaxed most of the time.	1	2	3	4	5
10. Have difficulty understanding abstract ideas.	1	2	3	4	5

11.	Feel comfortable around people.	1	2	3	4	5
12.	Insult people.	1	2	3	4	5
13.	Pay attention to details.	1	2	3	4	5
14.	Worry about things.	1	2	3	4	5
15.	Have a vivid imagination.	1	2	3	4	5
16.	Keep in the background.	1	2	3	4	5
17.	Sympathize with others' feelings.	1	2	3	4	5
18.	Make a mess of things.	1	2	3	4	5
19.	Seldom feel blue.	1	2	3	4	5
20.	Am not interested in abstract ideas.	1	2	3	4	5
21.	Start conversations.	1	2	3	4	5
22.	Am not interested in other people's problems.	1	2	3	4	5
23.	Get chores done right away.	1	2	3	4	5
24.	Am easily disturbed.	1	2	3	4	5
25.	Have excellent ideas.	1	2	3	4	5
26.	Have little to say.	1	2	3	4	5
27.	Have a soft heart.	1	2	3	4	5
28.	Often forget to put things back in their proper place.	1	2	3	4	5
29.	Get upset easily.	1	2	3	4	5
30.	Do not have a good imagination.	1	2	3	4	5
31.	Talk to a lot of different people at parties.	1	2	3	4	5
32.	Am not really interested in others.	1	2	3	4	5
33.	Like order.	1	2	3	4	5

34.	Change my mood a lot.	1	2	3	4	5
35.	Am quick to understand things.	1	2	3	4	5
36.	Don't like to draw attention to myself.	1	2	3	4	5
37.	Take time out for others.	1	2	3	4	5
38.	Shirk my duties.	1	2	3	4	5
39.	Have frequent mood swings.	1	2	3	4	5
40.	Use difficult words.	1	2	3	4	5
41.	Don't mind being the center of attention.	1	2	3	4	5
42.	Feel others' emotions.	1	2	3	4	5
43.	Follow a schedule.	1	2	3	4	5
44.	Get irritated easily.	1	2	3	4	5
45.	Spend time reflecting on things.	1	2	3	4	5
46.	Am quiet around strangers.	1	2	3	4	5
47.	Make people feel at ease.	1	2	3	4	5
48.	Am exacting in my work.	1	2	3	4	5
49.	Often feel blue.	1	2	3	4	5
50.	Am full of ideas.	1	2	3	4	5

Self-Report Measure of Aggression and Social Behavior Measure (Morales & Crick, 1998).

Directions: This questionnaire is designed to measure qualities of adult social interaction and close relationships. Please read each statement and indicate how true each is for you, **now**, and during the **last year**, using the scale below. Write the appropriate number in the blank provided.

IMPORTANT: The items marked with asterisks (*) ask about experiences in a current romantic relationship. **If you are not currently in a romantic relationship, or if you have not been in a relationship**

during the last year, please leave these items blank (but answer all other items).

NOT AT ALL TRUE 1	2	3	SOMETIMES TRUE 4	5	6	VERY TRUE 7
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1. *My romantic partner tries to make me feel jealous as a way of getting back at me.

1 2 3 4 5 6 7

2. I have a friend who ignores me or gives me the “cold shoulder” when s/he is angry with me.

1 2 3 4 5 6 7

3. When I am not invited to do something with a group of people, I will exclude people from future activities.

1 2 3 4 5 6 7

4. A friend of mine has gone “behind my back” and shared private information about me with other people.

1 2 3 4 5 6 7

5. *I try to make my romantic partner jealous when I am mad at him/her

1 2 3 4 5 6 7

6. When I have been angry at, or jealous of someone, I have tried to damage that person’s reputation by gossiping about him/her or by passing on negative information about him/her to other people.

1 2 3 4 5 6 7

7. When someone does something that makes me angry, I try to embarrass that person or make them look stupid in front of his/her friends.

1 2 3 4 5 6 7

8. When I have been mad at a friend, I have flirted with his/her romantic partner.

1 2 3 4 5 6 7

9. When I am mad at a person, I try to make sure s/he is excluded from group activities (going to the movies or to a bar).

1 2 3 4 5 6 7

10. *My romantic partner has threatened to break up with me in order to get me to do what s/he wants.

1 2 3 4 5 6 7

11. *My romantic partner doesn't pay attention to me when s/he is mad at me.

1 2 3 4 5 6 7

12. *When my romantic partner wants something, s/he will ignore me until I give in.

1 2 3 4 5 6 7

13. *I have cheated on my romantic partner because I was angry at him/her.

1 2 3 4 5 6 7

14. I have a friend who excludes me from doing things with her/him and her/his friends when s/he is mad at me.

1 2 3 4 5 6 7

15. I have spread rumors about a person just to be mean.

1 2 3 4 5 6 7

16. When a friend of mine has been mad at me, other people have “taken sides” with her/him and been mad at me too.

1 2 3 4 5 6 7

17. *I give my romantic partner the silent treatment when s/he hurts my feelings in some way.

1 2 3 4 5 6 7

18. *If my romantic partner makes me mad, I will flirt with another person in front of him/her.

1 2 3 4 5 6 7

19. I have intentionally ignored a person until they gave me my way about something.

1 2 3 4 5 6 7

Social Interaction Anxiety Scale (Mattick & Clarke, 1998).

Instructions: For each item, please circle the number to indicate the degree to which you feel the statement is characteristic or true for you. The rating scale is as follows:

0 = **Not at all** characteristic or true of me.

1 = **Slightly** characteristic or true of me.

2 = **Moderately** characteristic or true of me.

3 = **Very** characteristic or true of me.

4 = **Extremely** characteristic or true of me.

1. I get nervous if I have to speak with someone in authority (teacher, boss, etc.)

0 1 2 3 4

2. I have difficulty making eye contact with others.

0 1 2 3 4

3. I become tense if I have to talk about myself or my feelings.

0 1 2 3 4

4. I find it difficult to mix comfortably with the people I work with.

0 1 2 3 4

5. I find it easy to make friends my own age.

0 1 2 3 4

6. I tense up if I meet an acquaintance in the street.

0 1 2 3 4

7. When mixing socially, I am uncomfortable.

0 1 2 3 4

8. I feel tense if I am alone with just one other person.

0 1 2 3 4

9. I am at ease meeting people at parties, etc.

0 1 2 3 4

10. I have difficulty talking with other people.

0 1 2 3 4

11. I find it easy to think of things to talk about.

0 1 2 3 4

12. I worry about expressing myself in case I appear awkward.

0 1 2 3 4

13. I find it difficult to disagree with another's point of view.

0 1 2 3 4

14. I have difficulty talking to attractive persons of the opposite sex.

0 1 2 3 4

15. I find myself worrying that I won't know what to say in social situations.

0 1 2 3 4

16. I am nervous mixing with people I don't know well.

0 1 2 3 4

17. I feel I'll say something embarrassing when talking.

0 1 2 3 4

18. When mixing in a group, I find myself worrying I will be ignored.

0 1 2 3 4

19. I am tense mixing in a group.

0 1 2 3 4

20. I am unsure whether to greet someone I know only slightly.

0 1 2 3 4

Social Phobia Scale (Mattick & Clarke, 1998).

Instructions: Indicate the extent to which each of the items is true for you. Please choose a response for each item using the rating scale provided below.

The rating scale is as follows:

0 = **Not at all** characteristic or true of me.

1 = **Slightly** characteristic or true of me.

2 = **Moderately** characteristic or true of me.

3 = **Very** characteristic or true of me.

4 = **Extremely** characteristic or true of me.

1. I become anxious if I have to write in front of other people.

0 1 2 3 4

2. I become self-conscious when using public toilets.

0 1 2 3 4

3. I can suddenly become aware of my own voice and of others listening to me.

0 1 2 3 4

4. I get nervous that people are staring at me as I walk down the street.

0 1 2 3 4

5. I feel I may blush when I am with others.

0 1 2 3 4

6. I feel self-conscious if I have to enter a room where others are already seated.

0 1 2 3 4

7. I worry about shaking or trembling when I'm watched by other people.

0 1 2 3 4

8. I would get tense if I had to sit facing other people on a bus or train.

0 1 2 3 4

9. I get panicky that others might see me to be faint, sick, or ill.

0 1 2 3 4

10. I would find it difficult to drink something if in a group of people.

0 1 2 3 4

11. It would make me feel self-conscious to eat in front of a stranger at a restaurant.

0 1 2 3 4

12. I am worried people will think my behavior is odd.

0 1 2 3 4

13. I would get tense if I had to carry a tray across a crowded cafeteria.

0 1 2 3 4

14. I worry I'll lose control of myself in front of other people.

0 1 2 3 4

15. I worry I might do something to attract the attention of other people.

0 1 2 3 4

16. When in an elevator I am tense if people look at me.

0 1 2 3 4

17. I can feel conspicuous standing in a line.

0 1 2 3 4

18. I get tense when I speak in front of other people.

0 1 2 3 4

19. I worry my head will shake or nod in front of others.

0 1 2 3 4

20. I feel awkward and tense if I know people are watching me.

0 1 2 3 4

Rejection Sensitivity Questionnaire (Downey & Feldman, 1996).

Each of the items below describes things college students sometimes ask of other people. Please imagine that you are in each situation. You will be asked to answer the following questions:

- 1) How concerned or anxious would you be about how the other person would respond?
- 2) How do you think the other person would be likely to respond?

1. You ask someone in class if you can borrow his/her notes.

How concerned or anxious would you be over whether or not the person would want to lend you his/her notes?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that the person would willingly give me his/her notes.

Very Unlikely

Very Likely

1 2 3 4 5 6

2. You ask your boyfriend/girlfriend to move in with you.

How concerned or anxious would you be over whether or not the person would want to move in with you?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would want to move in with me.

Very Unlikely

Very Likely

1 2 3 4 5 6

3. You ask your parents for help in deciding what programs to apply to.

How concerned or anxious would you be over whether or not your parents would want to help you?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that they would want to help me.

Very Unlikely

Very Likely

1 2 3 4 5 6

4. You ask someone you don't know well out on a date.

How concerned or anxious would you be over whether or not the person would want to go out with you?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that the person would want to go out with me.

Very Unlikely

Very Likely

1 2 3 4 5 6

5. Your boyfriend/girlfriend has plans to go out with friends tonight, but you really want to spend the evening with him/her, and you tell him/her so.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would decide to stay in?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that the person would willingly choose to stay in.

Very Unlikely

Very Likely

1 2 3 4 5 6

6. You ask your parents for extra money to cover living expenses.

How concerned or anxious would you be over whether or not your parents would help you out?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that my parents would not mind helping me out.

Very Unlikely Very Likely

1 2 3 4 5 6

7. After class, you tell your professor that you have been having some trouble with a section of the course and ask if he/she can give you some extra help.

How concerned or anxious would you be over whether or not your professor would want to help you out?

Very Unconcerned Very Concerned

1 2 3 4 5 6

I would expect that my professor would want to help me out.

Very Unlikely Very Likely

1 2 3 4 5 6

8. You approach a close friend to talk after doing or saying something that seriously upset him/her.

How concerned or anxious would you be over whether or not your friend would want to talk with you?

Very Unconcerned Very Concerned

1 2 3 4 5 6

I would expect that he/she would want to talk with me to try to work things out.

Very Unlikely Very Likely

1 2 3 4 5 6

9. You ask someone in one of your classes to coffee.

How concerned or anxious would you be over whether or not the person would want to go?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that the person would want to go with me.

Very Unlikely

Very Likely

1 2 3 4 5 6

10. After graduation, you can't find a job and ask your parents if you can live at home for a while.

How concerned or anxious would you be over whether or not your parents would want you to come home?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect I would be welcome at home.

Very Unlikely

Very Likely

1 2 3 4 5 6

11. You ask your friend to go on a vacation with you over Spring Break.

How concerned or anxious would you be over whether or not your friend would want to go with you?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would want to go with me.

Very Unlikely

Very Likely

1 2 3 4 5 6

12. You call your boyfriend/girlfriend after a bitter argument and tell him/her you want to see him/her.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would want to see you?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would want to see me.

Very Unlikely

Very Likely

1 2 3 4 5 6

13. You ask a friend if you can borrow something of his/hers.

How concerned or anxious would you be over whether or not your friend would want to loan it to you?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would willingly loan me it.

Very Unlikely

Very Likely

1 2 3 4 5 6

14. You ask your parents to come to an occasion important to you.

How concerned or anxious would you be over whether or not your parents would want to come?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that my parents would want to come.

Very Unlikely

Very Likely

1 2 3 4 5 6

15. You ask a friend to do you a big favor.

How concerned or anxious would you be over whether or not your friend would do this favor?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would willingly do this favor for me.

Very Unlikely

Very Likely

1 2 3 4 5 6

16. You ask your boyfriend/girlfriend if he/she really loves you.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would say yes?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would answer yes sincerely.

Very Unlikely

Very Likely

1 2 3 4 5 6

17. You go to a party and notice someone on the other side of the room and then you ask them to dance.

How concerned or anxious would you be over whether or not the person would want to dance with you?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would want to dance with me.

Very Unlikely

Very Likely

1 2 3 4 5 6

18. You ask your boyfriend/girlfriend to come home to meet your parents.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would want to meet your parents?

Very Unconcerned

Very Concerned

1 2 3 4 5 6

I would expect that he/she would want to meet my parents.

Very Unlikely

Very Likely

1 2 3 4 5 6

APPENDIX B

CONSENT FORM

**THE UNIVERSITY OF SOUTHERN MISSISSIPPI AUTHORIZATION TO
PARTICIPATE IN RESEARCH PROJECT**

Consent is hereby given to participate in the study titled: Personality and Aggression

1. **Description of Study:** The purpose of this study is to assess how various aspects of personality relate to forms of socially aggressive behavior in college students. Participants will be asked to complete online questionnaires about aspects of their personality and forms of social aggression in which they have participated or experienced. The study will take no more than 60 minutes to complete and will be worth 1 research credit.
2. **Benefits:** Although participants will receive no direct benefit from participation in this study, the information provided will enable researchers to better understand the possible role of personality in aggressive behavior.
3. **Risks:** There are no foreseeable risks to participating in this study. If you feel that completing these questionnaires has resulted in emotional distress, please stop and notify the researcher (Daniel Deason at Daniel.Deason@eagles.usm.edu). If you should decide at a later date that you would like to discuss your concerns, please contact the research supervisor, Dr. Eric Dahlen (Eric.Dahlen@usm.edu).
4. **Confidentiality:** These questionnaires are intended to be anonymous, and your name is requested on this page only for the purpose of assigning research credit. The information you provide will be kept confidential, and your name will not be associated with your responses. Records related to this study will be stored on secure computer devices and only involved researchers will have access to these records. If significant new information relating to this study becomes known which may relate to your willingness to continue to take part in this study, you will be given this information.
5. **Voluntary Nature of the Study:** Participation in this study is completely voluntary. You may exit the study at any time or skip any questions that you do not feel comfortable answering. Your decision whether to participate in the study or not will not affect your current or future relationship with the University of Southern Mississippi.
6. **Participant's Assurance:** Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies

cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to Daniel Deason (Daniel.Deason@eagles.usm.edu). This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820. A copy of this form will be given to the participant.

7. **Consent to Participate:** I consent to participate in this study, and in agreeing to do so, I understand that:
- a. I must be at least 18 years of age;
 - b. I am being asked to complete a set of questionnaires which will take no more than 60 minutes and for which I will receive 1 research credit; and
 - c. All information I provide will be used for research purposes and be kept confidential.

I have read and understand the information stated, am at least 18 years of age, and I willingly sign this consent form. A copy can be printed from my browser window.

Signature of the Research Participant

Date

APPENDIX C

INSTITUTIONAL REVIEW BOARD NOTICE OF COMMITTEE ACTION



THE UNIVERSITY OF
SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **13100201**

PROJECT TITLE: **Personality and Relational Aggression in College Students**

PROJECT TYPE: **Thesis**

RESEARCHER(S): **Daniel Deason**

COLLEGE/DIVISION: **College of Education and Psychology**

DEPARTMENT: **Psychology**

FUNDING AGENCY/SPONSOR: **N/A**

IRB COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **10/10/2013 to 10/09/2014**

Lawrence A. Hosman, Ph.D.
Institutional Review Board

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