Regional Differences in Relational Aggression: The Role of Culture

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REGIONAL DIFFERENCES IN RELATIONAL AGGRESSION:  
THE ROLE OF CULTURE

by

Katherine Amanda Czar

Abstract of a Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

August 2012
ABSTRACT

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It is becoming increasingly clear that relational aggression has just as much potential to cause harm as overt verbal and physical aggression. Though the literature base on relational aggression is growing, far fewer studies have been conducted with late adolescents and adults as compared with children and early adolescents. Moreover, the role of culture in relational aggression has received limited attention. The current study aimed to examine the potential impact of one aspect of culture on relational aggression by focusing on North-South regional differences in the United States. Differing norms and expectations for social behavior between Northern and Southern U.S. may translate into differences in aggressive behavior. Two-hundred and eighty-eight undergraduate students from a Southern university and 217 students from a university in the Northeast completed self-report measures of relational aggression, overt aggression, normative beliefs about relational aggression, and gender role attitudes online. Results indicated that Southern participants reported greater levels of both general/peer and romantic relational aggression compared to the Northern sample. Southerners also reported more traditional gender role attitudes compared to Northerners. There was not a significant difference between Northern and Southern participants on normative beliefs about relational aggression. Traditional gender role attitudes were positively correlated with both general/peer and romantic relational aggression. Finally, gender role attitudes were a
significant predictor of general/peer relational aggression but not of relational aggression in romantic contexts.
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August 2012
ACKNOWLEDGMENTS

First and foremost, I would like to express my abundant gratitude to my dissertation advisor, Dr. Eric Dahlen, for his extremely valuable input, expertise, and guidance, as well as for his incredible patience throughout the course of this study as well as throughout my graduate career. I would also like to extend many thanks to my dissertation committee, Dr. J. T. Johnson, Dr. Jon Mandracchia, and Dr. Virgil Zeigler-Hill, whose insights and collaboration helped to make this project a quality one. Thank you all for helping me to achieve this milestone and produce a dissertation that I can be proud of.
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CHAPTER I
INTRODUCTION

Aggression is a significant problem related to health and safety, both in the United States and throughout the world (Dahlberg & Krug, 2002). The negative consequences of aggressive behavior are apparent in a range of contexts, such as in schools and the workplace (Chapell et al., 2004; Kaukiainen et al., 2001), roadways (Dahlen & White, 2006), interactions with peers (Storch, Bagner, Geffken, & Baumeister, 2004), familial and romantic relationships (Follingstad, Coyne, & Gambone, 2005), and criminal justice settings (Patrick & Zempolich, 1998). Given the vast societal, financial, and health-related costs of aggressive behavior, it is clearly a construct worthy of study.

Aggression is widely viewed as a multidimensional construct (Archer, 2001; Buss, 1961; Tremblay, 2000); however, there is some disagreement about the number and nature of the underlying dimensions. For example, some have argued that relational and social aggression are nearly synonymous (Archer & Coyne, 2005), while others suggest that they are related but distinct forms of aggression (Augustin, 2010; Ostrov & Houston, 2008; Xie, Swift, Cairns, & Cairns, 2002). In general, the aggression literature supports at least two higher-order forms of aggression into which most other forms can likely be subsumed: overt and relational aggression (Little, Jones, Henrich, & Hawley, 2003).

Overt aggression (i.e., direct physical and verbal behavior accompanied by an intent to harm the target) has received most of the attention in the literature (e.g., Capaldi & Owen, 2001; Frankel & Simmons, 1985; Joussemet et al., 2008; Moore & Pepler, 2006; Nagin & Tremblay, 2001; O’Leary, Vivian, & Malone, 1992; Parrott & Giancola, 2006; Schumacher & Leonard, 2005; Straus & Ramirez, 2007). Considerably less is
known about the more subtle or indirect forms of aggressive behavior that have been
categorized as relational aggression (Leadbeater, Boone, Sangster, & Mathieson, 2006).
In fact, these forms of aggression have only been subjected to study in the past fifteen
years or so. With mounting evidence that relational aggression may cause just as much
harm as overt aggression (Archer & Coyne, 2005), additional work is needed to
understand this understudied subject.

Of the forms of indirect aggression, relational aggression has generated the most
interest in the literature, particularly because of the prevalence with which it occurs
among children and early adolescents and the many adverse correlates with which it has
been associated. Relational aggression refers to behavior that “causes harm by damaging
relationships or feelings of acceptance and love” (Linder, Crick, & Collins, 2002, p. 70).
Examples of relationally aggressive behavior include gossiping, social exclusion, and
spreading rumors. Youths who are victims of relational aggression often report symptoms
of depression and anxiety and tend to engage in harmful behaviors and coping strategies
(Archer & Coyne, 2005; Olafsen & Viemero, 2000; Twenge, Catanese, & Baumeister,
2002). In addition, perpetration of relationally aggressive acts has been associated with
peer rejection, maladaptive eating behaviors, traits associated with antisocial and
borderline personality, and diminished use of prosocial behavior (Linder et al., 2002;
Werner & Crick, 1999). Furthermore, both victimization and perpetration of relational
aggression are associated with externalizing behaviors, such as misconduct and use of
psychoactive substances (Sullivan et al., 2006). Such findings lend support to the utility
and clinical relevance of the relational aggression construct.
One aspect of relational aggression that remains relatively unexplored is the potential role of culture. A small number of studies have documented international differences in relational aggression, leading to the suggestion that cultural variation was responsible (French, Jansen, & Pidada, 2002; Hart, Nelson, Robinson, Olsen, & McNeilly-Choque, 1998; Russell, Hart, Robinson, & Olsen, 2003; Schafer, Werner, & Crick, 2002; Tomada & Schneider, 1997). In addition, as gender is considered an aspect of culture (Reid, 2002), it is important to note that gender differences in relational aggression have also been reported. Among children, girls tend to be more relationally aggressive than boys (Coyne et al., 2006; Crick & Grotpeter, 1995; Marsee, Silverthorn, & Frick, 2005). The presence and nature of gender differences in older children and young adults are less clear (Archer & Coyne, 2005; Basow, Cahill, Phelan, Longshore, & McGillicuddy-DeLisi, 2007), although it appears that the gender differences apparent among younger children tend not to persist into late adolescence and early adulthood (Bagner, Storch, & Preston, 2007; Burton, Hafetz, & Henninger, 2007; Linder, Crick, & Collins, 2002; Verona, Sadeh, Case, Reed, & Bhattacharjee, 2008), with some researchers even discovering that males in these older age groups appear to be more relationally aggressive than their female peers in both friendships and romantic contexts (Lento-Zwolinski, 2007; Loudin et al., 2003; Saini & Singh, 2008; Storch et al., 2004). Additionally, because age group can be considered an aspect of culture, it is also worth noting that we are only beginning to understand relational aggression among older adolescents and adults; we know far more about how this construct functions among children and early adolescents. Other aspects of culture (e.g., race/ethnicity, religiosity, socioeconomic status, etc.) have not yet been examined.
The proposed study seeks to examine the potential impact of culture on relational aggression by focusing on one particular regional difference: comparing relational aggression in the Northern and Southern United States. Not only has there been no previously published investigation of regional variation in relational aggression in the U.S., but there is a theoretical rationale for expecting North-South differences in this construct. As will be delineated below, certain cultural differences between North and South appear to exist, and as Crick, Ostrov, and Kawabata (2007) pointed out, “Investigating the role of culture in aggression, particularly relational aggression, is essential because the meaning and functions of relational aggression might differ across cultures and contexts” (pp. 251-252). Furthermore, identifying and better understanding such differences, if they are indeed found, would have implications for understanding the cultural contributions to aggressive behavior, instrument development and norming, and prevention and treatment efforts.

Although the regions and individual inhabitants of the U.S. share many commonalities, significant regional differences are known to exist between the various regions of the U.S. Differences have been discovered in terms of attitudes and practices such as comfort with the use of physical discipline for children (Flynn, 1994), views on what constitutes well-being (Plaut, Markus, & Lachman, 2002), and even seat belt use (Strine et al., 2010). Regional differences between the Northern and Southern U.S., specifically, have been documented in terms of cultural norms and attitudes. For instance, residents of the South differ from those of other regions of the U.S. in their attitudes toward traditional gender roles (Carter & Borch, 2005; Hurlbert, 1989; Rice & Coates, 1995; Twenge, 1997). Southerners also tend to hold more conservative, traditional values
and attitudes toward issues such as politics (Hurlbert, 1989; Jones, 2010b) and legalization of same-sex marriage (Jones, 2010a). Some research also supports the view that Southerners are generally more polite and courteous than non-Southerners (Cohen, Vandello, Puente, & Rantilla, 1999), or are at least viewed that way by non-Southerners (Boles, 1988; Reed, 1980). Northerners, on the other hand, tend to be thought of as less conservative and traditional as well as more aggressive, argumentative, and impolite (Dillman, 1988; Reed, 1980). These distinctions may exemplify a concept proposed by Henrikson (2010), involving the difference between the “Northern mind” and the “Southern mind,” with the inhabitants of each region viewing their world in unique ways. Despite these research findings and stereotypes, empirical data on regional differences in constructs such as anger, hostility, and aggression are scarce. If differences were found on various forms of aggression, such differences might have important implications for psychological research and intervention on these and other closely related constructs.

Furthermore, given the social “rules” and expectations for polite behavior that are thought to exist in the Southern U.S. (Boles, 1988; Cohen et al., 1999; Reed, 1980), it is possible that Southern individuals, particularly women, may be more likely than Northern women to resort to more concealed, subtle forms of aggressive behavior such as relational aggression to deal with angry emotions. In other words, expectations for polite, modest behavior may be particularly high for Southern women, more so than for non-Southern women. Thus, when coping with and expressing angry feelings in the form of aggression, Southern women may feel the need to deal with that anger in non-obvious ways to avoid being viewed as rude or non-feminine. Northern women, on the other hand, may be less inclined to require such sneaky means of managing anger, because
Northern norms may lend themselves to more direct expression of anger. Although cultural expectations regarding passive and mild-mannered behavior may apply to Northern women as well to a degree, if the stereotypes regarding North-South differences discussed above are true, then it is likely that direct expression of emotions such as anger may be more acceptable for Northern as compared to Southern women.

Northern and Southern women may also differ in their expectations for the costs of violating prescriptive norms for gender. It has been found that infractions of such norms often result in negative interpersonal and employment consequences for women (Rudman, 1998; Rudman & Glick, 1999, 2001). Because Southerners have been found to have more traditional attitudes, including attitudes pertaining to gender roles (Carter & Borch, 2005; Hurlbert, 1989; Rice & Coates, 1995; Twenge, 1997), perhaps it is the case that Southern women perceive higher costs for defiance of traditional female gender roles and, therefore, are more likely to maintain behavior that is within what they perceive as socially acceptable limits.

The proposed research focuses, then, on whether there are regional (i.e., North-South) differences in attitudes about aggression and/or aggressive behavior, including the use of relational aggression, as well as whether gender role attitudes are associated with relational aggression. The literature review that follows will begin with a review of relevant terms related to the forms and functions of aggression, followed by a comprehensive review of the main variable of interest, relational aggression. Then, the literature on North-South differences in overt aggression will be reviewed, followed by a discussion of the cultural distinctiveness of the Southern U.S. with a focus on women and the potential role of traditional gender role attitudes and prescriptive gender norms.
Forms of Aggression

Aggression is typically defined as behaviors directed at others with the goal of inflicting harm (Anderson & Bushman, 2002; Baron & Richardson, 1994; Bushman & Anderson, 2001; Ostrov & Houston, 2008). It is widely recognized as a multidimensional construct, even if considerable disagreement remains about the precise nature of its dimensions.

Overt Aggression

Overt aggression includes forms of aggressive behavior aimed at causing harm to another person through physical means (e.g., hitting, pushing) or the threat of physical aggression. Direct physical aggression would be a prototypical example of overt aggression. In cases of overt aggression, the target is typically confronted by the aggressor face-to-face (Little et al., 2003).

Relational Aggression

Relational aggression refers to acts that intend to harm a victim by way of targeting their relationships and sense of belonging within a social group (Crick & Grotpeter, 1995; Linder, Crick, & Collins, 2002). Such behavior may take the form of gossiping, spreading malicious rumors, or excluding someone from social events. Relational aggression often involves indirect or covert behaviors committed with the specific intent of harming the target’s reputation or relationships (Archer & Coyne, 2005; Werner & Crick, 1999). Although certain overt behaviors can qualify as relationally aggressive (Archer & Coyne, 2005; Coyne, Archer, & Eslea, 2006), such as verbally threatening to withdraw friendship, many relationally aggressive behaviors are not carried out in the presence of the target.
In defining relational aggression, it is worthwhile to note the considerable overlap between this construct and two other forms of aggression: indirect and social aggression. The central feature of indirect aggression is that it is delivered in such a way that veils the identity of the aggressor (Björkqvist, Lagerspetz, & Kaukiainen, 1992). Social aggression, like relational aggression, involves harming victims’ relationships and social standing (Archer & Coyne, 2005), but it is also uniquely characterized by an emphasis on the role of the surrounding peer group in contributing to the harm inflicted. In addition to covert acts, social aggression also includes “subtle confrontational” (Cappella & Weinstein, 2006, p. 435) behaviors which are less concealed in nature (e.g., eye-rolling, giving “dirty” looks). Despite the degree of overlap among the three constructs, relational aggression is somewhat unique in its emphasis on the harm caused to relationships as a central feature (Archer & Coyne, 2005). Nonetheless, because they are “essentially the same area of research” (Archer & Coyne, 2005, p. 213), relevant research on indirect aggression among adults will be referenced at points. Because social aggression research largely addresses this construct among children and adolescents, it is less relevant to the present topic.

**Overt and Relational Aggression**

Relational and overt aggression are clearly related yet distinct constructs. The moderate relationship \( r = .54 \) found between relational and overt aggression was described by Crick and Grotpeter (1995) as that which would be anticipated between two variants of a construct. Yet relational aggression is also related to some variables that have found to be associated with overt aggression, including anger (Archer & Coyne, 2005). Where these forms of aggression differ in their relationship to anger is the manner
in which the anger is expressed; overt aggressors are more likely to be fairly transparent in their communication of anger, whereas relationally aggressive individuals may express this emotion in less obvious forms (Kaukiainen et al., 2001; Richardson & Green, 2003). The indirect manner in which relational aggression is often expressed affords aggressors a safer method of conveying anger as compared to more overt forms, particularly physical aggression.

Functions of Aggression

Not only can the various forms of aggression be grouped into the broad overt and relational categories, but researchers have also found it useful to classify aggressive behavior by function (Little et al., 2003; Ostrov & Houston, 2008). *Proactive aggression* (or instrumental aggression) is based in Bandura’s (1973) Social Learning Theory and involves behavior that is often premeditated and designed to achieve some objective. *Reactive aggression* (or impulsive aggression), rooted in Berkowitz’s (1962) Frustration Aggression Hypothesis, is characterized by aggressive acts elicited by some provocation and is typically accompanied by negative feelings such as anger (Lento-Zwolinski, 2007; Ostrov & Houston, 2008). For instance, a physical attack aimed at robbing another individual would be a case of proactive aggression, while reacting violently in response to having been threatened or insulted would be considered reactive aggression.

The proactive-reactive distinction can also be applied to relational aggression. For example, proactive relational aggression could take the form of threatening to reveal a secret to force an individual to comply with the aggressor’s wishes. Reactive relational aggression, on the other hand, might involve ostracizing someone out of anger in order to get back at them for some perceived offense.
Adverse Correlates and Potential Effects of Relational Aggression

Relational aggression proves to be a problematic behavior in several respects. Individuals may be less hesitant to employ relational aggression as compared to more direct forms of aggression, especially physical aggression, which is generally not socially acceptable, particularly for women (Richardson & Green, 1999). Thus, relational and other less direct forms of aggression may be utilized to avoid the social disapproval, potential legal ramifications, and other consequences of physical and other overt forms of aggression (Archer & Coyne, 2005; Linder et al., 2002). Relationally aggressive behaviors may also be less noticeable to others due to their furtive quality (Goldstein, Young, & Boyd, 2008). More notably, indirect aggression, described earlier as a construct that shares many features with relational aggression, has been depicted as being capable of inflicting “considerable psychological harm to its victims” (Archer & Coyne, 2005, p. 223). Indirect aggression has also been shown to correlate with negative psychological consequences such as increased depression, anxiety, and loneliness (Archer & Coyne, 2005).

Thanks in large part to the recent growth in relational aggression research, researchers and practitioners are gaining awareness about the harmful nature of this behavior, including its potential for producing just as much damage as physical aggression (Archer & Coyne, 2005). Furthermore, it has been demonstrated that relational aggression contributes uniquely to the harm experienced by victims of aggression beyond that caused by more overt forms of aggression. For instance, Crick (1996) discovered that relational aggression “provided unique information” (p. 2325) beyond that accounted for by physical and verbal aggression in 245 third through sixth
graders. In this study, students and their teachers completed peer-nomination measures of overt and relational aggression, prosocial behavior, and social adjustment (peer rejection and peer acceptance) periodically throughout the school year. The researchers conducted a series of hierarchical multiple regression analyses which revealed that, according to student reports, relational aggression accounted for a significant portion of future peer rejection in girls beyond that which was explained by overt aggression. This indicates that relational aggression may function at least somewhat independently of physical and verbal aggression, at least among children.

Victims are at risk for experiencing a number of negative consequences. For instance, relational victimization has been shown to predict the use of self-directed destructive coping strategies among girls. Olafsen and Viemero (2000) investigated various coping behaviors utilized to manage troublesome altercations at school among the following groups: bullies, bully/victims, victims of direct and/or indirect aggression, and children uninvolved with either bullying or victimization. The behaviors associated with these categories, along with participants’ use of various coping strategies (e.g., cigarette smoking, self-injurious behavior) to deal with problems at school, were assessed among 510 fifth and sixth graders. It was observed that females targeted by indirect aggression employed significantly more self-destructive strategies than did casualties of direct bullying, indicating that the former group were predisposed to focus their responses to victimization toward themselves rather than toward others.

Craig (1998) examined the associations among depression, anxiety, victimization, and differing forms of aggression including indirect aggression. Also investigated was the occurrence of indirect aggression and victimization among bullies, victims, and
bully/victims. Based on their self-reported experiences with bullying behaviors and victimization, 546 fifth through eighth grade students were categorized as bullies, victims, bully-victims, or comparisons who did not belong in the other three groups. They also completed instruments assessing social anxiety, depression, and frequency of physical, verbal, and indirect aggression and victimization. The study’s findings revealed that indirect aggression correlated significantly with anxiety.

Findings on relational aggression among children indicate that those who are relationally aggressive are more at risk for experiencing such difficulties as peer rejection and depression as compared to children who do not exhibit these behaviors. Furthermore, perpetration of relational aggression appears to have the potential to “[contribute] significantly to the prediction of future maladjustment” (Werner & Crick, 1999, p. 615). Relational aggression is thought to contribute to peer rejection because, unless the aggressor is able to remain totally unknown to the victim and others, peers are likely to be turned off by, and lose tolerance for, the continuous demonstration of relationally aggression behavior. Crick (1996) investigated the long-term contribution of relational aggression to social maladjustment among 245 third through sixth graders. The students were assessed via a peer-nomination measure of aggression, prosocial behavior, and social adjustment over the span of one school year. Results revealed a moderate relationship between relational aggression and peer rejection among girls.

According to Sullivan and colleagues (2006), psychosocial adjustment during adolescence is crucial, since members of this age group are navigating a life phase during which they are transitioning from having mostly adult-centered relationships (e.g., with parents) to having increasing levels of independence from their caretakers as well as
increases in peer relations. Frequent aggressive behavior during this time, whether in the relational form or otherwise, is likely to interfere with adolescents’ ability to form quality relationships with their peers. Sullivan and colleagues also theorized that relational aggression and victimization would be associated with undesirable externalizing behaviors (e.g., delinquency and drug use). To investigate this idea, the researchers examined the relationships among externalizing behavior and both physical and relational aggression among 276 eighth grade students. Participants reported how frequently they were the perpetrators or victims of either type of aggression. Additionally, the students reported how often they used drugs, consumed alcohol, and engaged in delinquent acts. Results indicated a moderate correlation between relational victimization and delinquent behavior. Additionally, relational aggression correlated significantly with alcohol use and abuse.

The potential problems linked to relational aggression may not only impact aggressors and victims. This form of aggression may also affect those who are not directly associated with relationally aggressive behavior but are nonetheless in settings where such behavior occurs. For instance, relational aggression may contribute to a school atmosphere that is perceived by students as unsafe. Goldstein and colleagues (2008b) conducted a study supporting this claim by investigating how the presence of relationally aggressive behavior may have contributed to 1,335 seventh through twelfth grade students’ opinions of their school environments. Participants completed an online survey assessing how often they observed or were the targets of relational and direct aggression. The students also reported on their perceptions of their schools in terms of safety and social environment. Finally, students were asked to indicate how frequently
they brought a weapon with them to school. Even after controlling for exposure to direct aggression, the researchers discovered that increased levels of exposure to relational aggression were associated with perceptions of the school climate as unsafe. Furthermore, male students who reported frequent encounters with relational aggression were more likely to report carrying a weapon to school. These findings indicate that the presence of relationally aggressive behavior in a school environment contributes to students’ perceptions of these surroundings as negative and dangerous. For some students, this perception appears to compel them to have a weapon in their possession while in this environment.

Relational Aggression in Adults

Most of the research on relational aggression has centered on children and adolescents. Though the literature base on other age groups is growing, much less research has been devoted to adult relational aggression (Schmeelk, Sylvers, & Lilienfeld, 2008). Therefore, as the bulk of the findings above concern relational aggression among children and adolescence, they cannot be assumed to similarly apply to adults. It has been proposed that several correlates discovered among children may emerge at other points across the lifespan as well, though some consequences related to this behavior are likely to be unique to the given developmental stage (Werner & Crick, 1999). For example, in adult settings such as work environments, relational aggression is likely to take on different forms and result in different consequences as compared to relational aggression perpetrated by young children in school or play settings. Researchers have also established that relational aggression during childhood tends to manifest in a more direct, overt manner, such as verbal threats to end a friendship. As
individuals grow older and more mature, they become increasingly adept at utilizing the more covert and devious versions of relationally aggressive behavior (Coyne et al., 2006). Thus, it is likely that adults tend to rely on these more concealed and crafty forms of relational aggression.

The social exclusion and rejection often suffered by victims of relational aggression has been found to be associated with a number of negative correlates, including anxiety and, in severe cases, suicide (Baumeister, 1990). Twenge et al. (2002) hypothesized that the “emotional distress and cognitive disorientation” (Twenge et al., 2002, p. 606) produced by social exclusion may also lead to self-defeating behaviors. A group of 50 undergraduate students completed a personality test and then were misleadingly informed that their scores indicated one of three conclusions, that they would: a) end up alone in life, b) go on to have strong relationships in the future, or c) have a future that was disappointing but not necessarily lonely. The results of two experiments indicated that participants who were led to believe they would experience social exclusion and loneliness were more likely to engage in self-defeating behaviors. Specifically, those who were told that they would end up alone (“future alone” group) engaged in more risk-taking behavior than the group informed that they would experience strong and rewarding interpersonal relationships (“future belonging” group; $d = 1.39$ and $d = 2.43$ for experiments one and two, respectively). In a third experiment, results revealed that members of the “future alone” group chose less healthy behaviors as compared to the “future belonging” group ($d = 1.51$). Finally, the results of a fourth experiment indicated that the “future alone” participants tended to procrastinate more as
compared to the “future belonging” group ($d = 1.00$). Thus, the exclusion associated with relational victimization appears to be associated with a number of negative behaviors.

As mentioned earlier, relational aggression is not linked solely to difficulties for victims but also appears to be associated with problems for perpetrators of this behavior. For instance, it has been discovered that young adults who engage in relationally aggressive behavior also tend to experience peer rejection and exhibit maladaptive eating behaviors as well as features of dysfunctional personality (Linder et al., 2002). Similarly, Werner and Crick (1999) investigated the social-psychological adjustment of relationally aggressive college students and found this behavior to be associated with peer rejection among both men and women. Furthermore, among women, relational aggression was associated with antisocial behaviors, negative relationships, and depressive features. In men, relational aggression was linked to egocentricity. These findings are comparable to the results of studies with child and adolescent populations.

Storch, Werner, and Storch (2003) likewise found relational aggression to be related to a number of indicators associated with poor psychosocial adjustment. One-hundred and five undergraduate athletes completed a peer-nomination instrument of relational aggression and social adjustment, as well as certain scales of the Personality Assessment Inventory (PAI) assessing depressive symptoms, problems with alcohol use, perceived social support, and borderline and antisocial personality characteristics. Female participants reporting high rates of relational aggression also tended to report problems with alcohol and limited use of prosocial behavior. In men, relational aggression was positively correlated with peer rejection.
Further findings regarding the relationship between relational aggression and certain pathological personality features among adults relate to psychopathic traits. As part of a larger study broadly investigating psychopathy among undergraduate students, Miller and Lynam (2003) examined the relationship of psychopathic personality to several variables, including relational aggression. Potential participants were screened, and 211 men and women were selected based on having high or low scores on the Agreeableness and Conscientiousness domains of the five factor model of personality. As part of the study, these participants completed self-report measures of psychopathy and relational aggression, among other measures and laboratory tasks. A significant relationship was discovered between psychopathy and relational aggression, particularly among women.

In a more comprehensive investigation of relational aggression’s personality correlates, Ostrov and Houston (2008) examined the relationships among physical and relational aggression, both proactive and reactive forms, with indices of personality pathology. Six-hundred and seventy-nine male and female university students provided self-report data on their use of proactive and reactive relational aggression as well as proactive and reactive physical aggression. They also completed questionnaires regarding psychopathic traits, characteristics of antisocial and borderline personality disorders, and the reactive versus impulsive nature of their physical aggression. The findings regarding relational aggression revealed a moderate to high correlation between its proactive and reactive forms, as well as between proactive relational and proactive physical aggression, especially for men. However, reactive relational aggression was not significantly related to reactive physical aggression. Reactive relational aggression was found to be related to
borderline but not antisocial symptoms. Proactive relational aggression was more strongly related to premeditated aggression than was reactive relational aggression. Reactive relational aggression was negatively related to fearless dominance, a feature of psychopathy involving traits such as sensation-seeking and glibness. Both forms of relational aggression were significantly related to impulsive antisociality (e.g., deceiving or using others, defiant behavior) and borderline features (e.g., manipulative tendencies), with proactive relational aggression being related to impulsive antisociality for women only. The authors concluded that different forms and functions of aggression appear to each relate slightly differently to various forms of personality pathology among young adults.

Some researchers have studied the manner in which media portrayal of relational aggression and indirect aggression may influence individuals’ own aggressive behavior. Relational aggression is often portrayed in the media and, in many cases, is presented in such a way that viewers may interpret the behavior as acceptable and carried out by attractive individuals who are rewarded for the behavior. Thus, such media portrayals of relational aggressive may contribute to viewers’ learning of this form of aggression. In fact, some research has suggested that observing relational and similar forms of indirect aggression in the media can foster viewers’ own aggressive behavior (Coyne, 2004; Coyne & Archer, 2004; Coyne, Archer, and Eslea, 2004; Huesmann, Moise-Titus, Podolski, & Eron, 2003; Ostrov, Gentile, & Crick, 2006). For instance, Coyne and colleagues (2008) investigated the effects of viewing videos depicting relational or physical aggression. They first conducted a pilot study to verify that the 10 video segments used in the study, all of which portrayed female actors, were roughly equivalent
in terms of excitement level. Physiological indicators of excitement were observed in 22 individuals immediately before, during, and after each video. The participants also provided ratings for each video on various aspects (e.g., excitement-related variables, aggressive content). The researchers subsequently chose one video clip for each of the three categories: physical aggression, relational aggression, and no aggression. Analysis of the pilot study revealed that each clip generated comparable levels of physiological excitement.

The main study involved three conditions based on the three aggression categories noted above, with either 17 or 18 female undergraduate students assigned to each. Participants first provided self-report data regarding their own use of direct and indirect aggression. They then watched the video clip and completed a questionnaire afterwards, reporting background information and responses to questions consistent with the cover story of the study. Participants were then told that they had the opportunity to participate in another study. Those who agreed completed a puzzle completion task during which a female confederate intentionally displayed antagonistic behaviors to elicit the participants’ own aggressive behavior. They then participated in a competitive reaction time test to assess physical aggression, indicated by loudness and duration of noise blasts given to an opponent. They also filled out questionnaires about the experimenter and hostile confederate to observe whether the participants would take the opportunity to “spread rumors” about the confederate. Results indicated that individuals who watched the physical or relational aggression video were significantly more likely to administer louder and longer noise blasts compared to participants in the no-aggression condition. In addition, evaluations of the confederate provided by participants who watched the
aggressive videos were significantly more vindictive as compared to the no-aggression group. No differences emerged between the physical and relational aggression conditions. The researchers concluded that there may be a generalized effect in which the impact of watching media portrayals of aggression may produce various types of aggressive behavior in viewers, regardless of how blatant versus subtle the type of aggression viewed was (Coyne et al., 2008).

Godleski, Ostrov, Houston, and Schlienz (2010) investigated the role of hostile attribution biases for scenarios involving relational provocation, as well as the associated neural processing by measuring the amplitude of individuals’ event-related brain potentials (ERP) in response to such scenarios. Lower amplitude and extended latency of ERP’s are thought to be indicative of poorer efficiency in cognitive performance and have been found to be associated with reactive aggression and hostility. One-hundred and twelve male and female undergraduate students completed a self-report measure of relational and physical aggression. A measure consisting of hypothetical scenarios involving ambiguous relational (e.g., being uninvited to a party) and instrumental (e.g., having a drink spilled on you) provocations was also administered. This measure required respondents to choose one of four potential reasons for the provocation described in order to assess for a hostile attribution bias, or a tendency to interpret others as possessing hostile intent in their behaviors, even in innocuous or ambiguous situations. Participants also underwent an auditory perseveration task to trigger the P300 ERP, thought to indicate the brain activity associated with attention, memory, and information processing.

Contrary to predictions, participants with hostile attribution biases for scenarios involving relational provocation exhibited increased P300 amplitude at one of the three
electrode sites, the site associated with the frontal region of the brain. This suggests greater attending to, and allotment of mental resources for, cues associated with a relationally provoking stimulus. The researchers proposed that this finding, which runs contrary to that found for physical aggression, can be explained by the increased complexity involved in carrying out relational as compared to physical aggression.

Relational aggression likely requires more linguistic and social intelligence to execute and, thus, more cognitive resources may be necessary. Also discovered was prolonged latency for relationally aggressive participants, indicating that the cognitive processing of these individuals may be deficient in the same way as those who are hostile and reactively aggressive.

Most of the literature on relational aggression in older adolescents and adults has focused on peer friendships; however, relational aggression also occurs in the context of romantic relationships (Goldstein, Chesir-Teran, & McFaul, 2008a; Schad, Szwedo, Antonishak, Hare, & Allen, 2008). In fact, romantic relational aggression tends to look somewhat different than relational aggression in peer friendships (Linder et al., 2002). Examples of the former behavior can include flirting with others to ignite a significant other’s jealousy, giving the “silent treatment,” or threatening to terminate the relationship should one’s partner not succumb to the aggressor’s wishes. In this context, the purpose of the behavior is likely often intended to manipulate or control a significant other with the goal of intensifying the “closeness and exclusivity” (Linder et al., 2002, p. 80) of the relationship.

Some researchers have suggested that romantic relational aggression may carry more risk of negative consequences than peer relational aggression given the significant
“emotional investment” that many people place into romantic relationships (Bagner et al., 2007, p. 19). Linder and colleagues (2002) found moderate to large relationships between relational aggression and several aspects of relationship quality among college students. Romantic relational aggression was inversely related to trust and positively related to frustration, ambivalence, jealousy, and anxious clinging. Similarly, Bagner and colleagues (2007) found that romantic relational aggression among college students was positively associated with loneliness, depression, and substance use. Although male and female students did not differ in the frequency with which they engaged in romantic relational aggression, women who used relational aggression in their relationships also reported higher levels of social anxiety.

Goldstein and colleagues (2008a) assessed romantic relational aggression and victimization in terms of its frequency of occurrence and its correlates in four domains known to be associated with physical aggression and peer relational aggression: social-cognitive factors (e.g., viewing aggression as acceptable behavior), trait/dispositional variables (e.g., negative emotionality), relationship characteristics (e.g., insecure attachment), and mental health factors (e.g., depression). Undergraduate students ($N = 479$) reported that romantic relational aggression was a fairly common occurrence, with only 8.2% of participants denying any victimization and only 4% denying any perpetration. While women reported more perpetration of relational aggression than men in romantic relationships, men reported being the victim of such behavior more frequently than did women. Based on their responses, participants were also categorized as victims (low on aggression), aggressors (low on victimization), victims and aggressors, or low aggression and victimization. Participants who scored low in both areas were
found to be the least at-risk group with regards to social-cognitive, trait, relationship, and mental health characteristics, while those high in both aggression and victimization reported the greatest amount of these risk factors. Romantic relational aggression was found to be associated with these areas of risk for both men and women. High rates of exclusivity were also found to accompany relational aggression in romantic relationships. The authors concluded that romantic relational aggression is associated with many of the same negative correlates as relationships involving physical aggression.

Although interest in relationally aggressive behavior has grown considerably in recent years, little research has examined cultural differences in relational aggression. Some studies have been generated on cultural distinctions in terms of gender differences, variations between countries, and different manifestations between heterosexual and homosexual individuals, which will be discussed next.

Relational Aggression and Culture

*Gender*

Research has suggested that gender differences in relational aggression exist among children, with girls tending to display relationally aggressive behavior more frequently than boys (Coyne et al., 2006; Marsee, Silverthorn, & Frick, 2005). For instance, among a group of eleven year old children, girls were found to employ significantly more relational aggression than boys, $d = -0.79$ (Lagerspetz, Björkqvist, & Peltonen, 1988). Furthermore, research using peer nomination instruments have indicated that boys take part in more direct aggression while girls employ more relational aggression (Crick and Grotpeter, 1995).
Findings have been less clear regarding whether gender differences in relational aggression exist among adolescents and adults. As individuals enter the adolescent and adult years, aggressive behavior may begin to reveal itself in its more concealed forms, and the gender differences in relational aggression observed in childhood may begin to fade (Linder et al., 2002). In other words, although there is a well-established disparity between boys’ and girls’ use of relational aggression during childhood, this gender difference may not persist into late adolescence and adulthood.

In one study that failed to find gender differences in relational aggression, Bailey and Ostrov (2008) investigated the behavior of 165 undergraduate men and women regarding physical and relational aggression, used in both proactive and reactive manners. Participants completed a number of self-report measures, including an instrument assessing proactive relational and physical aggression, as well as reactive relational and physical aggression. While men were found to report significantly more use of both proactive and reactive physical aggression than women, no gender differences emerged for relational aggression. In other words, men appeared to be more physically aggressive than the women, though men and women did not differ in their degree of relational aggression. The authors theorized that males may learn during the adolescent years that relational aggression carries less risk of negative social consequences, and as a result may increase their use of this form of aggression while decreasing their use of physically aggressive behavior.

Other studies have found that men and women exhibit similar levels of relational aggression overall, though women and men may be more relationally aggressive than the opposite gender in different contexts. Murray-Close, Ostrov, Nelson, Crick, and
Coccaro’s (2010) survey of 800 women and 587 men between the ages of 25 and 45 found no gender differences in respondents’ overall use of relational aggression. However, women reported engaging in more romantic relational aggression than men, while men appeared to be more relationally aggressive toward peers as compared to women.

Relational aggression also appears to relate to different sets of correlates in women versus men. In a study examining the personality and emotional correlates of relational aggression, with the goal of also clarifying gender differences, self-report data was collected from 134 undergraduate students. Participants completed measures of normal personality based on the five factor model, depression, anxiety, physical aggression, relational aggression, and emotional comprehension and functioning (e.g., empathy, assertiveness). Results included the finding that relational aggression was related to lower agreeableness and deficient overall emotional understanding and functioning, regardless of gender. Relational aggression was also related to higher levels of neuroticism in men and lower conscientiousness, empathy, social responsibility, and interpersonal skills for women. Men reported greater use of physical aggression than women, with no gender differences on the relational aggression measure. Thus, although the use of relational aggression did not appear to differ by gender in this sample, the construct does appear to be associated with different emotional and personality correlates for men as compared to women (Burton et al., 2007).

In the process of investigating the psychometric properties of a comprehensive self-report instrument of various forms of aggression (including physical, property, verbal, relational, passive, and rational-appearing), Verona and colleagues (2008)
discovered relational aggression to be the only form of aggression that did not appear to differ by gender among 823 high school and 744 university students. In a second study with a different sample of 192 undergraduate students, these researchers also investigated anger and personality variables associated with the forms of aggression examined in the first study. While low levels of agreeableness and conscientiousness were similarly related to physical forms of aggression as well as relational aggression and the other non-physical forms of aggression, the latter forms were found to also relate to neuroticism and emotional instability. As in the first study, there were no gender differences on self-reported relational aggression.

Lento-Zwolinski (2007) looked at reactive relational aggression specifically, comparing it to reactive physical aggression among 329 undergraduate men and women. Specifically, this researcher was interested in observing the correlations between these types of aggression with psychological distress, prosocial behavior, and relationship quality. Participants completed self-report measures of these constructs, and results suggested that, overall, reactive relational aggression was reported more frequently than reactive physical aggression. The two constructs were also found to correlate with one another, but only for women. Regarding further gender differences, men reported more use of both physical and relational aggression than women. In men, reactive relational aggression was associated with lower self-reported prosocial behavior and greater desire for exclusivity in relationships. Similarly, exclusive behavior was the construct most strongly related to female relational aggression. Contrary to predictions, a relationship did not emerge between relational aggression and indicators of poor relationship quality among women.
Men’s and women’s perceptions of relational aggression appear to differ, especially when taking into account the gender of the perpetrator and victim. In a study seeking to look at young adults’ normative perceptions of various forms of aggression, as well as whether gender differences were apparent in these views, Nelson, Springer, Nelson, and Bean (2008) administered an open-ended questionnaire to 134 undergraduate students. Participants reported what behaviors they believed their male and female peers tend to employ in order to be mean to other men and women (e.g., “what do most women do when they want to be hurtful or mean to a man?”). Responses were transcribed and coded as one of eight types of aggression, unless a response was not provided or was determined to be overly vague. Among the forms of aggression were direct and indirect relational aggression, non-verbal aggression in the form of a gesture or ignoring/avoiding, verbal aggression, direct and indirect physical aggression, and passive aggression. Verbal and physical aggression were the most common forms reported to be observed by men, while verbal aggression and various forms that can be considered relational (e.g., direct and indirect relational, ignoring or avoiding) were the forms of aggression most frequently endorsed by female participants. In addition, participants tended not to perceive relational aggression as a commonly used form of aggression among men, and women were more likely to be viewed as prone to relationally aggressive behaviors than were men, especially indirect relational aggression perpetrated against other women.

In a study with similar goals, Basow and colleagues (2007) assessed university students’ views of relational and physical aggression, taking into account the gender of the aggressor, victim, and respondent. Three-hundred and fourteen young men and
women read scenarios describing relationally and physically aggressive acts, with
different combinations of perpetrator and target genders. Participants then responded to
questions such as how acceptable, harmful, and distressing they viewed the behavior to
be. They also reported their own perpetration and victimization of each form of
aggression. Physical aggression targeted at women was found to be less acceptable, more
harmful, and more aggressive than relational aggression toward women. Men’s
aggression targeted toward women was the least acceptable of the gender combinations,
regardless of aggression type. Physical aggression by men was viewed as less acceptable,
more harmful, and more aggressive as compared to women’s physical aggression.
However, the opposite pattern emerged for relational aggression, with female relational
aggression being perceived more negatively than relationally aggressive men. Overall,
female participants appeared to view aggression in general with more disapproval as
compared to men. Also, while men reported significantly more physical perpetration and
victimization than women, no gender differences were apparent for experience with
relational aggression. Thus, it appears that young adults may view relational aggression
differently from how they perceive physical aggression. In addition, their views on
relational aggression may also differ depending on the gender of both the aggressor and
victim.

In sum, it is fairly clear that the physical versus relational aggression distinction
discovered among children, with boys tending to be more physically aggressive and girls
tending to employ more relational aggression, does not persist into adulthood. Adult men
appear to be at least as relationally aggressive as women, although women and men may
exhibit relational aggression in different contexts and have slightly differing sets of correlates associated with this behavior.

**Nationality**

A fairly large body of research on relational aggression, particularly with regard to populations of children and adolescents, has accumulated in recent years in the U.S. Some investigation has also taken place in other countries, with a few researchers directly comparing American and foreign samples, and others drawing broad comparisons to previous research conducted in the U.S.

French et al. (2002) assessed relational aggression among children and adolescents in the U.S. and Indonesia. One-hundred twenty students, ages ranging from 9 to 16, made up the Indonesian sample, and the American sample consisted of 104 students from the U.S., ages 10 to 15. All participants responded to open-ended questions about peers whom they disliked and the individuals’ behaviors that made participants dislike them. Responses were then coded into physical, verbal, and relational aggression categories, with relational aggression further divided into “relationship manipulation, social ostracism, and malicious rumors” (French et al., 2002, p. 1146). Even without specific prompting regarding relationally aggressive behavior, participants in both Indonesia and the U.S. cited examples of such behavior. The gender differences that emerged were consistent with prior research on childhood relational aggression in the U.S., with girls being more prone to all three types of relationally aggressive behavior as compared to boys. Although not directly assessed in this study, the researchers suggested that the cultural differences between the U.S. and Indonesia would likely have
implications for the occurrence and types of relational aggression used as well as the contexts within which relationally aggressive behavior is performed.

In the above study, results pertaining to relational aggression were very similar to those found in studies of American children. Some differences in children’s relationally aggressive behavior, however, have been discovered between countries, and these differences may be attributable to cultural differences. Tomada and Schneider (1997) collected teacher and peer reports pertaining to overt aggression, relational aggression, and prosocial behavior of 214 eight to ten year olds in Central Italy. Measures were administered in January and May of a single school year. Results indicated that boys were more overtly aggressive than girls. Contrary to previous findings, however, these researchers failed to discover differences in relational aggression between boys and girls, attributing this finding to features of Italian culture that differ from others including American culture.

Differences in relational aggression may even exist between countries with very similar cultures. For example, Russell and colleagues (2003) collected data from 306 parents in Australia and 341 parents in the U.S. about their parenting styles with their preschool-age children. These two countries are considered to be similar on several dimensions, such as their individualistic orientation and Westernized culture. In addition, teacher reports were obtained regarding the frequency of the children’s sociability, physical aggression, and relational aggression in the school environment. Gender differences similar to those found in previous relational aggression research in the U.S. emerged, such that teachers judged girls to be more relationally aggressive than boys and boys as more physically aggressive than girls. Overall, however, children from the U.S.
were rated by their teachers as being higher in both relational and physical aggression as compared to Australian children. It is possible that, although the U.S. and Australian cultures do share many commonalities, certain differences that do exist between these countries may result in higher rates of aggression among children in the U.S.

Li, Wang, Wang, and Shi (2010) took an intracultural approach to examining the role of cultural values in the overt and relational aggression of 460 adolescents in China. Peer nomination and teacher report data were collected regarding seventh and eighth grade boys’ and girls’ aggressive behavior. The students also provided self-report data regarding their social insecurity, degree of peer conflict, and endorsement of individualistic versus collectivistic views. Results indicated that individualism was significantly related to greater levels of conflict as well as both overt and relational aggression. Greater endorsement of collectivism, on the other hand, was associated with less conflict and was negatively related to aggressive behavior. The researchers concluded that it is important to consider differences within cultures in understanding aggressive behavior.

Thus, the pattern of gender differences in childhood relational aggression found in the U.S. seems to hold true across some countries (French et al., 2002; Österman et al., 1994, 1998; Russell et al., 2003; Schafer et al., 2002) but not others (Hart et al., 1998; Tomada & Schneider, 1997). Because the primary aim of most of the above studies was to examine gender differences, it seems likely that cross-cultural differences might exist in terms of some other uninvestigated aspects of relationally aggressive behavior as well. Several researchers have suggested that potential differences may be in large part due to cultural variations between countries. Although cultural differences within the U.S. may
not be as profound as those that exist between the U.S. and other countries, certain differences do exist. Such cultural variations between regions of the U.S. such as the North and South could translate into differences in terms of relational aggression. Furthermore, the findings of Li and colleagues (2010) support the existence of differences in relational aggression within a single culture.

**Sexual Orientation**

One aspect of group differences that often goes overlooked relates to sexual orientation. Nearly all studies of relational aggression, for example, have ignored participants’ sexual orientation, focusing solely on heterosexual peer or romantic relationships, or at least assuming that the participants were reporting from a heterosexual perspective. Kelley and Robertson (2008) attempted to address this oversight by examining relational aggression and victimization in the peer interactions of homosexual men, as well as the potential function of participants having internalized the homophobic attitudes and behaviors encountered in their lives. After interviewing gay men, ages 18 to 24, to learn about relationally aggressive acts they had experienced or observed amongst their gay peers (including partners, friends, acquaintances, and classmates) during high school and college, the researchers derived three categories of relational aggression: manipulation of relationships, social exclusion, and spreading rumors. They found that relational aggression and victimization are common in a number of contexts among young gay males’ peer relationships. Examples included “outing” someone by disclosing his sexual orientation, excluding an individual because he has neglected to meet a certain standard of “gay aesthetic” (p. 478), gossiping about sexual prowess or promiscuity, covertly criticizing someone for behaving in “too gay” (p. 478) a manner, and spreading
rumors regarding sexually transmitted diseases. Reasons behind relationally aggressive behavior were reported to include insecurity, retribution, jealousy, acquiring an intimate partner, and to preserve one’s social rank or relationships.

Next, Kelley and Robertson (2008) surveyed 100 self-identified gay male undergraduates. Again, their results indicated that relational aggression was a common occurrence in their sample. Results indicated that participants who reported frequent perpetration of relational aggression were also likely to report being frequently victimized. Thus, some results replicated findings of previous relational aggression studies with populations presumably consisting primarily of heterosexual participants. Furthermore, although no significant correlation emerged between relational aggression and internalized homophobia, the latter variable tended to be reported more commonly among participants who also reported frequent victimization.

Relationally aggressive behaviors among gay men may be driven by factors that differ from those typically found among heterosexual samples. For instance, some of Kelley and Robertson’s (2008) participants reported motivations such as regulating gay behavior and appearance, while in prior research, relational aggression has been thought to be the product of such factors as wanting to control another person, obstructing the formation of a new friendship, obtaining acceptance within a peer group by aggressing against unpopular peers, or as an outlet for anger expression (Crick et al., 2007; Gomes, 2007). Certain reported behaviors, such as “outing” and spreading rumors regarding sexually transmitted diseases, seemed unique to this sexually diverse population (Kelley & Robertson, 2008). Thus, the results of this study lend further support to the possible role of cultural differences in relational aggression.
North-South Differences in Aggression

Variations between North and South have been discovered in terms of overt aggression. For example, dating violence is more common in the South than in some other areas of the country (Marquart, Nannini, Edwards, Stanley, & Wayman, 2007). Northerners and Southerners also appear to hold differing beliefs about aggression, such as which types of aggression are acceptable and in what circumstances aggression is appropriately employed (Cohen, Nisbett, Bowdle, & Schwarz, 1996; Ellison, Burr, & McCall, 2003; Marquart et al., 2007; Nisbett, 1993; Vandello, Cohen, & Ransom, 2008). For instance, Southerners tend to endorse physical aggression as acceptable in the case of defending oneself, for use in disciplining children, and to retaliate against insults (Cohen & Nisbett, 1994; Nisbett, 1993; Pennebaker, Rimé, & Blankenship, 1996).

A factor that likely contributes to Southerners’ propensity toward responding aggressively to insults and similar triggers involves what researchers have referred to as a culture of honor (Cohen et al., 1996; Cohen et al., 1999; Nisbett, 1993; Richardson & Latané, 2001; Vandello et al., 2008). In regions where such a cultural feature exists, such as Southern U.S., threats to one’s social standing or reputation, even minor slights, are often retaliated against fiercely and sometimes with physical aggression. The predominant theory that has been proposed to explain the existence of this culture of honor in the South relates to the combination of inadequate law enforcement and prevalence of herding activity in this region during the time period of American history when the frontier was being expanded through the South and West. Many settlers in these areas of the country originally made their living through herding and were likely motivated to protect their livestock, their land, and themselves through whatever means
necessary, especially during a time when law enforcement was not yet well-established. In order to put forth an image that one is not to be provoked or hassled in any way, these individuals’ responses to threats were often intense, perhaps out of proportion to the offense yet viewed as necessary to establish oneself as strong and self-reliant. Although the South is no longer home to a prominent herding economy, this necessity for toughness and ferocity in response to threats may have become part of Southerners’ identities and, thus, has persisted a great deal into modern times (Cohen et al., 1996, 1999; Ellison et al., 2003; Nisbett, 1993; Pennebaker et al., 1996; Vandello et al., 2008).

Cohen (1996) also argues that the history of slavery in the South may contribute to an attitude of support for aggression used for force or disciplinary purposes, such as domestic violence and corporal punishment.

In order to investigate the hypothesis that Northerners and Southerners would respond to an insult differently, Cohen et al. (1996) conducted a series of studies in which each participant was bumped into and subjected to a mild insult from a confederate. Participants in all three experiments were Southern or Northern White male undergraduate students. In the first experiment, the researchers measured the effects of the affront on 83 participants’ emotions and hostile behavior, comparing Northerners’ and Southerners’ reactions to a control group of participants who were not bumped into or insulted. Emotional reactions were assessed using observer ratings of the participants’ emotions in response to the offensive incident. Participants’ subsequent levels of hostility were measured shortly following the bump and the insult by engaging them in three projective judgment exercises, including a word completion task in which they could complete words to make them either hostile or non-hostile, as well as an activity
involving rating the emotions indicated by pictures of facial expressions. In the third judgment task, participants were asked to provide the beginning or ending to each of two scenarios, one not involving an insult and the other involving a man coming on to a friend’s fiancée. Results showed that Northerners appeared more amused by being bumped into and insulted as compared to Southerners, who were more likely to appear angry in response to the incident. While no differences in hostility were evident for the word completion or face rating exercises, Southerners who had been insulted were more likely than control Southerners to conclude the fiancée scenario with a physically aggressive resolution, while no difference existed for Northern participants.

In the second experiment, Cohen et al. (1996) measured participants’ physiological reactions to the insulting incident described above. Before and after the incident, the experimenters obtained cortisol and testosterone samples from 173 participants as indications of their stress levels and readiness to enact aggression, respectively. This experiment also involved an assessment of participants’ proneness to display their “toughness” following the bump and the insult by allowing them an opportunity to subject themselves to electric shock, either in private or in front of confederates. In addition, participants were instructed to read several scenarios in which it was unclear whether or not the fictional person in each scenario was being insulted. After reading each scenario, participants reported on how likely they believed that the situation would result in a physically or verbally aggressive argument. Results revealed that Southern participants who were subjected to the insulting incident were more likely than control Southerners to experience significant increases in their cortisol and testosterone levels, whereas there was no significant difference in these levels for
Northern participants. It was also found that Southerners collectively were more willing to receive higher levels of electric shock when other individuals were present as compared to when they were given this opportunity in private. No significant results were discovered, however, for the scenario predictions.

The third of Cohen and colleagues’ (1996) experiments dealt with whether Southerners would view their reputations as being damaged by the confederate’s insult, as well as whether they would subsequently act more aggressively and forcefully. Of the 148 individuals in this experiment, each participant in a public-insult condition was bumped into and insulted in front of another person and, shortly after, was required to estimate the observer’s impression of him. Following the insulting incident, each participant was forced to walk down a narrow hallway while a different confederate walked toward him, showing no intention of moving out of the way. The researchers measured how closely participants got to the confederate before conceding and moving aside for him. Participants then entered a room where they met and shook hands with another confederate who rated how firmly the participant shook hands, the participant’s degree of eye contact, and how domineering versus submissive the participant seemed. Finally, participants filled out surveys about stereotypically masculine behaviors and were either led to believe that their answers would be private or that they would be required to discuss their responses with other participants. It was discovered that Southerners who were insulted in front of an observer were more prone to view their reputations as having been damaged, while there was no difference for Northerners. Results also indicated that Southerners who had been bumped and insulted approached the confederate to a greater extent before yielding as compared to control Southerners.
Insulted Northerners walked only slightly further toward the confederate compared to un-insulted northerners. Southern participants who had been insulted were also rated as giving stronger handshakes and being more domineering than those who had not, while little difference existed between insulted and control Northerners. No significant effects emerged regarding the public versus private nature of participants’ questionnaire responses.

It is important to note that, in all three experiments, there were few differences among both Southern and Northern participants who were in the control conditions and, thus, were not insulted or provoked in any way. Clear differences were evident only among Southerners, however, when an insult was involved. Results indicated that, following an insulting situation, Southerners were more emotionally and physiologically distressed, tended to view their reputations as having been damaged when insulted in front of others, showed more cognitive and physiological readiness for aggression, were more prone to act aggressively when subsequently challenged, and were more likely to be perceived as domineering immediately following the insult. Thus, the overall findings of the Cohen et al. (1996) study fit with the notion of a culture of honor in the Southern U.S.

In a later article, Cohen and colleagues (1999) proposed that differing attitudes and customs regarding politeness and conflict resolution may also play a role in the variations between North and South in terms of aggression. These researchers proposed a pattern that begins with cultural norms in the South related to the image of Southern politeness and hospitality. This cultural feature may lead Southerners to “tread lightly” (p. 258) and avoid offending or creating confrontation with others. This tendency to avoid conflict, even related to only minor disputes, may leave many such conflicts
unresolved. Meanwhile, tension and anger related to the conflict may not be communicated and build up over time, potentially resulting in later aggressive outbursts. The authors further explained that, because of their norms for politeness, Southerners may be less adept than Northerners at navigating what Schelling (1966) referred to as coordination games, which involve the ability of two persons involved in an interpersonal interaction to effectively convey to one another, often subtly, when one of the individuals has upset or offended the other. Examples of such signals include sarcasm, indirect hints, or candid statements of distress or anger. Southerners, however, may be relatively unfamiliar with these tools and, thus, be “unable to signal their anger in socially appropriate ways” (p. 259), instead tending to suppress their irritation which perpetuates the cycle described above. Northerners, on the other hand, may be more inclined to “use anger, rudeness, and insults as regulating mechanisms” (p. 259) for handling conflicts.

In order to test this theory, Cohen et al. (1999) performed three experiments using Northern and Southern White undergraduate males. In the first, a confederate delivered several annoyances and insults to 27 Northern and 22 Southern participants who were rated on their expressed levels of anger and amusement following each provocation from the confederate. Experimenters also rated the apparent risk of both verbal and physical confrontation after each annoyance was issued. Results indicated that Northerners generally displayed their irritation early in the series of provocations, with their reactions progressively increasing in hostility through approximately the fifth annoyance and then leveling out. Southern participants, on the other hand, were much more likely to contain their frustration with the confederate until around the fifth annoyance, at which time their
hostile reactions spiked. In fact, two Southern participants eventually physically attacked the confederate.

In the second experiment, 46 Northern and 47 Southern participants observed recordings of sessions from the first experiment, although the tapes were stopped before participants could observe the outcome of the interaction. They were instructed to rate the videotaped participants’ levels of anger and amusement following each annoyance. In addition, they were asked to describe what they believed the videotaped participant would do next as well as the likelihood that the experimental session would eventually have to be terminated due to potential escalation to the point of violence. In response to observing the two sessions, which ultimately ended in a physical altercation between the videotaped participant and the confederate, Southerners were less likely than Northerners to perceive the situation as hostile and potentially resulting in violence. In addition, as compared to Northerners, Southerners were five times more likely to guess incorrectly regarding which of the videotaped individuals would eventually “blow up” (p. 269). Thus, the results of experiments one and two suggest that Southerners may be less practiced than Northerners in their ability to effectively express and recognize indications of anger which may have otherwise helped to diffuse conflict situations.

Finally, in Cohen et al.’s (1999) third study, the experimenters examined homicides initiated by verbal arguments among White males, ages 15 to 39, between the years 1976 and 1983. They compared these data to Levine and colleagues’ (1994) data on friendliness and helpfulness in several cities throughout the U.S. It was found that more “argument-related homicides” (p. 270) took place in Southern locations which were deemed to be more polite, while fewer such homicides occurred in Southern cities rated
as less polite. This finding lends support to the notion that politeness norms in the South may contribute to violence in this region.

Vandello and colleagues (2008) suggested that Southern men may misjudge the degree to which “honor norms are internalized among their peers” (p. 164). For example, regardless of one’s personal view regarding whether aggression is called for in a given situation, an individual may perceive that his fellow Southerners would behave aggressively in such situations and, thus, this belief may influence his behavior such that he conforms to the standard which he presumes to exist. Individuals may also fear shame and diminishment of their masculinity if they were to fail to live up to the perceived norms regarding aggression, whether they truly exist or not. Similarly, Southerners may be hypervigilant to signs of approval or encouragement of aggressive behavior from peers, even when such signs of endorsement are absent or ambiguous.

To investigate these notions, Vandello et al. (2008) carried out a series of studies, beginning with having 82 Northern and 83 Southern White undergraduate men read scenarios depicting aggressive situations and describe how they would respond to the situations as well as how they believed other men would behave in such situations. The participants, both Northern and Southern, judged that others would behave more aggressively than the respondents themselves in response to the scenarios. This difference was particularly large for Southerners, indicating that this group may tend to believe that others condone physical aggression even though, individually, aggression is not seen as the most desirable response.

In the second experiment, Southern (25 male, 25 female) and Northern (24 male, 22 female) White undergraduate participants observed a verbal altercation between two
confederates, one of which was the “victim” and the other the “perpetrator” who supposedly knowingly stepped on the victim’s glasses case and failed to acknowledge or apologize for the act. Immediately after the ensuing altercation, the victim prompted the participant with a series of questions that differed according to whether the participant was in the “apologetic victim” condition or the “hostile victim” condition. The tone of participants’ responses to these prompts was rated according to how encouraging versus discouraging of aggression they were. Following debriefing, participants also provided self-reports regarding their perceptions of the victim and perpetrator, as well as their own reactions to the altercation including what types of impressions they believed they gave the confederates. Results of this experiment revealed only gender differences in terms of encouragement of aggression, with male participants tending to be more encouraging than females. No differences existed between Southerners and Northerners.

The final experiment conducted by Vandello et al. (2008) tested whether Southerners would be more likely to perceive indications of approval regarding aggression even when such signals were ambiguous. Twenty-eight Northern and 25 Southern White undergraduate men viewed videotapes depicting experimental sessions from the previous study, and participants were instructed to rate the videotaped participant’s level of encouragement of aggression as well as whether the participant on the tape appeared to be conveying encouragement of aggression, apology, and/or forgiveness. Participants viewed five tapes, two of which illustrated reasonably clear intent on the part of the videotaped participant to convey encouragement or discouragement of aggression. In the remaining three tapes, participants’ responses to the victim were fairly indistinct. Results revealed that, for all five tapes as well as for the
ambiguous tapes only, Southern participants were more prone to believe that the videotaped participant had encouraged the victim to retaliate aggressively. No differences emerged between Northerners and Southerners regarding the particular behaviors that participants were encouraging the victims to carry out. Thus, the results of all three experiments led the authors to suggest that Southern men may miscalculate their peers’ attitudes toward aggression as well as interpret cues from others as being supportive of aggression, subsequently encouraging them to act in ways that fit with their erroneous perceptions, thus perpetuating a cycle of aggression.

Clearly, discrepancies exist between North and South in terms of aggression as it has traditionally been studied (i.e., overt verbal and physical aggression). However, a major limitation of these studies is that the majority involved White male participants. We continue to know little about regional differences in women’s aggression. In addition, it is not known whether regional differences exist with regard to the relational form of aggression. It seems particularly likely that differences in relational aggression may exist considering the norms for politeness thought to exist among Southerners as well as their related tendencies to inhibit outward expression of anger, at least initially. Thus, they may resort to less direct means of conveying their anger, such as relational aggression.

Southern Distinctiveness

Geographical regions can be thought of as more than a physical expanse of land. Smith (1999) argues that people tend to “invest meaning in the places they inhabit and create… whether [they] construct that meaningful place as a street, neighborhood, hollow, city, or region” (p. 2). Additionally, region can be thought of as consisting of a “mental landscape… a series of settlements tied together by mental concepts” (pp. 7-8).
Furthermore, the differences between disparate subcultures belonging to separate regions tend to manifest themselves in the form of differing attitudes, traits, and actions (Carter & Borch, 2005). For instance, Southerners tend to have more conservative views about what constitutes appropriate behavior for women as compared to the rest of the U.S. (Carter & Borch, 2005; Gillem, Sehgal, & Forcet, 2002). In fact, several authors have argued that the South is so different from other U.S. regions on a number of dimensions that it represents a distinct cultural region inhabited by a distinct ethnic group (Killian, 1970; Reed, 1983; Stein & Hill, 1977; Tindall, 1976).

In a review of the data from the 1972-1982 General Social Surveys (GSS), Hurlbert (1989) investigated the ways in which the South varies from other U.S. regions. Only White respondents were included in the analyses based on the argument that Southern distinctiveness may only apply to this particular group of Southerners. Dimensions thought to be distinctly associated with Southern culture were compared with the New England, Middle Atlantic, East North Central, West North Central, Mountain, and Pacific regions of the U.S. Significant differences emerged on factors such as moral/religious views, racial attitudes, political attitudes, and attitudes toward women, with the South tending to be associated with a more conservative position on each of these issues. With regard to attitudes toward women specifically, the Hurlbert study found that White Southerners were more likely to believe that men are more appropriate for political positions while women are more suited for domestic activities (i.e., managing the household). Southern respondents were also more likely to assert that they would be disinclined to vote for a competent female candidate for U.S. President.
In a slightly more recent review of Americans’ gender role attitudes, Rice and Coates (1995) analyzed GSS data from 1972-1993 involving survey questions relating to female gender roles. Questions asked about issues such as whether women should be employed, stay at home with their children, or be involved in political leadership positions. Data from all respondents in the Southern states were incorporated, including non-Southern born individuals as well as both Black and White participants. Southerners and non-Southerners did not differ on whether women should stay at home with their children, and the researchers discovered a slight, gradual trend toward convergence in attitudes between the South and non-South across time. However, Southerners were significantly more conservative in their views on the desirability of women’s employment outside the home and involvement in politics. Thus, although gender-related views of Southerners and non-Southerners may gradually be meeting a point of agreement, it seems that certain differences in gender-related attitudes continue to persist. The researchers argued that cultural differences are a likely explanation for these regional differences, particularly for White individuals. Considering racial and gender differences in attitudes among Southerners, it is also interesting to note that Black men appeared to possess the most conservative ideas about gender roles as compared to the other three groups, followed by White men, White women, and finally Black women, who were found to have the least conservative gender-related attitudes of the four groups. Even more recently, Carter and Borch (2005) utilized GSS survey data from 1974 to 1998 and likewise discovered that Southern respondents endorsed more traditional gender role attitudes. Again, however, Americans as a whole were observed to hold increasingly liberal views about women over time.
Twenge (1997) took a different approach to examining regional differences in attitudes toward women by conducting a meta-analysis of studies utilizing the Attitudes Toward Women Scale (AWS) from 1970 through 1995 with college undergraduate populations. Southern men and women were found to be somewhat more conservative in their scores as compared to their non-Southern counterparts. There was also an indication of a gradual trend toward more liberal or feminist scores for men and women regardless of region. Thus, although Americans as a whole may gradually be moving away from conservative views, there continues to be a gap, with Southerners tending to hold more traditional attitudes on issues such as gender roles as compared to other regions. Next, it will be argued that these differences in attitudes toward women result in actual variations in the characteristics of Southern versus non-Southern women.

Southern Women

Several authors have depicted Southern women as a distinct group with characteristic traits (Dillman, 1988; Rich, 1999). For instance, they have been described as graceful, charming, traditional, kind, and feminine beings who always employ good manners and strive to look their best (Rich, 1999). Early indications of the contrast between Southern and non-Southern women can be seen in the argument that, during the women’s suffrage movement in the U.S., speeches given by Southern advocates exemplified a rhetoric of request, while Northern activists communicated a rhetoric of demand (Young, 2002). This difference is reminiscent of the more general contrast between Northerners and Southerners described above, with the latter tending to be viewed as more courteous and mild-mannered than the former, who tend to be seen as more direct and argumentative.
In a study that included an evaluation of existing stereotypes about Southern women, 63 university students rated this group of women on a scale from -3 to +3 in terms of how negative versus positive they perceived them to be on a number of traits. Themes of traits found to be associated with Southern women included traditional feminine traits such as being reserved, gentle, and deferent toward men. Other prominent traits indicated by respondents included having an accent, physical attractiveness, being rich or privileged, cooking, living in a farming or rural setting, and being uneducated. Most of these traits were rated as being positive or roughly neutral, with uneducated being the only major trait associated with this group with a significantly low rating (Dye, 2008).

Some of these views may not simply be stereotypes, however. Middleton-Keirn (1988) examined, via open-ended questions, whether 105 Southern women could be distinguished from 180 Western women on certain views related to gender role. Participants were predominately White and had lived in their respective regions for the majority of their lives. Results indicated that Southern women were indeed more likely to report attitudes such as the importance of femininity and men’s respect for women, as well as supporting patriarchal family structures. The author pointed out that such views are not found exclusively in the South but appear to be held with more resolve and consistency in this region.

The modern Southern woman does not appear to have captured the attention of today’s social science researchers. Some of the most recent academic writings on Southern women, however, support the characterization of Southern women as those who have been socialized to be hospitable and “ladylike” (Dillman, 1988, p. 5), which are
traits inconsistent with direct expression of anger. As the following quote would suggest, 
Southern women may not be expected to exhibit very forceful, direct, or angry behavior:  
“The term Southern woman [italics in original] conjures up a specific cultural image…  
she is a lady in her innocence, including the absence of knowledge of vulgar topics and  
language. She is modest in her concerns, dress, and demeanor. Her timidity, never marred  
by assertiveness or anger, is complemented by her submissiveness…. ” (Lynxwiler &  
Wilson, 1988, p. 113). Thus, expectations such as these for the behavior of Southern  
women, in addition to the potential consequences of going against these expectations  
discussed below, may lead them to employ less direct forms of aggression when angry.  

Traditional Gender Role Attitudes  
Traditional, as opposed to egalitarian, views regarding gender roles may be  
particularly prominent in the South as compared to the North. Gender role attitudes are  
defined as “beliefs about appropriate roles for men and women” (Berkel, Vandiver, &  
Bahner, 2004, p. 120) and exist on a spectrum from very traditional to very egalitarian.  
Those who hold more traditional gender role attitudes tend to base their expectations for  
behavior and interactions with others on preconceived notions of what traits and  
behaviors are stereotypically associated with a certain gender (Berkel et al., 2004).  
Traditional attitudes include the belief that women are weak, defenseless, and in need of  
the authority and shielding of the stronger and more capable male gender. Individuals  
who endorse these traditional views are also likely to feel that women are particularly  
suited for certain activities and responsibilities, such as raising children and keeping up  
the household (Larsen & Long, 1988). Egalitarian gender role attitudes, on the other  
hand, support equality in various life roles and include believing in the rights of women
to determine what they say and do (e.g., language, behaviors, hobbies, occupations) based on skill and personal choice rather than a limited range of societally-determined options based on gender (Larsen & Long, 1988). Individuals with egalitarian attitudes tend to interact with others and interpret behaviors independent of gender (Berkel et al., 2004).

Traditional gender role attitudes have been found to be associated with certain variables, such as frequency of religious service attendance (Willetts-Bloom & Nock, 1994). It has also been found that young women with either egalitarian or traditional gender role attitudes tend to exhibit more sexual behavior that is risky as compared to those whose attitudes fall toward the middle of the traditional-egalitarian continuum (Leech, 2010). Traditional attitudes have also been linked to negative attitudes toward women, attitudes toward use of force against a marital partner (Finn, 1986), violence perpetrated against women, acceptance of physical and sexual violence, belief in rape myths (Burt, 1980; Mayerson & Taylor, 1987), and blaming of domestic violence victims (Willis, Hallinan, & Melby, 1996). Thus, degree of traditionalism in gender role attitudes clearly has implications for aggression-related views as well as for behavior, including certain behaviors related to aggression.

Costs of Violating Gender Norms

Part of what drives traditional gender role attitudes, at least among women, may relate to the perceived costs of defying what women believe to be culturally appropriate norms for their behavior. Violations of prescriptive norms governing acceptable gender-specific behavior for women (e.g., timidity, modesty, politeness, etc.) have been found to result in negative consequences for women (Costrich, Feinstein, Kidder, Marecek, & Pascale, 1975; Rudman, 1998; Rudman & Glick, 1999, 2001). For example, men who
exhibit direct, assertive behavior, in which their competence and intelligence are emphasized, tend to be perceived as capable, powerful, and self-assured, while women engaging in such behavior are often viewed as pushy, masculine, and aversive. The workplace provides a particularly useful forum for illustrating the effects of such a difference. Women in professional settings may find themselves in a predicament wherein confident, direct behavior enhances how others view their qualifications and performance yet negatively impacts how well-liked they are by their co-workers.

A meta-analysis of research on bias against women in leadership roles found that female leaders tended to be appraised more negatively relative to their male counterparts, particularly when the leadership style was especially directive or authoritarian (Eagly, Makhijani, & Klonsky, 1992). One female author who identifies as Southern offered a subjective explanation for this, stating that a woman who conducts herself in a masculine way nullifies men’s natural instinct to respect and protect women and elicits an aggressive reaction to such non-traditional behavior (Rich, 1999).

To investigate the possibility that gender roles might lead individuals to devalue women in leadership positions, Butler and Geis (1990) assessed undergraduate participants’ affect by observing their nonverbal reactions to both male and female leadership behaviors during ten-minute group interactions. Each group consisted of one male and one female participant as well as one male and one female confederate, and each group of four was asked to work together on a group project. Three conditions were employed, each varying according the degree to which the male confederate, female confederate, or both assumed an assertive, capable leadership role. The pleased versus displeased nature of participants’ nonverbal reactions to both male and female leadership
behaviors was rated by hidden coders during the group activities. In addition, following the exercise, participants provided their opinions regarding the leadership proficiency and personality characteristics of their fellow group members. Participants also responded to items assessing their bias toward group members based on gender as well as gender bias in general. Results indicated that, compared to male confederates exhibiting leadership behaviors, participants displayed fewer positive and more negative responses toward female leaders during the group activity. In addition, as indicated by ratings provided after the exercise, participants were more likely to perceive male leaders in a positive light, assigning traits such as intelligence, skill, and ability, while female leaders’ behavior was more associated with traits such as bossiness and emotionality. Furthermore, participants’ affective responses, which were presumably at least partly subconscious, differed from their conscious, more egalitarian responses to direct questions about gender bias. The researchers concluded that, because the leadership behavior from women violates individuals’ expectancies for how women should conduct themselves, such behavior elicits unfavorable perceptions of the women and negative affective responses to their behavior.

Because Southerners appear to value traditional female gender roles more than Northerners, perhaps it is the case that Southerners, especially Southern women, also perceive higher costs for defiance of such norms and, therefore, are all the more likely to maintain behavior that is within what they perceive as socially acceptable limits.

The Present Study

While most aggression research has focused on overt aggression, the importance of relational aggression is becoming increasingly clear as research accumulates on its
meaning, correlates, and destructive potential. Given the differing social “rules” and expectations for acceptable behavior that may exist between the Northern and Southern U.S., it is possible that Southern individuals, particularly women, may be especially prone to employing less overt forms of aggression. Northern norms, on the other hand, may lend themselves to more overt aggression. Northern and Southern women may also differ in their expectations for the costs of violating prescriptive norms for gender (Rudman, 1998; Rudman & Glick, 1999, 2001). It may be the case that Southern women anticipate greater costs for lack of compliance with traditional female gender roles and, thus, are more likely to exhibit behavior that they perceive as more feminine and socially acceptable.

The primary question of interest addressed by the current study, then, concerns the presence of regional (North versus South) differences in relational aggression, attitudes about aggression, and/or aggressive behavior. Specifically, the following research questions were posed:

1. Are there regional differences in levels of general/peer relational aggression?
2. Are there regional differences in levels of romantic relational aggression?
3. Are there regional differences in attitudes about the acceptability of relational aggression?
4. Are there regional differences in egalitarian gender role attitudes?
5. Are egalitarian gender role attitudes associated with relational aggression?
6. Are egalitarian gender role attitudes associated with romantic relational aggression?
7. Independent of physical aggressiveness, are gender role attitudes associated with relational aggression among women?

8. Independent of physical aggressiveness, are gender role attitudes associated with romantic relational aggression among women?

The results of the statistical hypotheses included:

1. Southern participants scored higher on general/peer relational aggression (i.e., higher SRASBM general/peer subscale scores) than Northern participants.

2. Southern participants scored higher on romantic relational aggression (i.e., higher SRASBM romantic subscale scores) then Northern participants.

3. Southern participants did not report more positive attitudes toward relational aggression on the modified NOBAGS compared to Northern participants.

4. Southern participants reported more traditional gender role attitudes (i.e., higher scores on the TESR) than Northern participants.

5. Scores on the TESR (i.e., more traditional gender role attitudes) were positively associated with general/peer relational aggression.

6. Gender role attitudes were positively associated with romantic relational aggression.

7. Independent of physical aggressiveness, gender role attitudes did predict general/peer relational aggression among women.

8. Independent of physical aggressiveness, gender role attitudes did not predict romantic relational aggression among women.
CHAPTER II

METHODS

Participants

Data were collected from 577 participants. However, the responses from 40 participants who reported that they had not lived continuously in either the North or South since the age of 4, including those who reported having lived the majority of their lives in the West or Midwest, were excluded. Additionally, data from 32 participants were excluded due to inconsistent responding on a scale developed for use in this study consisting of eight pairs of true-false items that should be answered opposite of one another. Data were dropped if five or more pairs were marked inconsistently by a given respondent. This cutoff was determined based on visual examination of the data and the fact that it falls two standard deviations above the mean of 2.

Participants for whom data were analyzed included 288 (71.5% female) undergraduate students from The University of Southern Mississippi (USM) and 217 (79.3% female) undergraduate students from Millersville University (MU), a university located in central Pennsylvania. At an alpha of .05, a sample of this size has the power of more than 0.95 to detect moderate effects. Participants’ ages ranged from 18 to 51 ($M = 21.24; SD = 4.54$). The majority of participants reported their race as either White (65.1%) or African American (26.9%), with other represented racial groups including Hispanic (3.2%), Asian (1.4%), Native American (0.2%), and Other (3.2%). Regarding school classification, the sample consisted of 28.7% freshmen, 26.3% sophomores, 26.1% juniors, 18.2% seniors, and 0.6% other. The most common academic major reported by participants was psychology (31.5%).
As part of the demographic portion of the survey, participants reported whether they have lived continuously in the North or South since the age of 4, a cutoff used in past research examining regional differences between Northern and Southern U.S. (Dress, Kreuz, Link, & Caucci, 2008). The North was defined as including states in New England (Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island) and the Middle Atlantic (New York, New Jersey, and Pennsylvania). The South included states in the South Atlantic (Delaware, Maryland, West Virginia, North Carolina, South Carolina, Georgia, Florida, and District of Columbia), East South Central (Kentucky, Tennessee, Alabama, and Mississippi), and West South Central (Arkansas, Oklahoma, Louisiana, and Texas), as defined by the General Social Survey (n.d.). In the Northern sample (43% of the overall sample), the majority of participants reported growing up in Pennsylvania (95.9%), with the remaining Northern participants being from New Jersey and New York. Among the Southern participants (57% of the overall sample), the majority reported being from Mississippi (80.9%), Louisiana (10.4%), or Alabama (6.3%). Less than 3% of the Southern sample reported being from other Southern states such as Texas, Georgia, and North Carolina.

Consistent with prior research (Dress et al., 2008), participants were also asked to rate the town in which they spent the majority of their life on a 6-point urban scale to ensure that any related differences did not contribute to variations found between regions, as individuals who live in more urban locations tend to possess less traditional gender-role attitudes as compared to people living in more rural areas (Carter & Borch, 2005). The majority of participants reported their hometown’s urbanicity as being in the moderate range (50.1%), with a smaller number of participants endorsing the more
extreme ends of the spectrum between fairly (16.4%) or very rural (12.9%) and fairly (12.3%) or very urban (8.3%).

Instruments

*Self-Report of Aggression and Social Behavior Measure (SRASBM)*

Relational aggression was assessed using select subscales of the Self-Report of Aggression and Social Behavior Measure (SRASBM), originally developed by Morales and Crick (1998). Respondents answer items according to a seven-point Likert scale, ranging from 1 (“not at all true”) to 7 (“very true”). Item scores on a given subscale are summed to determine the subscale score. The most relevant portions of this instrument include the 5-item proactive relational aggression, 6-item reactive relational aggression, and 5-item romantic relational aggression subscale. Though the instrument does not include enough romantic relational aggression items to divide into proactive and reactive subscales, the subscale does include items assessing both types of relational aggression in this context. In addition to the subscales mentioned above, the 4-item peer relational victimization and 5-item romantic relational victimization subscales were administered for exploratory purposes. Most of the SRASBM subscales have demonstrated adequate internal consistency, with Cronbach’s alphas ranging from .71 to .87 (Bailey & Ostrov, 2008; Goldstein et al., 2008a; Lento-Zwolinski, 2007; Linder et al., 2002; Miller & Lynam, 2003; Murray-Close et al., 2010; Ostrov & Houston, 2008; Schad et al., 2008). However, the internal consistencies of the proactive relational aggression and romantic relational aggression subscales have sometimes fallen slightly below .70 (e.g., Murray-Close et al., 2010; Ostrov & Houston, 2008). This has led some researchers to combine the proactive and reactive relational aggression subscales into a general/peer relational
aggression subscale (e.g., Czar, Dahlen, Bullock, & Nicholson, 2010). In our recent work, we found alpha coefficients of .81 and .71 for the general/peer relational aggression composite and romantic relational aggression, respectively (Czar et al., 2010). High levels of test-retest reliability for some subscales ($r = .84$ for proactive relational aggression, $r = .75$ for reactive relational aggression) have also been found (Ostrov & Houston, 2008). The predictive validity of the proactive and reactive relational aggression subscales was supported by Murray-Close et al. (2010) through establishing their relationship to theoretically related constructs as well as their unique associations with relevant variables. For instance, both scales correlated significantly with anger, hostility, and impulsivity, though the reactive scale showed a stronger relationship to these constructs as compared to the proactive scale. Also, consistent with predictions, the reactive scale was uniquely associated with history of abuse, hostile attribution bias, and distress evoked by relational provocation scenarios. Ostrov and Houston (2008) also discovered the reactive and proactive scales to be uniquely related to indicators of impulsivity and psychopathic traits, respectively. In addition, a confirmatory factor analysis conducted by Murray-Close et al. (2008) indicated a good fit between the data and the theoretical factor structure and hypothesized model.

Aggression Questionnaire (AQ)

The 29-item AQ, developed by Buss and Perry (1992), was used to measure overt aggression among participants. The AQ was created by revising Buss and Durkee’s (1957) Hostility Inventory and is intended to measure general aggressive tendencies, what Archer and Webb (2006) refer to as “trait aggression” (p. 464). This measure has been studied extensively in university populations (Archer & Webb, 2006; Bernstein &
Gesn, 1997; Bryant & Smith, 2001; Felsten & Hill, 1999; Harris, 1995; Harris & Knight-Bohnhoff, 1996) and has been translated into several languages (Ando et al., 1999; von Collani & Werner, 2005; Fossati, Maffei, Acquarini, & Di Ceglie, 2003). Respondents rate each item according to a five-point Likert scale ranging from 1 (“extremely uncharacteristic of me”) to 5 (“extremely characteristic of me”). The instrument is comprised of four empirically-derived subscales measuring “subtraits” (Diamond, Wang, & Buffington-Vollum, 2005, p. 553) of aggression: physical aggression, verbal aggression, anger, and hostility. Cronbach’s alphas for the subscales have been reported as ranging from .72 to .85. Buss and Perry (1992) also reported test-retest reliabilities ranging from .72 to .80. There is evidence for the discriminant and convergent validity of the subscales, including a negative correlation between education level and the anger, verbal aggression, and physical aggression scales (Harris & Knight-Bohnhoff, 1996) and the ability of the hostility scale to predict anger in response to mistreatment (Felsten & Hill, 1999). The AQ has also been found to be correlated with other measures of aggression (Buss & Perry, 1992; Harris & Knight-Bohnhoff, 1996).

Adapted Normative Beliefs about Aggression Scale (NOBAGS)

The original Normative Beliefs about Aggression Scale (NOBAGS; Huesmann & Guerra, 1997) is a 20-item self-report measure inquiring about respondents’ beliefs about overt forms of aggression. Though this instrument has primarily been used with child and adolescent samples, versions have been developed for use with adults. The present study used Goldstein and colleagues’ (2008a) 14-item version of the NOBAGS, developed for use with adult samples, that includes both overt and relational aggression items. Five items are intended to assess participants’ normative beliefs about relational aggression, or
how acceptable they believe relational aggression to be in general, such as, “In general, it is OK to spread rumors about people.” Possible responses range from 1 (“It’s perfectly OK”) through 4 (“It’s really wrong”), with higher scores indicating that a respondent views relational aggression as highly acceptable in general. This version has demonstrated adequate internal consistency ($\alpha = .70$); however, evidence of validity for this version has not been published.

**Traditional Egalitarian Sex Roles Scale (TESR)**

This 20-item measure, developed with undergraduate students by Larsen and Long (1988), was used to assess the degree to which respondents’ gender role attitudes are traditional versus egalitarian. Items are presented with response choices ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). An individual receiving a high total score endorses more traditional attitudes toward behaviors that are appropriate for men and women, while lower scores are indicative of more egalitarian gender role attitudes. The instrument developers reported a split-half reliability coefficient of .85, and .91 when employing the Spearman-Brown Prophecy correction formula. They also reported evidence of the convergent and construct validity of this instrument, established by demonstrating its relationships to other measures of gender role orientation scales as well as theoretically related constructs, such as traditionalist thinking and authoritarianism (Larsen & Long, 1988).

**Procedure**

Participants at USM were recruited using the university’s web-based research system, Sona (http://usm.sona-systems.com/) and received research credit for participating as specified by departmental policy (i.e., one-half credit earned for each 30
minutes of participation time required for online research participation). Participants at MU were recruited through verbal announcements and passing out paper slips requesting their participation in classes, as well as emails forwarded to students from their instructors. Students at MU were provided with the link to the survey in class and, upon completion of the online questionnaires, printed out a page provided at the end of the survey to give to professors to verify participation. The amount of credit earned for MU students’ participation was at the discretion of each individual MU professor but was likely comparable to that received by participants at USM.

All questionnaires (see Appendix A), as well as demographic data (see Appendix B) and an informed consent form specific to each of the two universities (see Appendix C), were completed in the form of an online survey. The survey required approximately 30 minutes to complete, and participants received research credit for their participation. This study was approved by the Human Subjects Protection Review Committee at The University of Southern Mississippi and the Institutional Review Board for the Protection of Human Subjects at Millersville University (see Appendix D).

Statistical Analyses

The results of the statistical hypotheses developed prior to conducting the current study, derived from the research questions specified in the Introduction, are as follows:

1. Southern participants did score higher on general/peer relational aggression than Northern participants.

2. Southern participants did score higher on romantic relational aggression than Northern participants.
3. Southern participants did not report more positive attitudes toward relational aggression than Northern participants.

4. Southern participants did report more traditional gender role attitudes than Northern participants.

5. Gender role attitudes were positively associated with general/peer relational aggression.

6. Gender role attitudes were positively associated with romantic relational aggression.

7. Independent of physical aggressiveness, gender role attitudes did predict general/peer relational aggression among women.

8. Independent of physical aggressiveness, gender role attitudes did not predict romantic relational aggression among women.

Before evaluating the statistical hypotheses, preliminary analyses were performed to ensure the integrity of the data and facilitate subsequent data analysis. Internal consistencies were computed via coefficient alpha for all measures presumed to assess unitary constructs. Next, exploratory analyses of key study variables by gender were conducted in order to understand the possible role of gender and inform subsequent reporting of descriptive data. Measures of central tendency and variability were computed on all variables of interest. Preliminary analyses were also conducted to determine the degree to which the two samples may differ on non-targeted variables, such as race and urbanicity.

Following preliminary analyses, Hypotheses 1, 2, 3, and 4 were each tested via one-way (Region) analyses of variance (ANOVAs). Hypotheses 5 and 6 were tested via
one-tailed, zero-order correlations. Hypotheses 7 and 8 were evaluated using two hierarchical multiple regression equations. In both regressions, the physical aggression subscale of the AQ was entered on Step 1, and the TESR was entered on Step 2. One regression was conducted for each major subscale of the SRASBM instrument (i.e., the general/peer and romantic relational aggression subscales). Finally, a series of exploratory analyses was conducted.
CHAPTER III

RESULTS

Preliminary Analyses

Means, standard deviations, and alpha coefficients for all variables are reported in Table 1. Note that the total sample size for the romantic relational aggression subscale \((n = 378)\) is lower than the sample size for the remaining variables \((N = 505)\), as only participants who reported having been involved in a romantic relationship in the past year completed the measures regarding romantic relational aggression.

Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>General/Peer RA</td>
<td>.91</td>
<td>24.24</td>
<td>13.34</td>
<td>20.11</td>
<td>9.96</td>
<td>13.62*</td>
<td>.35</td>
</tr>
<tr>
<td>Romantic RA†</td>
<td>.77</td>
<td>9.74</td>
<td>4.97</td>
<td>11.26</td>
<td>6.02</td>
<td>4.69**</td>
<td>.28</td>
</tr>
<tr>
<td>NOBAGS</td>
<td>.72</td>
<td>13.91</td>
<td>2.68</td>
<td>13.40</td>
<td>2.60</td>
<td>3.54</td>
<td>-</td>
</tr>
<tr>
<td>TESR</td>
<td>.87</td>
<td>49.43</td>
<td>12.24</td>
<td>40.57</td>
<td>11.30</td>
<td>55.94*</td>
<td>.75</td>
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<td>AQ Physical</td>
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<td>21.57</td>
<td>7.50</td>
<td>17.41</td>
<td>6.73</td>
<td>34.19*</td>
<td>.58</td>
</tr>
</tbody>
</table>

\(n = 378; ^*p < .001; ^{**}p < .05\)

Note. General/Peer RA = Self-Report of Aggression and Social Behavior Measure, General/Peer Relational Aggression Subscale; Romantic RA = Self-Report of Aggression and Social Behavior Measure, Romantic Relational Aggression Subscale; NOBAGS = Adapted Normative Beliefs about Aggression Scale, Relational Aggression Subscale; TESR = Traditional-Egalitarian Sex Roles Scale; AQ Physical = Aggression Questionnaire, Physical Aggression Subscale

Internal consistencies were computed using coefficient alpha for each measure to verify that these instruments were measuring unitary constructs and were acceptable for
use in further analyses. Alpha coefficients for all major study variables and exploratory variables were adequate (i.e., $\alpha \geq .70$); thus, none were excluded from subsequent analyses.

As gender has been found to be a significant consideration in discussions of aggression, potential gender differences on the aggression-related variables were explored via one-way (Gender) analyses of variance (ANOVAs). Men scored higher on general/peer relational aggression compared to women. Conversely, for romantic relational aggression, women scored higher compared to men. Regarding physical aggression, men scored higher than women. It should be noted that there was a slightly significant difference in the gender composition between the Northern and Southern samples, $X^2(N = 505, \text{df} = 1) = 3.93, p = .047$ (Table 2).

Table 2

<table>
<thead>
<tr>
<th>Gender</th>
<th>North</th>
<th></th>
<th>South</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>20.7</td>
<td>82</td>
<td>28.5</td>
</tr>
<tr>
<td>Female</td>
<td>172</td>
<td>79.3</td>
<td>206</td>
<td>71.5</td>
</tr>
</tbody>
</table>

The data were also examined for potential regional differences on the following variables using chi-square analyses: racial background, urbanicity, and sexual orientation. The regions differed in regards to the racial backgrounds reported by respondents, $X^2(N = 505, \text{df} = 5) = 31.11, p < .001$. Participants’ racial backgrounds by region are reported in
Table 3. No significant differences were found for urbanicity or sexual orientation, $X^2(N = 505, \text{df} = 5) = 4.71, p = .45$ and $X^2(N = 505, \text{df} = 2) = 2.40, p = .30$, respectively.

Table 3

*Racial Background Reported by Northern Participants (n = 217) and Southern Participants (n = 288)*

<table>
<thead>
<tr>
<th>Racial Background</th>
<th>North</th>
<th></th>
<th>South</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>African American</td>
<td>32</td>
<td>6.3</td>
<td>104</td>
<td>20.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8</td>
<td>1.6</td>
<td>8</td>
<td>1.6</td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>White</td>
<td>167</td>
<td>33.1</td>
<td>162</td>
<td>32.1</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>0.4</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>1.6</td>
<td>8</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Additionally, a Mann-Whitney $U$ test was conducted to evaluate possible regional differences in family income, an ordinal variable where respondents indicated their family income by selecting one of five ranges. The results of the test were not significant, $z = 1.87, p = .06$. Participants from the North had an average rank of 264.06, while those from the South had an average rank of 240.27.

**Primary Analyses**

A series of one-way (Region) ANOVAs were conducted to test Hypotheses 1 through 4. Means and standard deviations are reported in Table 4. As predicted,
participants in the Southern sample scored significantly higher on both general/peer and romantic relational aggression than Northern participants, \( F(1,503) = 11.18, p = .001, d = .31 \), and \( F(1,376) = 9.00, p = .003, d = .32 \), respectively. Southerners also reported more traditional gender role attitudes than Northerners, \( F(1,503) = 69.32, p < .001, d = .75 \). Thus, Hypotheses 1, 2, and 4 were supported. However, Northern and Southern participants did not differ in their normative beliefs about relationally aggressive behavior, \( F(1,503) = 1.72, p = .19 \). Thus, Hypothesis 3 was not supported.

Table 4

*Means and Standard Deviations for Variables in Hypotheses 1 through 4 (N = 505)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>South</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>General/Peer RA</td>
<td>24.57</td>
<td>19.28</td>
</tr>
<tr>
<td>Romantic RA†</td>
<td>11.70</td>
<td>9.91</td>
</tr>
<tr>
<td>NOBAGS</td>
<td>11.69</td>
<td>11.35</td>
</tr>
<tr>
<td>TESR</td>
<td>46.47</td>
<td>37.93</td>
</tr>
</tbody>
</table>

\( n = 378 \)

*Note. General/Peer RA = Self-Report of Aggression and Social Behavior Measure, General/Peer Relational Aggression Subscale; Romantic RA = Self-Report of Aggression and Social Behavior Measure, Romantic Relational Aggression Subscale; NOBAGS = Adapted Normative Beliefs about Aggression Scale, Relational Aggression Subscale; TESR = Traditional-Egalitarian Sex Roles Scale*

One-tailed bivariate correlations (Pearson’s *r*) were calculated to test Hypotheses 5 and 6. Both hypotheses were supported. Gender role attitudes were positively associated with both general/peer \( (r = .25) \) and romantic relational aggression \( (r = .12) \), \( ps < .01 \). Thus, respondents with more traditional (as opposed to egalitarian) gender roles reported engaging in more general/peer and romantic relational aggression. The
hypotheses that gender role attitudes would predict general/peer (Hypothesis 7) and romantic relational aggression (Hypothesis 8) among women, independent of physical aggressiveness, were tested via two hierarchical multiple regressions, one for each type of relational aggression (see Tables 5 and 6). In each regression, the Physical Aggression subscale of the AQ was entered on Step 1, and the TESR was entered on Step 2. Results indicated that, while traditional gender role attitudes did predict general/peer relational aggression among women, the same was not true for romantic relational aggression. Thus, Hypothesis 7 received support while Hypothesis 8 did not.

Table 5

*Summary of Hierarchical Multiple Regression Predicting General/Peer Relational Aggression From Gender Role Attitudes Among Women (n = 377)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ Physical</td>
<td>.65</td>
<td>.07</td>
<td>.44*</td>
<td>.19*</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ Physical</td>
<td>.63</td>
<td>.07</td>
<td>.43*</td>
<td>.22</td>
<td>.03*</td>
</tr>
<tr>
<td>TESR</td>
<td>.15</td>
<td>.04</td>
<td>.17*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .001

*Note: SRASBM General/Peer RA = Self-Report of Aggression and Social Behavior Measure, General/Peer Relational Aggression Subscale; AQ Physical = Aggression Questionnaire, Physical Aggression Subscale; TESR = Traditional-Egalitarian Sex Roles Scale*
Table 6

Summary of Hierarchical Multiple Regression Predicting Romantic Relational Aggression From Gender Role Attitudes Among Women (n = 288)

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>$R^2$</th>
<th>Δ$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ Physical</td>
<td>.39</td>
<td>.05</td>
<td>.45</td>
<td>.20</td>
<td>*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ Physical</td>
<td>.38</td>
<td>.05</td>
<td>.44</td>
<td>.21</td>
<td>.00</td>
</tr>
<tr>
<td>TESR</td>
<td>.05</td>
<td>.03</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .001$

Note. SRASBM Romantic RA = Self-Report of Aggression and Social Behavior Measure, Romantic Relational Aggression Subscale; AQ Physical = Aggression Questionnaire, Physical Aggression Subscale; TESR = Traditional-Egalitarian Sex Roles Scale

Exploratory Analyses

The correlation matrix (see Table 7), which consists of 2-tailed bivariate correlations of all major and exploratory variables, was examined for other noteworthy relationships. All correlations described were significant at $p < .01$. Both general/peer ($r = .36$) and romantic ($r = .28$) relational aggression were positively correlated with normative beliefs about relational aggression, as were both general/peer ($r = .19$) and romantic ($r = .20$) relational victimization. In addition, physical aggression was positively correlated with both forms of relational aggression ($r = .43$ for general/peer, $r = .39$ for romantic) and relational victimization ($r = .24$ for general/peer, $r = .38$ for romantic). Significant relationships were also found between normative beliefs about relational aggression and traditional gender role attitudes ($r = .16$). Finally, physical aggression was
positively correlated with normative beliefs about aggression ($r = .26$) as well as traditional gender role attitudes ($r = .16$).

Two additional hierarchical multiple regressions were performed in order to determine the degree to which region might impact the relationship between gender role attitudes and relational aggression. After centering the independent variables, the physical aggression subscale of the AQ was entered on Step 1, Region was entered on Step 2, the total TESR score was entered on Step 3, and the Region x TESR interaction term was entered on Step 4. This combination of variables were regressed first on general/peer relational aggression and then on romantic relational aggression.

For general/peer relational aggression, the step of the regression model containing the Region x TESR interaction term did not result in a significant improvement in $R$, $\Delta R^2 = .01$, $p = .07$. Thus, region did not moderate the relationship between gender role attitudes and general/peer relational aggression. Similar results were obtained for romantic relational aggression. Once again, the step of the model containing the Region x TESR interaction did not improve predictive accuracy, $\Delta R^2 = .00$, $p = .66$.

In order to observe whether the gender differences in the various forms of aggression described above held true for both regions, one-way (Gender) analyses of variance (ANOVAs) were performed individually for the Northern and Southern samples. Means and standard deviations are reported in Table 8. It was discovered that men scored higher on general/peer relational aggression compared to women only among Southerners, $F(1, 286) = 12.09, p = .001, d = .43$, with no significant difference apparent between Northern men and women, $F(1, 215) = .64, p = .42$. Regarding romantic relational aggression, women scored significantly higher compared to men only among
Northerners, $F(1, 166) = 3.96, p < .05, d = .42$, while no significant difference emerged between Southern men and women on this variable, $F(1, 208) = 2.39, p = .12$. The finding that men scored higher on physical aggression than women was true among both Northerners and Southerners. Upon examination of the exploratory variable of relational victimization, there were no gender differences for either the general/peer or romantic forms of victimization, $F(1, 503) = .68, p = .41$ and $F(1, 376) = 1.89, p = .17$, respectively.

Table 7

*Intercorrelations Among all Variables (N = 505)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2†</th>
<th>3</th>
<th>4†</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General/Peer RA</td>
<td></td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Romantic RA†</td>
<td>.53*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. General/Peer Vic</td>
<td>.50*</td>
<td>.29*</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Romantic Vic†</td>
<td>.44*</td>
<td>.68*</td>
<td>.31*</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>5. Proactive RA</td>
<td>.94*</td>
<td>.50*</td>
<td>.40*</td>
<td>.43*</td>
<td>–</td>
</tr>
<tr>
<td>6. Reactive RA</td>
<td>.97*</td>
<td>.49*</td>
<td>.53*</td>
<td>.41*</td>
<td>.81*</td>
</tr>
<tr>
<td>7. NOBAGS</td>
<td>.36*</td>
<td>.28*</td>
<td>.19*</td>
<td>.20*</td>
<td>.28*</td>
</tr>
<tr>
<td>8. TESR</td>
<td>.25*</td>
<td>.12*</td>
<td>.04*</td>
<td>.11*</td>
<td>.32*</td>
</tr>
<tr>
<td>9. AQ Physical</td>
<td>.43*</td>
<td>.39*</td>
<td>.24*</td>
<td>.38*</td>
<td>.41*</td>
</tr>
</tbody>
</table>

* $p < .01$
† $N = 378$
Table 7 (continued).

*Intercorrelations Among all Variables (N = 505)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Reactive RA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. NOBAGS</td>
<td>.39*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. TESR</td>
<td>.18*</td>
<td>.16*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. AQ Physical</td>
<td>.42*</td>
<td>.26*</td>
<td>.16*</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

*Note.* General/Peer RA = Self-Report of Aggression and Social Behavior Measure, General/Peer Relational Aggression Subscale; Romantic RA = Self-Report of Aggression and Social Behavior Measure, Romantic Relational Aggression Subscale; General/Peer Vic = Self-Report of Aggression and Social Behavior Measure, General/Peer Victimization Subscale; Romantic Vic = Self-Report of Aggression and Social Behavior Measure, Romantic Victimization Subscale; Proactive RA = Self-Report of Aggression and Social Behavior Measure, Proactive Relational Aggression Subscale; Reactive RA = Self-Report of Aggression and Social Behavior Measure, Reactive Relational Aggression Subscale; NOBAGS = Adapted Normative Beliefs about Aggression Scale, Relational Aggression Subscale; TESR = Traditional-Egalitarian Sex Roles Scale; AQ Physical = Aggression Questionnaire, Physical Aggression Subscale

Table 8

*Means for Aggression Variables by Gender and Region (N = 505)*

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Southern</td>
<td>Northern</td>
</tr>
<tr>
<td>General/Peer RA</td>
<td>26.44 (n = 82)</td>
<td>20.24 (n = 45)</td>
</tr>
<tr>
<td>Romantic RA</td>
<td>10.52 (n = 54)</td>
<td>8.54 (n = 35)</td>
</tr>
<tr>
<td>AQ Physical</td>
<td>22.85 (n = 82)</td>
<td>19.22 (n = 45)</td>
</tr>
</tbody>
</table>

*Note.* General/Peer RA = Self-Report of Aggression and Social Behavior Measure, General/Peer Relational Aggression Subscale; Romantic RA = Self-Report of Aggression and Social Behavior Measure, Romantic Relational Aggression Subscale; AQ Physical = Aggression Questionnaire, Physical Aggression Subscale
CHAPTER IV
DISCUSSION

The growing literature base continues to enhance our understanding of relational aggression among young adults. However, only a few aspects of culture, such as gender (e.g., Bailey & Ostrov, 2008; Murray-Close et al., 2010), sexual orientation (e.g., Kelley & Robertson, 2008), and international differences (e.g., French et al., 2002; Russell et al., 2003) have been examined. Moreover, gender is the only variable related to culture that has received any significant degree of attention. Additionally, though variations in overt aggression have been studied between Northern and Southern U.S., similar investigations have not been conducted with relational forms of aggression. Thus, the present study sought to extend our knowledge of the role of cultural factors in relational aggression by examining potential regional differences between Northern and Southern U.S.

Specifically, regional differences in relational aggression, attitudes about relational aggression, and traditional gender role attitudes were studied. Additionally, the relationship between traditional gender role attitudes and relational aggression was observed. Finally, we examined whether traditional gender role attitudes predict relational aggression controlling for physical aggressiveness.

Findings supported the presence of regional differences in relational aggression and gender role attitudes. As predicted, Southern participants reported higher levels of both general/peer and romantic relational aggression compared to Northern participants. Also consistent with the predictions of the present study, Southerners reported more traditional gender role attitudes than did Northerners. However, contrary to what was expected, there was not a regional difference in participants’ beliefs about the
acceptability of relational aggression. As expected, traditional gender role attitudes were positively related to both general/peer and romantic relational aggression. Finally, though it was hypothesized that gender role attitudes would predict both general/peer and romantic relational aggression among women, results indicated that this was the case for the former type of relational aggression only.

Regional Differences in Relational Aggression and Normative Beliefs

Differences in social norms and expectations between various geographic locales, even within the same country, can be expected to result in behavioral differences between the regions. This likely includes behaviors related to aggression. For example, several authors have proposed that a culture of honor exists in the Southern region of the U.S., involving a tendency to respond intensely to even minor threats to one’s social status or reputation (Cohen et al., 1996; Cohen et al., 1999; Nisbett, 1993; Richardson & Latané, 2001; Vandello et al., 2008). These researchers have proposed that Southerners, accordingly, are more likely to become upset and to respond aggressively to provocations such as personal insults (Cohen et al., 1996) while also being more likely to initially stifle their responses in some situations to conform to cultural customs pertaining to politeness and conflict resolution, later resulting in a spike in their aggressive responses (Cohen et al., 1999).

Residents of the Southern states have also been found to possess more traditional values on a number of issues, including gender-appropriate behavior (Hurlbert, 1989; Rice & Coates, 1995). Southerners may also embody stronger beliefs about the importance of courteous, deferent behavior (Cohen et al., 1999), particularly for women (Dillman, 1988; Middleton-Keirm, 1988), while stereotypes about Northerners tend to
depict them as more liberal, direct, and argumentative (Dillman, 1988; Reed, 1980). The results of the present study suggest that such cultural differences between North and South may translate into differences in relationally aggressive behavior much like they do for overt aggression, with Southerners being more likely to resort to more covert means of aggressing in order to uphold perceived social expectations for polite behavior.

Consistent with previous findings (e.g., Carter & Borch, 2005; Twenge, 1997), Southern participants in this sample reported more traditional gender role attitudes compared to Northerners. Additionally, Southern participants reported significantly greater use of relational aggression in both peer and romantic contexts, and traditional gender role attitudes were found to be associated with both forms of relational aggression. Thus, although Southerners have been found to be more approving of overt aggression in situations like discipline and responding to insults (e.g., Cohen & Nisbett, 1994; Pennebaker et al., 1996), it is possible that the more traditional values and norms that appear to exist in the South may lead individuals in this region to aggress relationally in many situations rather than in more direct ways that may cause them to be viewed as abrasive and unmannerly. Northern participants reported comparatively less relational aggression, perhaps due to norms that do not require individuals to resort to such covert aggressive strategies as often.

In the overall sample of both Northerners and Southerners, normative beliefs about relational aggression were associated with relationally aggressive behavior, with more approving attitudes toward relational aggression being related to greater use of both general/peer and romantic relational aggression. However, though Southerners reported more frequent use of relational aggression, Southern and Northern participants did not
differ in their normative beliefs about relational aggression. In other words, although Southerners did not report more approving attitudes toward the use of relationally aggressive behaviors, they did report being more likely to employ such behaviors. Perhaps the reason for this disparity is that Southerners may not view relational aggression in a particularly positive light, yet they feel such behavior is necessary because more overt displays of aggression are even less acceptable. Conversely, Northerners may not necessarily view relational aggression with disapproval, though they may not be as inclined to employ relational aggression as their socially constructed norms do not require such behavior to the same degree as may be the case in the South. In addition, a small but significant relationship was discovered between traditional gender role attitudes and normative beliefs about relational aggression in the sample as a whole. Thus, though apparently not specific to Southerners, it does appear that more traditional attitudes regarding gender-specific behavior do relate to more approving attitudes toward relational aggression.

**Gender Role Attitudes and Relational Aggression among Women**

Behavior is often dictated by the anticipated consequences of a given action. Women, for example, may construct their behaviors in ways that are consistent with perceived gender-appropriate expectations to avoid any risks associated with violating such prescriptive gender norms (Rudman, 1998; Rudman & Glick, 1999, 2001). Traditional gender role attitudes pertaining to women include beliefs about women being submissive toward men and women’s suitability for education and leadership positions versus for domestic tasks. It was discovered in the current study that norms based on traditional gender role attitudes are predictive of relationally aggressive behavior among
women in general interactions, such as with peers, but not in the context of romantic relationships. Thus, it appears that women who expect more traditional, conservative behavior from themselves and their female peers are more likely to utilize general/peer relational aggression. However, women with more traditional gender role attitudes are not similarly likely to be relationally aggressive in their romantic encounters, perhaps because such behaviors perpetrated against one’s partner, at least in heterosexual relationships, may be viewed by these more traditional women as constituting insubordination and disrespect, which would be in direct violation of such individuals’ beliefs about women’s behavior toward men.

If traditional Southern values lead individuals in the South to employ more subtle forms of aggression in order to comply with perceived social rules about civil behavior, one could expect that this would be especially evident for Southern women given that expectations for feminine, mild-mannered behavior (Dye, 2008), as well as the perceived costs for violating such social standards (Rudman, 1998; Rudman & Glick, 2001), may lead Southern women in particular to rely on covert means of aggressing against others. If this explanation were accurate, one might expect region to moderate the relationship between gender role attitudes and relational aggression. That is, the link between traditional gender role attitudes and relational aggression might be stronger among Southern women than Northern women. However, this possibility was not supported by the exploratory analyses carried out. Though regional differences were discovered in gender role attitudes and relational aggression, there was no evidence that region moderated the relationship between gender role attitudes and relational aggression among women. In other words, the relationship between gender role attitudes and relational
aggression was no stronger for Southern women than Northern women. Thus, although traditional gender role attitudes do appear to be more prevalent among Southerners as a whole, women who possess more traditional gender roles are indeed more likely to be relationally aggressive in peer contexts, regardless of region.

Gender Differences and Region

Gender has been found to be an important construct in our understanding of aggression. For instance, it is well established that men, both as boys (e.g., Crick and Grotpeter, 1995) and adult men (e.g., Bailey & Ostrov, 2008), tend to be more physically aggressive than girls and women. Gender is also an important consideration in discussions of relational aggression. Though the gender differences found among children seem to abate as individuals enter the young adult years (Linder et al., 2002), men are sometimes found to be more relationally aggressive than women (Lento-Zwolinski, 2007), and women and men often appear to utilize relational aggression in different contexts (Murray-Close et al., 2010) and have differing perceptions of relationally aggressive behavior (Basow et al., 2007; Nelson et al., 2008). Furthermore, relational aggression appears to have somewhat different correlates for women and men (Burton et al., 2007; Lento-Zwolinski, 2007). The results of the present study are consistent with much of the prior research on gender and aggression and are further complicated by the additional consideration of region.

As has been established in previous research (e.g., Bailey & Ostrov, 2008; Burton et al., 2007), male participants in the current study reported greater use of physical aggression compared to women, especially Southern men. Men also reported more frequent relational aggression in general and peer contexts compared to women.
However, this was only true for Southern participants, while no gender differences emerged in general/peer relational aggression between Northern men and women. Interestingly, the opposite was true for romantic relational aggression, with women reporting more frequent use of this behavior, but only among Northerners. Thus, the pattern of gender differences regarding aggressive behavior varied depending on both region and the form of aggression being considered. Southern men reported the most physical aggression, followed by Northern men, Southern women, and Northern women. In general and peer interactions, Southern men appear to be the most relationally aggressive, followed by Southern women, Northern men, and Northern women. Finally, when considering romantic relations, Southern women report the most relational aggression, followed by Southern men, Northern women, and Northern men. Regardless of region, it is clear that, although prior findings on gender differences in relational aggression among adults have been somewhat mixed, relational aggression cannot be presumed to be primarily a female form of aggression as it has often been described.

Though perpetration of relational aggression was of primary interest, we also examined gender differences regarding relational victimization. It was discovered that there were no gender differences in participants’ experiences with being the target of either general/peer or romantic relational aggression. This result is consistent with some prior research failing to establish gender differences in relational victimization (Basow et al., 2007), and inconsistent with other findings discovering that men may experience more romantic relational victimization than women (Goldstein et al., 2008a). Additionally, normative beliefs about relational aggression were positively correlated
with both forms of relational victimization, implying that the targets of relational aggression may view this behavior as normal and acceptable.

Limitations

One limitation of note is the use of self-report instruments to measure key variables, including relational aggression. A few researchers have expressed reservations regarding the use of self-report methods to assess relational aggression (e.g., Archer & Coyne, 2005; Bagner et al., 2007; Coyne et al., 2006; Crick et al., 1999; Goldstein et al., 2008a). For instance, one group of researchers warns that respondents may be driven by social desirability to intentionally underreport their behavior, or they simply may not recognize their relationally aggressive behavior as injurious or aggressive (Bagner et al., 2007). On the other hand, it has also been proposed that the shortcomings of self-report instruments may be more of a concern for researchers using samples of children and adolescents for whom it may be more desirable to use assessment strategies including teacher reports, observational approaches, and peer nomination methods. Furthermore, some researchers have argued that, although peer ratings are likely the most advantageous assessment approach for children and adolescents, a self-report method is more suitable for use with adult participants (Archer & Coyne, 2005). Nevertheless, the methodology of studies such as the present one would be enhanced by using supplementary assessment methods in addition to self-report, such as observational methods and partner or peer reports, in an effort to thwart any potential response bias that has the potential to taint self-report data (Goldstein et al., 2008a).

An additional limitation concerns the fact that practical limitations did not permit inclusion of other potentially culturally distinct sections of the U.S. in this study, as only
the Northern and Southern regions of the country were examined. Cultural differences between one or both of these regions may be just as vast when making direct comparisons with other areas of the U.S., such as the Midwest or the West coast.

Significant differences were found in terms of racial background between the Northern and Southern samples in this study, with the Southern sample consisting of significantly greater number of African American participants compared to the Northern group. Thus, certain significant differences discovered between the regions may be, at least in part, accounted for by differences in the racial composition of the two samples. Though power was not sufficient to examine race by region interactions for relational aggression, when looking only at race, African American participants were found to be somewhat more likely to report employing romantic relational aggression compared to White participants. There was not a significant difference between these two racial groups for general/peer relational aggression.

Finally, although certain cultural pictures have been painted of the North and South, and these regions have been described throughout this study as distinct, it must be recognized that differences within a given group are often greater than the differences observable between distinct groups. Thus, should these findings be used to inform treatment or for other practical applications, it must be remembered that the findings may not apply to all individuals who belong to the groups described here.

Implications and Directions for Future Research

One implication of the present study points toward the importance of cultural factors and related values and attitudes in the study of relational aggression. Just as the culture of honor literature provides some insight into regional differences in physical
aggression (Richardson & Latané, 2001; Vandello et al., 2008), it appears that North-South differences also exist for the relational form of aggression, and such differences may be driven by cultural variations between the regions. Though relational aggression researchers have paid due attention to the role of gender in studying this construct, it may be just as important to consider other cultural factors, such as region, gender role attitudes, and norms about what constitutes acceptable behavior. Furthermore, given the findings in the current study that reported rates of general and romantic relational aggression varied depending on both gender and region, regional differences may be one potential explanation for the differing findings in the extant literature regarding gender and relational aggression.

Though the current study addressed one aspect of culture in relational aggression by considering regional differences between the Northern and Southern U.S., future research might also compare other regions of the U.S. to these regions and to each other as well. Additionally, the literature on cultural factors remains sparse for relational aggression, and researchers in this area should continue to investigate other various cultural factors that contribute to this behavior so that we might better understand, study, and address relational aggression in clinical settings.

As delineated in the Introduction, the pattern of gender differences in relational aggression among adults is not as clear-cut as those found among children and adolescents. Given that the gender differences discovered in the current study varied based on both region and type of relational aggression (i.e., general/peer versus romantic), it seems that region adds an additional layer of complication when attempting to understand relational aggression among adult men versus women. Future research may
be helpful in replicating these findings and shedding some light onto why these differences exist.

Although perpetration of relational aggression was of chief interest in the current study, relational victimization was also included as an exploratory variable, and findings worth mentioning included lack of gender differences and a relationship with normative beliefs about relational aggression. Relational victimization has not received as much attention in the literature as relational aggression, and further scrutiny may be warranted to further understand gender differences and other considerations regarding the former construct.

Treatment-relevant implications can also be deduced. The results of the present study suggest that, when relationally aggressive behavior is a part of the clinical picture for a given client, mental health professionals should be aware of the cultural factors, values, and attitudes that may contribute to this behavior. Included in this are normative beliefs specifically about relational aggression, a construct that has received little attention in the literature. Mental health professionals working with young adults to reduce relationally aggressive behavior might initiate discussions of perceived behavioral expectations, cultural messages (e.g., those received by family and peers), and beliefs about what types of behaviors are appropriate as part of the clinical process in understanding and changing the behavior.

In conclusion, the current study contributed to the literature on relational aggression among young adults by investigating the role of cultural factors. Results revealed regional differences in relational aggression between participants from the Northern and Southern U.S. Moreover, the traditional versus egalitarian nature of one’s
attitudes regarding gender roles seems to have implications for the perpetration of relationally aggressive behavior. It is hoped that this research will add to the growing understanding of this relational aggression, both in research and practice settings.
APPENDIX A

MEASURES

Self-Report Measure of Aggression and Victimization

**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.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all True</th>
<th>Sometimes True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have threatened to break up with my romantic partner in order to get him/her to do what I wanted.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. My romantic partner tries to make me feel jealous as a way of getting back at me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I have a friend who ignores me or gives me the “cold shoulder” when he/she is angry with me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. When my romantic partner is mad at me, he/she won’t invite me to do things with our friends.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. My friends know I will think less of them if they do not do what I want them to do.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. When I am not invited to do something with a group of people, I will exclude those people from future activities.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. When I want something from a friend of mine, I act “cold” or indifferent towards them until I get what I want.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. A friend of mine has gone “behind my back” and shared private information about me with other people.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. I try to make my romantic partner jealous when I am mad at him/her.  
   1 2 3 4 5 6 7

10. 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

11. 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

12. When I have been mad at a friend, I have flirted with his/her romantic partner.  
   1 2 3 4 5 6 7

13. When I am mad at a person, I try to make sure he/she is excluded from group activities (going to the movies or to a bar).  
   1 2 3 4 5 6 7

14. My romantic partner has threatened to break up with me in order to get me to do what he/she wants.  
   1 2 3 4 5 6 7

15. My romantic partner doesn’t pay attention to me when he/she is mad at me.  
   1 2 3 4 5 6 7

16. I have threatened to share private information about my friends with other people in order to get them to comply with my wishes.  
   1 2 3 4 5 6 7

17. When my romantic partner wants something, he/she will ignore me until I give in.  
   1 2 3 4 5 6 7
18. I have cheated on my romantic partner because I was angry at him/her. 1 2 3 4 5 6 7
19. I have a friend who excludes me from doing things with her/him and her/his other friends when he/she is made at me. 1 2 3 4 5 6 7
20. I have spread rumors about a person just to be mean. 1 2 3 4 5 6 7
21. 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
22. I give my romantic partner the silent treatment when he/she hurts my feelings in some way. 1 2 3 4 5 6 7
23. When someone hurts my feelings, I intentionally ignore them. 1 2 3 4 5 6 7
24. 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
25. I have intentionally ignored a person until they gave me my way about something. 1 2 3 4 5 6 7

Aggression Questionnaire (AQ)

Directions: A number of statements are listed below which people use to describe themselves. Read each statement carefully and then circle the number that best indicates how well it applies to you. There are no right or wrong answers.

1. Once in a while I can’t control the urge ……... 1 2 3 4 5 to strike another person.
2. I am sometimes eaten up with jealousy. ……... 1 2 3 4 5
3. I flare up quickly but get over it quickly. ……1 2 3 4 5

4. I can’t help getting into arguments when …… 1 people disagree with me.

5. I have become so mad that I have broken ……1 things.

6. I know that “friends” talk about me ………1 behind my back.

7. I am an even-tempered person. …………… 1 2 3 4 5

8. My friends say that I’m somewhat ………1 argumentative.

9. If I have to resort to violence to protect …… 1 my rights, I will.

10. Sometimes I fly off the handle for no good ….1 reason.

11. Other people always seem to get the breaks…. 1 2 3 4 5

12. Given enough provocation, I may hit ……… 1 another person.

13. I tell my friends openly when I disagree …… 1 with them.

14. When frustrated, I let my irritation show………1 2 3 4 5

15. When people are especially nice, I wonder ……1 what they want.

16. I can think of no good reason for ever ………1 hitting a person.

17. At times I feel I have gotten a raw deal ………1 out of life.

18. If somebody hits me, I hit back. …………… 1 2 3 4 5

19. I sometimes feel like a powder keg ready ……1 to explode.
20. I often find myself disagreeing with people. …1  
    2  3  4  5

21. I sometimes feel that people are laughing ……1  
    behind my back.  
    2  3  4  5

22. I have threatened people I know. ................1  
    2  3  4  5

23. I have trouble controlling my temper…………1  
    2  3  4  5

24. There are people who pushed me so far ……1  
    that we came to blows.  
    2  3  4  5

25. I am suspicious of overly friendly strangers….1  
    2  3  4  5

26. When people annoy me, I may tell them ……1  
    what I think of them.  
    2  3  4  5

27. Some of my friends think I’m a hothead. …..1  
    2  3  4  5

28. I wonder sometimes why I feel so bitter ……1  
    about things.  
    2  3  4  5

29. I get into fights a little more than the ………1  
    average person.  
    2  3  4  5

Adapted Normative Beliefs about Aggression Scale (NOBAGS)

Directions: Please read the below questions and mark the number that best 
corresponds to your opinion. Choose ONE and only one answer.

It's perfectly OK  It's sort of OK  It's sort of wrong  It's really wrong

1. In general, it’s OK to stop talking to people if you are mad at them.  
   1  2  3  4

2. It is usually OK to try to get other people to dislike somebody who you personally dislike.  
   1  2  3  4

3. In general, it is wrong to hit other people.  
   1  2  3  4

3. If you’re angry, it is OK to say mean things to other people.  
   1  2  3  4
4. In general, it is OK to yell at others and say bad things.

5. It is usually OK to push or shove other people around if you’re mad.

6. It is wrong to insult other people.

7. It is wrong to talk about people behind their backs.

8. It is wrong to take it out on others by saying mean things when you’re mad.

9. It is generally wrong to get into physical fights with others.

10. In general, it is OK to take your anger out on others by using physical force.

11. It is usually OK to give people the “silent treatment” if you are mad at them.

12. In general, it is OK to spread rumors about people.

13. It is usually OK to cancel plans with somebody if you are mad at them.

<table>
<thead>
<tr>
<th>Traditional-Egalitarian Sex Roles Scale (TESR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>1. It is just as important to educate daughters as it is to educate sons.</td>
</tr>
<tr>
<td>2. Women should be more concerned about clothing and appearance than men.</td>
</tr>
<tr>
<td>3. Women should have as much sexual freedom as men.</td>
</tr>
</tbody>
</table>
4. The man should be more responsible for the economic support of the family than the woman.

5. The belief that women cannot make as good supervisors or executives as men is a myth.

6. The word obey should be removed from wedding vows.

7. Ultimately a woman should submit to her husband’s decision.

8. Some equality in marriage is good, but by and large the husband ought to have the main say-so in family matters.

9. Having a job is just as important for a wife as it is for her husband.

10. In groups that have both male and female members, it is more appropriate that leadership positions be held by males.

11. I would not allow my son to play with dolls.

12. Having a challenging job or career is as important as being a wife and mother.

13. Men make better leaders.

14. Almost any woman is better off in her home than in a job or profession.

15. A woman’s place is in the home.

16. The role of teaching in elementary schools belongs to women.
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td>The changing of the diapers is the responsibility of both parents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18.</td>
<td>Men who cry have a weak character.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19.</td>
<td>A man who has chosen to stay at home and be a house-husband is not less masculine.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20.</td>
<td>As head of the household, the father should have final authority over the children.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX B

DEMOGRAPHICS FORM

1. Age ______

2. Gender
   ___ Male       ___ Female

3. Ethnicity
   ___ African American     ___ White
   ___ Hispanic            ___ Asian
   ___ Native American     ___ Other

4. Classification
   ___ Freshman       ___ Sophomore   ___ Junior
   ___ Senior         ___ Graduate Student ___ Other

5. Major __________________________

6. Please indicate the state in which you have continuously lived for the majority of your life since the age of 4:
   __________________________ OR ___ I have not lived continuously in one state since age 4
7. Please indicate the degree to which the area you spent the majority of your life was rural versus urban using the following scale.

___ 1  ___ 2  ___ 3  ___ 4  ___ 5  ___ 6
(Very rural)                  (Very urban)

8. What is the annual household income for your family of origin?

___ $25,000/year or less
___ $25,000 - $50,000/year
___ $50,000 - $75,000/year
___ $75,000 - $100,000/year
___ $100,000/year or more

9. Please indicate the religious group or denomination with which you identify:

_____________

10. Do you consider yourself to be:

___ Heterosexual or straight
___ Gay or lesbian
___ Bisexual

11. In the past year, who have you had sex with?

___ Men only
___ Women only
__ Both men and women

__ I have not had sex

12. People are different in their sexual 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

__ Not sure
APPENDIX C

CONSENT FORMS

UNIVERSITY OF SOUTHERN MISSISSIPPI
AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Consent is hereby given to participate in the study entitled: *Attitudes and Social Behavior*.

1. **Purpose**: This study is being conducted to investigate how certain attitudes relate to individuals’ social behavior.

2. **Description of Study**: Participants will be asked to complete questionnaires online about attitudes, social behavior, and certain difficulties that some people experience. This study should take no more than a half hour and will be worth a half a research credit.

3. **Benefits**: Although participants will receive no direct benefit from participation in this study, the information provided in this study will enable researchers to better understand the factors associated with young adults’ social behavior.

4. **Risks**: There are no foreseeable risks to participating in this study. Participation is entirely voluntary, and you may withdraw at anytime. All questionnaires are self-report and noninvasive. If you feel that completing these questionnaires has resulted in emotional distress, please stop and notify the researcher (Kate Czar at Katherine.Czar@eagles.usm.edu). If you should decide at a later date that you would like to discuss your concerns, please contact Ms. Czar or Dr. Eric Dahlen (Eric.Dahlen@usm.edu) at (601) 266-4601. Alternatively, you may contact one of several local agencies, such as:

   - **Student Counseling Services**: Community Counseling and Assessment Clinic
   - 200 Kennard Washington Hall       Owings-McQuagge Hall, Room 202
   - Phone: (601) 266-4829            Phone: (601) 266-4601

   - **Pine Belt Mental Healthcare Resources**
   - Phone: (601) 544-4641

5. **Confidentiality**: These questionnaires are intended to be anonymous, and you are asked not to provide your name anywhere except for this consent form. The information you provide will be kept strictly confidential. Names on this consent form will not be associated with questionnaires in any way. 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.
6. **Subject’s Assurance**: Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted), the researchers will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and you may withdraw from this study at any time without penalty or prejudice. Questions concerning this research should be directed to Kate Czar (Katherine.Czar@eagles.usm.edu) or Eric Dahlen, Ph.D. (Eric.Dahlen@usm.edu). This project and this consent form have been reviewed by the Human Subjects Review Committee, 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, University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-001.

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 to participate.
   b. I am being asked to complete a set of questionnaires, which will take up to a half hour and for which I will receive half a research credit.
   c. All information I provide will be used for research purposes and will be kept confidential.

I understand that my participation in this research is voluntary. If I decide to participate in the study, I may withdraw my consent and stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.

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 by clicking on “file” at the top left and choosing “print” from the menu.

____________________________________
(Subject name printed)

____________________________________          ______
(Subject signature)                                                       Date
INFORMED CONSENT FORM
MILLERSVILLE UNIVERSITY
Authorization to Participate in Research Project

Consent is hereby given to participate in the study entitled: *Attitudes and Social Behavior*.

1. **Involvement:** This study is being conducted by principal investigator Kate Czar, M.A. Elizabeth Thyrum, Ph.D., is serving as the faculty sponsor. Institutions involved in this study include Millersville University and The University of Southern Mississippi.

2. **Overview:** You are invited to participate in a study being conducted to investigate how certain attitudes relate to individuals’ social behavior. Participants will be asked to complete questionnaires online about attitudes, social behavior, and certain difficulties that some people experience. This study should take no more than a half hour.

3. **Compensation:** Participants will receive course credit in exchange for participation in this study. The amount of credit will be determined by your instructor.

4. **Benefits and Risks:** Although participants will receive no direct benefit from participation in this study, the information provided in this study will enable researchers to better understand the factors associated with individuals’ social behavior. There are no foreseeable risks to participating in this study. Participation is entirely voluntary, and you may withdraw at anytime. All questionnaires are self-report and noninvasive. If you feel that completing these questionnaires has resulted in emotional distress, please stop and notify the researcher (Kate Czar at Katherine.Czar@eagles.usm.edu). If you should decide at a later date that you would like to discuss your concerns, please contact Ms. Czar or Dr. Eric Dahlen (Eric.Dahlen@usm.edu) at (601) 266-4601. Alternatively, you may contact a local agency, such as:

Millersville University Counseling Center
3rd Floor Lyle Hall
717-872-3122
http://www.millersville.edu/counsel/

5. **Confidentiality:** The information you provide will be kept strictly confidential. These questionnaires are intended to be anonymous, and you are asked not to provide your name anywhere except to your instructor to notify him/her of your participation. Names will not be associated with questionnaires in any way.

6. **Voluntary Participation:** Participation in this project is completely voluntary, and you may withdraw from this study at any time without penalty or prejudice by
closing the browser window in which the survey appears. If you elect to participate, please respond honestly to each item and follow the prompts on your webpage to navigate through the online survey. If you begin the survey but decide to withdraw before completing it, your responses will be deleted from the data set.

7. **For More Information:** Questions concerning this research should be directed to Kate Czar (KCzar13@yahoo.com) or Eric Dahlen, Ph.D. (Eric.Dahlen@usm.edu), both associated with the Counseling Psychology doctoral program at The University of Southern Mississippi, or Elizabeth Thyrum, Ph.D. (Elizabeth.Thyrum@millersvill.edu), Professor of Psychology at Millersville University. This project and this consent form have been reviewed by The Millersville University Institutional Review Board (MUIRB), 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 Dr. Michelle White (Michelle.White@millersville.edu or 717-872-3257) or Dr. Victor DeSantis (Victor.DeSantis@millersville.edu or 717-872-3099) or MUIRB.

8. **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 to participate.
b. I am being asked to complete a set of questionnaires, which will take up to a half hour and for which I will receive an amount of course credit determined by my instructor.
c. All information I provide will be used for research purposes and will be kept confidential.

I understand that my participation in this research is voluntary. If I decide to participate in the study, I may withdraw my consent and stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.

I have read and understand the information stated, am at least 18 years of age, and by clicking below, I indicate that I willingly agree to the terms outlined in this consent form. A copy can be printed by clicking on “file” at the top left and choosing “print” from the menu.

___ I consent to participate in this study and wish to begin

**Note:** This project has been approved by the Millersville University of Pennsylvania Institutional Review Board for the Protection of Human Subjects.
APPENDIX D

INSTITUTIONAL REVIEW BOARD APPROVAL LETTERS

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

118 College Drive #5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6820
Fax: 601.266.5509
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 21, 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 Event 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: 10102134
PROJECT TITLE: Attitudes and Social Behavior
PROPOSED PROJECT DATES: 11/01/2010 to 11/01/2011
PROJECT TYPE: Dissertation
PRINCIPAL INVESTIGATORS: Kahterine Czar
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Psychology
FUNDING AGENCY: N/A
HSPRC COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 10/27/2010 to 10/26/2011

[Signature]
Lawrence A. Hosmen, Ph.D.
HSPRC Chair

Date
December 15, 2010

Ms. Katherine Czar
316 S 12th Ave.
Hattiesburg, MS 39401

Dear Ms. Czar:

Members of the Millersville University Institutional Review Board (IRB) have reviewed your proposed research, "Regional Differences in Relational Aggression: The Role of Culture" and agree that this research qualifies as minimal risk. Your proposal has been approved by a full board review.

Approval for use of human subjects in this research is given for a period of one year from this date. If your study extends beyond December 15, 2011, you must again contact the IRB for re-approval six weeks before the expiration date.

By accepting this decision, you agree to notify the Chair of (1) any additions or changes in procedures for your study that modify subjects' risk and (2) any events that affect the safety and well being of subjects.

Thank you for cooperating with our efforts to maintain compliance with federal regulations for the protection of human subjects.

Sincerely,

[Signature]

Dr. Michelle M. White
Chairperson
Millersville University Institutional Review Board

cc: Members of the Millersville University IRB
    Dr. Elizabeth Thyrum
    Dr. Eric Dahlen
REFERENCES


The National Data Program for the Sciences at The University of Chicago. (n.d.).

*General Social Survey.* Retrieved from http://www.norc.uchicago.edu/GSS+Website/


