College Professors' Perceptions of and Responses to Relational Aggression in College Students

by

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Abstract

The purpose of this study was to investigate the impact of selected factors on professors' responses to relational aggression in college students. Specifically, this study explored the relationships between professors' gender, class size, level of empathy, ratings of seriousness of a relationally aggressive scenario, the gender of the perpetrator and target in the aforementioned scenario, and professors' likelihood of intervention when the witness relational aggression in their classrooms. The sample included 40 female professors and 58 male professors recruited from a large, southeastern university. Participants were asked to complete three measures: a demographics questionnaire, the Relational Aggression Perception and Intervention Questionnaire, and the Balanced Emotional Empathy Scale (BEES).

No relationship was found between professors' gender, class size, or the gender of the perpetrator and target in a relationally aggressive scenario and professors' likelihood of intervention. Bivariate correlations were found between professors' level of empathy and their likelihood of intervention, as well as between professors' ratings of seriousness of a relationally aggressive scenario and their likelihood of intervention. Hierarchical multiple regression analysis also revealed an interaction effect between professors' empathy and seriousness ratings and their likelihood of intervention. Implications of the results of this study are discussed, including recommendations for administration and faculty on college and university campuses.
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I. INTRODUCTION

Relational aggression is a complex topic. The term ‘relational aggression’ refers to non-physical forms of aggression which are intended to cause harm via the manipulation of and/or damage to one’s social relationships (Crick & Grotpeter, 1995). Examples of relational aggression include, but are not limited to, gossiping, spreading rumors, avoiding or ignoring someone, and social exclusion (Young, Boye, & Nelson, 2006). Non-physical forms of aggression such as these may also be referred to as social aggression (Galen & Underwood, 1997) or indirect aggression (Bjorkqvist, 1994), although some researchers acknowledge that these terms refer to the same construct due to the overlapping definitions regarding the desire to cause harm through the manipulation of social relationships (Archer & Coyne, 2005; Bjorkqvist, 2001). For the purposes of this study, the term relational aggression is used to refer to any behaviors that might otherwise be classified as social or indirect aggression.

Some of the more troublesome aspects of relational aggression have to do with perceptions associated with relational aggression, as well as difficulty identifying relational aggression. With regard to perceptions, neither students nor adults necessarily consider relational aggression to be a particularly serious problem (Orpinas, Horne, & Staniszewski, 2003; Young, Boye, & Nelson, 2006), despite the fact that there are serious long-term consequences associated with this form of aggression (Crick & Grotpeter, 1996; Merrell, Buchanan, & Tran, 2006; Owens, Slee, & Shute, 2000; Paquette & Underwood, 1999; Young, Boye, & Nelson, 2006). In fact, adults may even view
relational aggression as a normal part of growing up; not necessarily warranting intervention (Young, Boye, & Nelson, 2006). As a result, adults may not even attempt to address the emotional needs of those who have experienced relational aggression (Young, Boye, & Nelson, 2006).

Statement of the Problem

Despite these misconceptions, however, relational aggression has been found to have serious long-term consequences, for both males and females, and for both targets and perpetrators, from preschool through adolescence (Merrell et al., 2006; Young, Boye, & Nelson, 2006). These consequences include, but are not limited to, feelings of low self-worth (Merrell et al., 2006; Paquette & Underwood, 1999; Young, Boye, & Nelson, 2006), increased loneliness and depression (Crick & Grotpeter, 1996; Young, Boye, & Nelson, 2006), fear of experiencing this type of aggression in future relationships, a desire to leave school, and thoughts of suicide (Owens et al., 2000). Further, relational aggression has been found to be predictive of future social maladjustment (Crick & Grotpeter, 1996), which is consistent with research that suggests that relational aggression continues into adulthood (Bjorkqvist, Osterman, & Kaukiainen, 1992; Bjorkqvist, Osterman, & Lagerspetz, 1994).

Currently there are no studies that directly examine the prevalence of relational aggression in emerging adults (ages 18-25) (Nelson, Springer, Nelson, & Bean, 2007; Ostrov & Houston, 2008) in comparison to school-aged children and adolescents. However, a growing body of research with this age group does suggest that relational aggression is not only normative, but a developmentally salient behavior given the increased emphasis on friendships and romantic relationships at this age (Nelson et al.,
2007; Ostov & Houston, 2008). While some researchers have found no significant difference in relational aggression among men and women (Schmeelk, Sylvers, & Lilienfeld, 2008), others have found that college aged men and women utilize relational aggression to varying degrees, and in different contexts (Nelson et al., 2007; Ostrov & Houston, 2008).

Emerging adulthood is a transitional developmental period that occurs between the ages of 18 and 25 years of age (Nelson et al., 2007; Ostrov & Houston, 2008). Emerging adults are not only focused on becoming an individual; they are at the same time placing greater importance on peer and romantic relationships. Men and women in this age group also experience shifts in moral reasoning, often increasing risk-taking behaviors such as drug and alcohol abuse and having unprotected sex. To date, research that explores relational aggression in emerging adults has utilized college students (Nelson et al., 2007; Ostrov & Houston, 2008).

In college students, relational aggression correlates with higher rates of peer rejection, more anti-social personality features, and less pro-social behavior (Ostrov & Houston, 2008; Storch, Werner, & Storch, 2003; Werner & Crick, 1999). Relational aggression in college students has also been correlated with borderline personality features, bulimia, difficulty with anger management and impulse control, higher rates of conflict in relationships, higher rates of alcohol use and other self-destructive behaviors, social anxiety, loneliness, and depression (Ostrov & Houston, 2008; Storch et al., 2003; Storch, Bagnier, Geffken, & Baumeister, 2004; Werner & Crick, 1999). In a study that examined the relationship between relational aggression and DSM-IV personality disorders in a non-clinical sample of college students, relational aggression had a strong
positive relationship with traits of Cluster B personality disorders; namely, Antisocial Personality Disorder, Borderline Personality Disorder, Histrionic Personality Disorder, and Narcissistic Personality Disorder (American Psychiatric Association, 2000; Schmeelk et al., 2008). Further, relational aggression was significantly correlated to certain features of psychopathy; i.e., chronic antisocial behavior and poor impulse control (Schmeelk et al., 2008). A more recent study suggests that victimization by relational aggression is negatively correlated to personal-emotional adjustment to college, social adjustment to college, and to overall college adjustment (Klem, 2008). These issues can have a serious negative impact on college students' perceptions of the campus climate, and can also hinder college students' ability to learn and retain academic material. Taken as a whole, these issues can in turn result in decreased college student retention rates.

However, research indicates that in spite of the serious long-term consequences associated with relational aggression, many people consider physical aggression to be the more serious problem, more worthy of immediate intervention and more stern consequences (Bauman & Del Rio, 2006; Craig, Henderson, & Murphy, 2000; Hazler, Miller, Carney, & Green, 2001; Werner, Senich, & Przepyszny, 2006). Interestingly, however, some research shows a link between relational aggression and physical aggression (Talbott, Celinska, Simpson, & Coe, 2002). Specifically, some studies have found that incidents of physical aggression were predicated by relational aggression (Talbott et al., 2002). Indeed, in some notable school shooting cases, research indicates that many of the shooters were victims of relational aggression themselves (Vossekuiil, Fein, Reddy, Borum, & Modzeleski, 2002). In a Secret Service study of 41 students who were perpetrators of school shootings between 1974 and 2000, investigators found that
three quarters of the shooters “felt persecuted, bullied, threatened, attacked, or injured by others prior to the incident” (Vossekuil et al., 2002, p. 21). In several cases, the harassment was long-standing and severe, which is characteristic of bullying (Bauman & Del Rio, 2005; Hazler et al., 2001; Nicolaides, Toda, & Smith, 2002; Olweus, 1993), and appeared to investigators to be a factor in the shooter’s decision to launch an attack at the school (Vossekuil et al., 2002). While the bullying experienced by the shooters prior to the attacks did include some physical attacks, it more commonly included more relationally aggressive behaviors such as verbal teasing and social exclusion (Vossekuil et al., 2002). Sixty-one percent of the shooters in the study specifically cited revenge as their motivation to launch an attack at school, while another 27 percent cited suicidal thoughts and/or depression (Vossekuil et al., 2002), both of which have been linked to relational aggression (Crick & Grotpeter, 1996; Owens et al., 2000; Young, Boye, & Nelson, 2006). With the rising incidents of shootings on college campuses in recent years (Associated Press, 2008; Reuters, 2008; Supiano, 2008), a closer examination of relational aggression among college students, as well as the perceptions and responses of campus authority figures, becomes relevant and necessary.

Prior research indicates that, despite evidence to the contrary, many adults do not consider relational aggression to be a serious problem (Bauman & Del Rio, 2006; Craig et al., 2000; Hazler et al., 2001; Werner et al., 2006). Further, even if they do consider relational aggression to be serious enough to warrant intervention, there is the challenge of recognizing relational aggression in the first place (Young, Boye, & Nelson, 2006). Given its covert nature, relational aggression is difficult to observe by others, making intervention that much less likely (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Crick &
Grotpeter, 1995). With proper education, however, adults may begin to see the seriousness of the issue, and may therefore become more diligent in monitoring students’ social interactions (Craig et al., 2000).

While there has been limited research on relational aggression in college students (Basow, Cahill, Phelen, Longshore, & McGillicuddy-DeLisi, 2007; Loudin, Loukas, & Robinson, 2003; Storch et al., 2003; Werner & Crick, 1999), the majority of research on relational aggression has been conducted with children (Werner & Crick, 1999). Consequently, studies which examine the perceptions of adults with regard to relational aggression tend to focus on the parents and/or teachers of students in grades pre-K through 12 (Bauman & Del Rio, 2006; Craig et al., 2000; Hazler et al., 2001; Werner et al., 2006). There currently exists no research which examines the perceptions of authority figures beyond the elementary and secondary school setting, such as in the workplace or on college campuses. Given the serious negative consequences associated with relational aggression in college students (Klem, 2008; Storch et al., 2003; Werner & Crick, 1999), rising college enrollments (Davis & Bauman, 2008), the rising number of college shootings in recent years (Associated Press, 2008; Reuters, 2008; Supiano, 2008), and the fact that many perpetrators of previous school shootings were victims of relational aggression (Vossekuil et al., 2002), it becomes worth examining the perceptions of college instructors regarding relational aggression, and the likelihood that they might intervene when they become aware of relational aggression among their students. This is important because, while many colleges and universities offer campus counseling services or other student support services, many students either do not know about these services, or they are unlikely to seek out such services without a direct referral (Rosenthal
Instructors tend to have more regular direct contact with students than other campus staff, and are therefore in an integral position to be able to identify students with problems, to intervene on the students’ behalf, and to refer the students for counseling or other support services if necessary.

It is also worth examining what factors might influence college instructors’ willingness or likelihood of intervening when they witness or are made aware of relational aggression among their students. Prior research has shown that elementary and secondary school teachers view physical aggression as more serious, and more likely to warrant intervention than other forms of aggression (Bauman & Del Rio, 2006; Craig et al., 2000; Hazler et al., 2001; Werner et al., 2006). Further, teachers even show less concern for situations in which the target is harmed socially or emotionally (Hazler et al., 2001). In fact, when elementary and secondary teachers were asked to define bullying, they tended to include primarily physically aggressive acts, while relationally aggressive behaviors that caused emotional distress were not considered to be bullying (Boulton, 1997).

Prior research has also found contextual and dispositional factors that influence teachers’ likelihood of intervening in relationally aggressive situations (Craig et al., 2000). First, a teacher who witnesses an act of verbal aggression or social exclusion is more likely to intervene than when the situation is reported by students (Craig et al., 2000; Limber, 2002; Nicolaides et al., 2002). Second, teachers with high self-efficacy are more confident in their ability to handle bullying situations, and are therefore more likely to intervene in such situations (Bauman & Del Rio, 2005; Boulton, 1997; Yoon, 2004). Third, teachers high in empathy tend to view bullying in general to be more serious, and
are more likely to intervene than teachers with lower levels of empathy (Bauman & Del Rio, 2006; Craig et al., 2000; Yoon, 2004). Craig and colleagues (2000) have recommended that teachers be educated about relational aggression and bullying, and that they also receive empathy training, in an effort to increase teacher awareness of the seriousness of relational aggression/bullying, and to increase the likelihood of teacher intervention.

Similarly, with recent research showing negative long-term consequences for college students, it becomes worthwhile to examine college professors' perceptions of and responses to relational aggression in college students. Such research can not only further the understanding of counselors and other collegiate student services personnel regarding this form of aggression in college students, but may provide a first step in addressing this type of aggression on college and university campuses. Addressing this specific form of aggression among college students may go a long way toward curbing or preventing the long-term negative mental and emotional consequences associated with relational aggression, as well as toward improving college student adjustment, campus climate and safety, and collegiate student retention rates.

Purpose

While there is a relative paucity of research on relational aggression in college students, there is some evidence to suggest that, just as children and adolescents are negatively and seriously impacted by relational aggression (Merrell et al., 2006; Young, Boye, & Nelson, 2006), so are young, college-aged adults (Storch et al., 2003; Storch et al., 2004; Werner & Crick, 1999). However, the issue of whether or not college instructors view relational aggression as a serious problem, as well as their likelihood of
intervention in relationally aggressive situations, remains unexplored. The current study attempted to extend the current literature on relational aggression to include the perceptions and likely intervention of instructors on college campuses. Further, the study also examined contextual and dispositional factors, i.e., class size, gender, and empathy, which may impact college instructors’ perceptions of relational aggression, and the likelihood that they would intervene if they witness or are made aware of relationally aggressive behaviors in their students. The results of this study are discussed in the context of current research on relational aggression in college students, and the possible implications for colleges and universities, instructors, and campus counselors.

Significance of the Study

While research on relational aggression in college students is limited, it does suggest a link between relational aggression and mental health issues such as social anxiety, eating disorders, and depression (Storch et al., 2003; Storch et al., 2004; Werner & Crick, 1999). Relational aggression has also been found to be correlated to alcohol abuse and other self-destructive behaviors in college students (Storch et al., 2003; Storch et al., 2004; Werner & Crick, 1999), as well as to overall college student adjustment (Klem, 2008). This myriad of issues can ultimately impact college students’ mental and physical well being, as well as harm their chances of remaining and succeeding in college.

While there has been a call for more mental health services for college students in recent years (Stovell, 2006), recent campus shootings have made the call for campus mental health services even more prominent in the general public (Voelker, 2007). Research has shown, however, that campus mental health services tend to be
underutilized for various reasons, including lack of knowledge about these services (Rosenthal & Wilson, 2008; Yorgason, 2008). For this reason, college instructors can play a key role in intervening on students’ behalf and making appropriate referrals when necessary. However, while recent events illustrate that college instructors are likely to intervene in extreme circumstances, such as the violent writings of Seung Hui Cho at Virginia Tech (Adams, 2007; Gardner & Cho, 2007), college instructors’ attitudes toward relational aggression remain unexplored. This study explores these attitudes in an effort to gain insight into how knowledgeable college instructors are as to the seriousness of relational aggression. This insight may then be used to educate college instructors about relational aggression, and to assist colleges in developing appropriate interventions for college students who are experiencing relational aggression.

Research Question

What amount of variance in college professors' likelihood of intervention when witnessing relational aggression in their students can be predicted by the professors' ratings of seriousness of relational aggression, instructor empathy, the professors' gender, the gender of the perpetrator and target in a given relationally aggressive scenario, and class size?

Definition of Terms

*Relational Aggression.* Behavior that causes harm to others via damage to and/or manipulation of their peer relationships (Crick & Grotpeter, 1995). Relational aggression is similar to indirect and social aggression in that it emphasizes harm via social means (Coyne, Archer, & Eslea, 2006). However, the behavior does not need to be covert; rather, it can be carried out directly in front of a target, i.e., Girl A tells Girl B that they
cannot be friends anymore unless Girl B does what Girl A wants (Coyne et al., 2006). Due to the overlap in definitions, some researchers argue that the terms relational aggression, indirect aggression, and social aggression are referring to the same construct (Archer & Coyne, 2005; Bjorkqvist, Osterman, Lagerspetz, Landau, Caprara, & Fraczek, 2001). For the purpose of this study, the term ‘relational aggression’ is used to refer to behaviors that might otherwise be referred to as indirect or social aggression.

*Indirect Aggression.* Behavior in which the targeted person is not attacked physically or directly through verbal intimidation, but rather, in a circuitous way via social manipulation (Kaukiainen et al., 1999).

*Verbal Indirect Aggression.* Behavior that causes harm through social manipulation and in a covert manner via gossiping, spreading rumors, writing nasty notes to others, or trying to get others to exclude a group member (Coyne et al., 2006).

*Physical Indirect Aggression.* Behavior that causes harm to another by covertly destroying the other’s property or robbing them (Coyne et al., 2006). Physical indirect aggression may also include attempts to cause psychological or physical harm by attacking the target through a third party in order to conceal the aggressive intent (Bjorkqvist et al., 2001).

*Social Aggression.* Behavior that is intended to harm one’s self-esteem, social status, or both (Galen & Underwood, 1997). Social aggression may include physical and nonverbal behaviors (such as eye rolling or negative facial expressions), that occur in a social setting, with the intent to damage social status (Galen & Underwood, 1997). Social aggression may also include indirect behaviors such as spreading rumors or social exclusion (Galen & Underwood, 1997).
Physical Aggression. Behavior that harms others through physical means, such as hitting or pushing (Crick & Grotpeter, 1995).

Verbal Aggression. Behavior that harms others through verbal means such as threatening (Crick & Grotpeter, 1995).

Bullying. Behavior that is intended to harm another, either physically, verbally, or socially, that is repeated over time, and involves an unfair power matching, meaning that repetitive harm is inflicted upon someone who is weaker by someone who is more powerful (Bauman & Del Rio, 2005).

Relational Bullying. Relationally aggressive behavior that is repeated over time and involves an unfair power differential between the perpetrator and the victim (Bauman & Del Rio, 2005; Hazler et al., 2001; Nicolaides et al., 2002; Olweus, 1993).

Emotional Empathy. The inclination to vicariously experience the emotions of another. In other words, feeling what the other person feels (Mehrabian & Epstein, 1972).

Dispositional Empathy. The reaction of one individual to the observed experiences of another individual, which is considered to be a dispositional trait, and is believed to have both an affective and a cognitive component (Davis, 1983).

Empathic Concern. The affective component of dispositional empathy, which involves an emotional response to another person’s emotional state or situation, or in other words, one’s emotional responsiveness to others (Davis, 1983).

Perspective Taking: The cognitive component of dispositional empathy, which involves the ability to identify or differentiate between the emotional states of others, or to assume the cognitive or affective perspective of others (Davis, 1983).
Summary

Research on relational aggression began in an effort to study other, more subtle forms of aggression than physical aggression (Merrell et al., 2006). While the majority of this research has been conducted with children (Werner & Crick, 1999), more recent studies have begun to examine relational aggression in college students (Klem, 2008; Storch et al., 2003; Storch et al., 2004; Werner & Crick, 1999). This research has revealed correlations between relational aggression and mental health conditions such as social anxiety, eating disorders, and depression in college students (Storch et al., 2003; Storch et al., 2004; Werner & Crick, 1999), as well as between relational aggression and issues such as alcohol abuse (Storch et al., 2003; Storch et al., 2004; Werner & Crick, 1999) and lack of adequate college adjustment (Klem, 2008). Taken together, these issues can have a negative impact on perceived campus climate and safety, and in turn, on college student retention rates.

Given the increased call for mental health services for college students in recent years (Stovell, 2006; Voelker, 2007), and the fact that college students tend to underutilize the mental health services that are available to them (Rosenthal & Wilson, 2008; Yorgason, 2008), the ability of college instructors to understand the seriousness of relational aggression and to intervene appropriately when they witness or are made aware of relational aggression in their students becomes paramount. College counselors and other student service personnel can assist in educating college instructors about relational aggression and its long-term consequences so that they may respond appropriately when they witness it in their students. The purpose of this study is to examine college
instructors’ perceptions of relational aggression and their likelihood of intervening when they witness or are made aware of relationally aggressive behavior in their students.
II. REVIEW OF LITERATURE

Introduction

This chapter will provide an overview of literature relevant to the research question, which seeks to explain how professors' likelihood of intervention when they witness relational aggression in their classrooms is influenced by gender, class size, instructor empathy, and the perceived seriousness of a given relationally aggressive situation. The chapter includes information regarding various theories of aggression which attempt to define, categorize, and explain different types of aggression and their associated behaviors, motivations, and development. Specifically, this chapter examines relational aggression, including how it is identified and perceived by others, how it is used by males and females, how it impacts males and females, and how it varies across cultures. Further, relational aggression in college students is reviewed, as well as educator attitudes toward and responses to relational aggression. Finally, this chapter examines empathy and class size, including the relationship of empathy to aggression and pro-social/helping behavior, and the relationship between class size and academic achievement. The chapter further examines mediating factors between class size and academic achievement, including teacher characteristics, student characteristics, and teacher-student interactions.
Theories of Aggression

Following is a comparison of various theories of aggression, including direct, indirect, social, and relational aggression. These theories attempt not only to define aggression, but to identify and explain different types of aggression. The theories include descriptions of how different types of aggression manifest, the motivations behind the aggression, and how the different types of aggression develop over time and across gender.

The Nature of Relational Aggression

Definition and Identification

There are numerous ways to categorize theories of aggression. One such way is to distinguish between direct and indirect methods of aggression (Bjorkqvist, 1994). Lagerspetz et al. (1988), Bjorkqvist (1994) and Kaukiainen et al. (1999) define indirect aggression as behavior in which the targeted person is not attacked verbally or physically, but rather, through social manipulation via circuitous means. Examples of such covert behaviors include gossiping, spreading rumors, ignoring or avoiding someone, and social exclusion (Young, Boye, & Nelson, 2006). In addition, information processing (Crick & Dodge, 1996), social (Galen & Underwood’ 1997) and relational (Crick & Grotpeter, 1995) aggression have all been identified. Social information-processing theory of aggression asserts that aggression is influenced, at least in part, by how individuals perceive and interpret the behavior and intentions of others (Crick & Dodge, 1996; Dodge, 1980). In other words, people who make hostile attributions regarding the intentions of others, even when no hostility is actually intended, are more likely to engage in aggressive behavior, whether direct or indirect, in order to retaliate (Crick & Dodge,
1996; Dodge, 1980; Loudin et al., 2003). Social aggression is defined as behavior that is intended to damage another's self-esteem, social status, or both (Galen & Underwood, 1997). Social aggression is a broad category of specific behaviors, including physical and nonverbal behaviors (such as eye rolling or negative facial expressions), that may occur in a social setting with the intent to damage social status (Merrell et al., 2006).

Whatever the category, definitions of aggression generally involve the intent to harm (Merrell et al., 2006; Young, Boye, & Nelson, 2006). Physical aggression is the most commonly studied form of aggression (Young, Boye, & Nelson, 2006); it may include behaviors such as pushing, hitting, kicking, throwing objects, or threatening to commit such acts (Merrell et al., 2006; Young, Boye, & Nelson, 2006). Relational aggression, in contrast, involves harming others through the manipulation of and/or damage to one’s peer relationships (Crick & Grotpeter, 1995).

According to Bjorkqvist (1994), an aggressor will choose which aggressive tactics to use based on the expected efficacy of the tactic, as well as the possible danger involved. In other words, aggressors will choose strategies that ensure maximum harm to their intended target, while at the same time ensuring minimal risk to themselves (Sumrall et al., 2000). Crick and Grotpeter (1995) agree, asserting that when people aggress, they will engage in behaviors that are most likely to cause harm to valued goals. In some cases, the aggressor may engage in covert, indirect behaviors in an effort to ensure anonymity and to decrease the threat of retaliation (Bjorkqvist, 1994; Loudin et al., 2003). For example, the aggressor will assess the relationship between the effect of the intended strategy on the target, as well as the potential for retaliation, whether it is physical, psychological, or social (Bjorkqvist, 1994). Physical aggression may be an
effective means of harming the target, but also holds the potential for harm to the aggressor. Indirect aggression on the other hand, if successful, allows the aggressor to harm the target and remain unidentified, thus minimizing the risk of counter-attack. This attempt to cause maximum harm to a target at minimal risk to the aggressor is known as the effect-danger ratio (Bjorkqvist, 1994).

Bjorkqvist and colleagues (1992) also acknowledge a developmental component to aggressive behavior. They assert that small children do not have the verbal and social skills required for the effective use of more subtle, covert forms of aggression; and small children therefore resort primarily to physically aggressive tactics. As children age, their verbal skills improve. They also begin to recognize the potential danger inherent in physically aggressive tactics, so they begin to replace physical aggression with verbal aggression. Once social intelligence develops to the point that children are able to analyze and manipulate social relations to their benefit, they begin to use more covert forms of aggression, such as relational aggression, that emphasize social manipulation and exclusion (Bjorkqvist et al., 1992). Examples of relationally aggressive behavior include threatening to stop talking to a friend, excluding someone from the peer group, or spreading rumors within the peer group (Young, Boye, & Nelson, 2006).

Identifying relational aggression can be difficult because it typically is covert in nature, and therefore, not easily observable (Young, Boye, & Nelson, 2006). Crick and Grotpeter (1995) and Bjorkqvist (1992) both assert that relationally aggressive behavior would be difficult to reliably recognize and observe, and that, due to its individual nature and focus on peer relationships, much of this type of aggression would go unnoticed by those outside of the peer group. Further, it may not be viewed by adults or by children as
aggression, or as warranting intervention (Orpinas et al., 2003; Young, Boye, & Nelson, 2006). Relational aggression is not often recognized as hurtful, inappropriate, or as warranting a focused response by adults (Young, Boye, & Nelson, 2006). In fact, some research indicates that relational aggression is viewed as a rite of passage, or as a normal part of growing up. Consequently, adults may not attend to the emotional needs of the targets of relational aggression (Young, Boye, & Nelson, 2006).

Research has also shown that the way children evaluate/interpret relational aggression is influenced by the context of the situation. For example, Sumrall et al. (2000) found that elementary age girls’ interpretation of a relationally aggressive situation depends on whether or not the aggressor was a classroom best friend or a classroom enemy, and also depending on whether the “mean comment” was made directly to the target or made to a neutral third party. The girls in the study were less likely to attribute hostile intentions to their best friend, and more likely to attribute hostile intentions to their classroom enemy in the same scenario (Sumrall et al., 2000). This may be, in part, due to differing expectations that children have regarding the behavior of a best friend versus an enemy. Further, girls in the study attributed more hostile intentions to comments that were made directly to them, and less hostile intentions to comments that were made to a neutral third party, possibly due to the greater ambiguity associated with indirect comments (Sumrall, et al., 2000).

Additional research dealing with children’s intent attributions of aggressive behavior has revealed a certain bias toward children’s preferred aggressive style. For example, Crick (1995) found that children who are relationally aggressive exhibit a hostile attributional bias in response to relational provocations, while overtly aggressive
children have hostile attributional bias only toward overt provocations. However, this finding is not consistent with Sumrall et al.'s study which found that the type of relationship that the child has with the aggressor (best friend versus enemy) may have greater influence over the child’s intent attributions than does the child’s preferred aggressive style (2006).

**Differentiation from Related Constructs**

Researchers such as Bjorkvist (2001) and Archer and Coyne (2005) assert that the terms relational aggression, social aggression, and indirect aggression are all referring to the same concept, due to the overlap in the definitions regarding the manipulation of and/or damage to social relationships. Researchers who advocate for the use of 'relational aggression' believe that ‘social aggression’ is too broad of a term, while ‘indirect aggression’ is thought to be too narrow a term that does not capture the full range of behaviors involved with this concept (Merrell et al., 2006). Relational aggression differs slightly from the other types in that it includes both covert (indirect) and overt (direct) behaviors, such as telling a peer directly that he/she may not sit at one’s table in the lunch room, come to one’s birthday party, etc. (Young, Boye, & Nelson, 2006).

Some literature uses the term ‘relational bullying’ rather than ‘relational aggression’ (Sampson, 2002). Further, several authors, while not explicitly using the term relational bullying, acknowledge that bullying can take physical, verbal, social, or emotional/psychological forms (Bauman & Del Rio, 2005; Hazler et al., 2001; Nicolaides et al., 2002; Olweus, 1993). As previously mentioned, definitions of aggression, regardless of the type of aggression, generally involve the intent to harm (Merrell et al., 2006; Young, Boye, & Nelson, 2006). Bullying, a subtype of aggression (Bauman & Del
Rio, 2005), also involves the intent to harm (Olweus, 1993), but there are two distinguishing characteristics between aggression and bullying (Bauman & Del Rio, 2005). First, while the term aggression can refer to a single aggressive act or conflict, bullying refers to aggressive behavior that is repeated over time. Second, bullying involves an unfair power matching, meaning that the repetitive harm is inflicted upon someone who is weaker (either physically, verbally, or socially) by someone who is more powerful (Bauman & Del Rio, 2005; Hazler et al., 2001; Nicolaides et al., 2002; Olweus, 1993). Thus, ‘relational bullying’ literature is concerned with relationally aggressive acts which are repeated over time and involve an unfair balance of power between the perpetrator and the victim (Bauman & Del Rio, 2005; Hazler et al., 2001; Nicolaides et al., 2002; Olweus, 1993).

*Gender and Relational Aggression*

One line of relational aggression research examines whether or not there are gender related differences in the use of relational aggression. The majority of this research has been conducted with school age children rather than adults. The results have been mixed. Some research indicates greater relational aggression in females, some suggests greater use in males, and still other studies have found similar levels of relational aggression across gender.

Prior to the study of relational aggression, research on aggression focused primarily on physical aggression in boys (Bjorkqvist, 1994; Merrell et al., 2006; Underwood, Galen, & Paquette, 2001). Research on relational aggression began in an effort to take into account other, more subtle forms of aggression (Merrell et al., 2006). With regard to gender differences in relational aggression, Underwood et al. (2001)
argued that the evidence of differences by gender is largely inconclusive and warned against conceptualizing relational aggression as a female form of aggression. Bjorkqvist (1994, 2001) agreed, suggesting that gender differences should be examined more closely. Further, many studies have begun to examine gender difference in relational aggression using both quantitative and qualitative methods (Bjorkqvist, 1994).

Girls. Crick and colleagues (1995, 1996) found that physical aggression is associated more with boys’ peer interactions, while relational aggression is more common in conflict among girls. In fact, when comparing girls and boys in aggressive situations, girls were found to be more relationally aggressive per incident, while boys were found to be more physically aggressive (Crick & Grotpeter, 1995).

In addition, research has shown that girls believe verbal insults and relational aggression to be as harmful as or more harmful than physical aggression; whereas boys believe physical aggression and verbal attacks to be particularly harmful (Crick, Bigbee, & Howes, 1996; Galen & Underwood, 1997). Further, girls tend to direct relationally aggressive tactics toward other girls (Russell & Owens, 1999), which may explain why relational aggression is considered by some researchers to be a relatively normal conflict style in female peer groups (Crick et al., 1996). These findings are consistent with Bjorkqvist’s (1994) theory of aggression, which states, as mentioned earlier, that aggressors choose tactics that bring maximum harm to the intended target, and minimal risk to the perpetrator. In other words, since girls believe relational aggression to be as harmful as or more harmful than physical aggression, and since girls place high value on social circles, it makes sense that girls will choose aggressive strategies that disrupt social relationships or social group standing (Sumrall et al., 2000). Boys, in contrast, are more
likely to disrupt “dominance hierarchies”, which are more valued in boys’ peer groups, through the use of overt physical tactics (Sumrall et al., 2000).

**Boys.** A few studies have found that boys engage in more relationally aggressive techniques than girls (Merrell et. Al, 2006). Henington, Hughes, Cavell, & Thompson (1998) found that second- and third-grade boys were considered by their peers to be more aggressive than girls, both relationally and physically. Goldstein, Tisak, and Boxer (2002) found that preschool children perceived boys to be more relationally aggressive than girls. Further, they found that children believed relational aggression to be more acceptable for boys than for girls. The authors in both studies suggested that their findings may be due to children simply finding boys to be more aggressive than girls in general (Goldstein et al., 2002; Henington et al., 1998). Further, since both of these studies included younger children, as opposed to older children or adolescents, researchers may consider the possibility of gender x age effects for relational aggression (Merrell et al., 2006).

**Cross-Gender.** Some research has indicated similar rates of relational aggression among boys and girls (Merrell et al., 2006). For example, Crick, Bigbee, & Howes (1996) examined students in grades three through six, and found that both boys and girls indicated that relational aggression is a normative behavior. While Xie, Farmer, and Cairns (2003) found gender differences in relational aggression for middle school children, they did not find gender differences in younger elementary-school-aged children, further suggesting a gender x age effect for relational aggression. This gender x age effect was also indicated by Galen and Underwood (1997), who found that middle-school-aged boys and girls did not differ in frequency of relationally aggressive acts.
They also found that girls at this age perceived relational and physical aggression as equally hurtful, and that girls considered both relational and physical aggression to be more hurtful than did boys. However, participants at the low and high ends of their age distribution (grades 4 and 10) indicated that physical aggression was more hurtful than relational aggression. The researchers theorized that this difference may be due to the increased importance of social relationships and social standing during middle school (Galen & Underwood, 1997).

*Psychosocial adjustment.* Crick and Grotpeter (1995) have found relational aggression to be predictive of future social maladjustment, more so for girls than for boys, and particularly when levels of overt (physical) aggression are statistically controlled. However, for boys and girls alike, relationally aggressive children tend to be more disliked, socially maladjusted, and more likely to be rejected by their peers, particularly when children use extreme forms of relational aggression (Crick & Grotpeter, 1995). In contrast, Henington et al. (1998) found that, in boys, relationally aggressive behaviors only predicted peer rejection when combined with physically aggressive behaviors. In girls, however, only physical aggression was predictive of peer rejection (Henington et al., 1998).

Relational aggression has also been linked to feelings of low self-worth in both boys and girls from preschool through adolescence (Merrell et al., 2006; Young, Boye, & Nelson, 2006). In a study by Paquette and Underwood (1999), both boys and girls reported that incidents involving relational aggression made them feel worse about themselves than incidents involving physical aggression, although girls reported feeling more hurt than boys. Crick and Grotpeter (1996) found that children who reported
relational victimization also reported increased loneliness and depression. Teen targets of relational aggression reported more internalization of symptoms, more loneliness, and lower self-worth than other teens (Young et al., 2001). Further, some research indicates that the frequency of experiencing relational aggression was linked to low feelings of self-worth more so for girls than for boys (Paquette & Underwood, 1999).

Additional studies seem to indicate that the negative effects of experiencing relational aggression may be more pronounced for girls than for boys (Merrell et al., 2006). For example, Talbott and colleagues (2002) found that relational aggression in girls can lead to future physical aggression, as well as to a bully-victim cycle, meaning that the girls can be both the perpetrator and the target of relational aggression. In addition, Owens, Slee, and Shute (2000) followed a progression of effects associated with relational aggression in 15-year-old girls. This progression began with feelings of confusion, hurt, and loss of self-confidence, and progressed to feelings of paranoia that they would experience this type of aggression in future relationships, a desire to leave school, and, in the most severe cases, thoughts of suicide (Owens et al., 2000).

While relational aggression has been found to be predictive of future social maladjustment (Crick & Grotpeter, 1995), some research has shown that high social status is a prerequisite for the effective, and more powerful, use of relationally aggressive tactics, regardless of gender (Rose, Swenson, & Waller, 2004). In other words, children with increasing levels of social status can use relational aggression more effectively, and with less risk of negatively impacting their own social standing (Merrell et al., 2006; Rose et al., 2004). In fact, some research has indicated that children may actually use relationally aggressive tactics to improve or maintain their standing in social groups.
(Young, Boye, & Nelson, 2006). For example, Rose et al. (2004) found that for adolescent girls, use of relational aggression resulted in peers perceiving the aggressor as more popular, which then led to an increased likelihood that girls would use relationally aggressive strategies to improve or maintain their social standing. For boys, however, relationally aggressive strategies did not lead to an increase in perceived popularity (Rose et al., 2004).

Despite the fact that some studies have indicated that children and adolescents, particularly girls, use relational aggression to improve or maintain their social status, researchers warn against the assumption that relational aggression may serve an adaptive function in certain situations (Young, Boye, & Nelson, 2006). Young and colleagues suggest that even though some children and adolescents use relational aggression to achieve social goals, they do so at the expense of their actual relationships. Furthermore, perceived-popular children and adolescents who engage in relational aggression become more and more disliked over time, which may lead to significant relationship difficulties in adulthood (Young, Boye, & Nelson, 2006).

Some research has shown that while aggressive children may develop friendships, the nature of their interactions with friends may differ. When comparing the relationship patterns of relationally aggressive and overtly aggressive children, Grotpeter and Crick (1996) found that relationally aggressive children have higher levels of intimacy, personal disclosure, and aggression with their friends, while overtly aggressive children have lower levels of intimacy and personal disclosure, even though they have more social interaction with friends.
Race/Culture and Relational Aggression

There is a paucity of research regarding race and relational aggression (Young et al., 2006). While research has indicated that children across cultures report relational aggression to be harmful (Crick et al., 1996; French, Jansen, & Pidada, 2002), the research has also focused primarily on similarities, rather than differences, with regard to how different cultural or ethnic groups may experience relational aggression (French et al., 2002; Hart, Nelson, Robinson, Olsen, McNeilly-Choque, 1998). However, in a study of middle-school-age African American females, students who took part in a 15-week cultural identity program reported fewer incidents of relational aggression than students in a comparison group (Belgrave et al., 2004). The lessons included discussions of being female and of African descent, and important components of this program included group support, cohesiveness, and mentoring (Belgrave et al., 2004).

Another study of African American and Hispanic/Latina teenage girls showed that relational aggression often precedes physical aggression, particularly in urban settings (Talbott et al., 2002). Relationally aggressive behaviors also led girls in this study to question group alliances. Participants also reported that while adults did respond to physical aggression, these same adults were largely unaware of the precipitating incidents of relational aggression (Talbott et al., 2002). This is consistent with Crick and Grotpeter’s (1995) and Bjorkqvist’s (1992) assertion that this form of aggression may remain unnoticed by people outside of one’s peer group.

Relational Aggression in Higher Education

While the majority of research on relational aggression has focused on children, in part because schools provide a naturalistic setting in which to study behavior (Werner
& Crick, 1999), some research suggests that relational aggression continues into adulthood (Bjorkqvist et al., 1992; 1994). Similarly, Werner and Crick (1999) found that college students often identify relational aggression as a common tactic enacted by their peers, furthering the evidence that relational aggression is common not only in children, but also in older adolescents and young adults. More recent research on relational aggression in emerging adults (men and women between the ages of 18 and 25), which to date has utilized primarily college students, indicates that relational aggression is a normative behavior in this age group, and that it is particularly salient given the emphasis on peer and romantic relationships during this developmental period (Nelson et al., 2007, Ostrov & Houston, 2008).

College Students' Perceptions of Relational Aggression

Nature and prevalence. Nelson and colleagues (2007) explored the normative beliefs of college students regarding relational aggression in emerging adulthood, a developmental period that occurs between 18 and 25 years of age. Emerging adults focus on individual goals, while at the same time they place greater emphasis on peer and romantic relationships (Nelson et al., 2007, Ostrov & Houston, 2008). This study surveyed college students about what specific form(s) aggression commonly takes in male-male, male-female, female-male, and female-female aggressor/target dyads (Nelson et al., 2007). Participants selected verbal aggression and direct physical aggression as norms for male-to-male aggression. For male-to-female aggression, verbal aggression was the most cited behavior category. Indirect relational aggression and verbal aggression were selected as norms for female-to-female aggression. Finally, both direct and indirect relational aggression, ignoring/avoiding non-verbal aggression, and verbal aggression
were perceived to be the most normative behaviors for female-to-male aggression. While relational aggression was only selected as a normative behavior for female aggressors, the authors of this study did caution that college students' perceptions may be influenced by gender stereotypes, and may not accurately reflect the frequency with which relational aggression is utilized by males and females in emerging adulthood (Nelson et al., 2007).

Basow and colleagues (2007) used vignettes depicting relationally aggressive behaviors to examine the perceptions that college students have regarding relational aggression. Specifically, the researchers examined the role of personal experience, gender of the perpetrator, gender of the target, and gender of the perceiver on college students’ perceptions. With regard to personal experience, researchers found no gender differences in experience with relational aggression, either as targets or as perpetrators. In addition, not only do male college students have similar experiences with relational aggression as their female counterparts, but when males are the targets of relational aggression, they are perceived as equally harmed by it. With regard to the gender of the perceiver, women participating in the study rated all aggressive behaviors as less acceptable and more harmful than male participants. This finding held true regardless of the gender of the aggressor or the gender of the target in the vignettes provided. Relational aggression perpetrated by a female character was perceived more negatively than the same behavior perpetrated by a male character, except in scenarios with a male aggressor and a female target. Male relational aggression perpetrated against female targets was rated as less acceptable than the same behavior in any other gender pairing (male aggressor/male target, female aggressor/female target, and female aggressor/male target) (Basow et al., 2007).
Psychosocial adjustment. In their study of undergraduate students, Werner and Crick (1999) found that relational aggression was correlated with higher rates of peer rejection and antisocial personality features, as well as with lower rates of prosocial behavior. This is consistent with previous findings in research with children and early adolescents indicating that those who are relationally aggressive are more likely to be rejected by peers, to engage in fewer pro-social acts, and to externalize difficulties (Crick & Grotpeter, 1995).

Werner and Crick (1999) also found relational aggression in college students to be correlated with borderline personality features (fear of abandonment or separation resulting in unstable interpersonal relationships) and bulimia. College students who were identified by their peers as relationally aggressive reported more difficulty with anger management, higher rates of conflict in interpersonal relationships, and higher levels of impulsive or self-destructive behaviors. Females identified as relationally aggressive also reported higher rates of bulimic behaviors (Werner & Crick, 1999). Werner and Crick (1999) suggested that these findings reflect deficits in anger management and impulse control among young adults who frequently use relationally aggressive tactics, indicating that relationally aggressive men and women are equally likely to experience adjustment difficulties.

Storch and colleagues (2003) uncovered similar findings in a study of intercollegiate athletes. For intercollegiate athletes, higher rates of relational aggression were predictive of higher rates of peer rejection for both men and women. Further, relational aggression was also correlated to higher levels of alcohol use, but only for women. Unlike the Werner and Crick (1999) study, however, relational aggression was
not found to be associated with borderline personality features in intercollegiate athletes (Storch et al., 2003).

A more recent study by Schmeelk, Sylvers, and Lilienfeld (2008) examined the association between relational aggression and features of DSM-IV personality disorders and psychopathy in a college sample. The study found that, for both male and female college students, relational aggression was significantly correlated to features of each of the Cluster B personality disorders in the DSM-IV; i.e., Antisocial Personality Disorder, Borderline Personality Disorder, Histrionic Personality Disorder, and Narcissistic Personality Disorder (American Psychiatric Association, 2000). Further, significant correlations were found between relational aggression and Factor 2 traits of psychopathy; specifically, a chronic disposition toward antisocial behavior and poor impulse control. This study found no significant difference in relational aggression among men and women, and gender did not moderate the personality disorder correlates of relational aggression (Schmeelk et al., 2008).

_Influential factors_. Research has shown that empathy lessens the likelihood of aggressive behavior (Loudin et al., 2003; Mehrabian, 1997). Dispositional empathy is the reaction of one individual to the observed experiences of another individual, and it is believed to have both an affective and a cognitive component (Davis, 1983). The affective component is known as empathic concern, which is the tendency to experience sympathy or concern for unfortunate others, while the cognitive component is known as perspective taking, which is the ability to understand another’s perspective (Davis, 1983).

Mehrabian (1997) found that the affective component of empathy, known as empathic concern, had a negative correlation to aggression and violence in college
students. In other words, college students with higher levels of empathic concern were less likely to exhibit aggressive/violent behaviors, while those with lower levels of empathic concern were more likely to exhibit aggressive/violent behaviors. Similarly, male college students in the Loudin, Loukas, and Robinson (2003) study who reported less empathic concern were more likely than other males to display relational aggression. However, empathic concern was not associated with relational aggression for female college students in this particular study.

Loudin and colleagues (2003) also found that higher levels of perspective taking, the cognitive component of dispositional empathy, in male and female college students was associated with lower levels of relational aggression. The researchers suggest that this may be due to the fact that people with better perspective taking skills are more likely to understand how others may feel when aggression is directed at them, and may therefore be less likely to intentionally harm another person (Loudin et al., 2003). In contrast, people with poorer perspective taking ability are more likely to have hostile attributional bias toward others (Crick, 1995), and may therefore be more likely to retaliate against others (Loudin et al., 2003).

Loudin and colleagues (2003) also examined the role of social anxiety in relational aggression among college students. When in the company of others, people with social anxiety tend to be overly concerned with how others are perceiving or evaluating them. The researchers discovered that college students who reported a higher fear of being negatively evaluated also exhibited higher levels of relational aggression (Loudin et al., 2003). This is also consistent with Crick’s (1995) findings regarding attributional bias. People with social anxiety are more likely to assume that they are being
evaluated in a negative way, constituting a hostile attributional bias, and they are therefore more likely to retaliate in an aggressive manner (Crick, 1995; Loudin et al., 2003). Further, since relationally aggressive people tend to be rejected by their peers (Werner & Crick, 1999), relational aggression in college students may actually lead to increased fear of negative evaluation (Loudin et al., 2003).

Lento-Zwolinski (2007) also examined factors that are associated with relational aggression in college students. In this study, male college students reported more relationally aggressive acts than female college students. For males in this study, lower levels of prosocial behavior predicted higher levels of relational aggression (Lento-Zwolinski, 2007). This is consistent with Werner and Crick’s (1999) findings that prosocial behavior was negatively correlated to relational aggression in college students. For females, exclusivity was the best predictor of relational aggression (Lento-Zwolinski, 2007). The researcher suggested that females who value exclusive relationships may react to perceived threats to these relationships in relationally aggressive ways, particularly if they believe these tactics will strengthen or maintain the exclusivity. This is consistent with previous findings indicating that adolescent girls may use relational aggression to maintain or improve their social standing (Rose et al., 2004).

Educators’ Attitudes and Responses to Relational Aggression

In addition to studying the development, characteristics, and consequences of relational aggression in males and females of various age groups, another line of research has examined the ways that adults perceive and respond to relational aggression in children. This is significant given the prevalence of relational aggression (Hazler et al., 2001) and the potential for long-term harm to both the perpetrator and the target of
relational aggression (Crick & Grotpeter, 1995; Werner & Crick, 1999; Storch et al., 2003). To date, research on educators’ attitudes and responses to relational aggression has focused on K-12 teachers.

Students indicate that verbal and psychological bullying (i.e., relational bullying) are more prevalent than physical bullying (Hazler et al., 2001). Unfortunately, however, few teachers recognize these incidents or identify them as bullying (Hazler et al., 2001). This is consistent with other research which suggests that teachers often over-estimate their effectiveness in recognizing and intervening in bullying situations, regardless of type (Limber, 2002). For example, in one study, 70% of teachers reported that they ‘almost always’ intervene in bullying situations, while only 25% of their students agreed with this assessment (Charach, Pepler, & Zeiler, 1995). An observational study revealed that teachers only responded to 18% of the bullying incidents that took place in their elementary and middle school classrooms (Atlas & Pepler, 1998). Another observational study of playground interactions found that teachers only intervened in 4% of bullying incidents (Craig & Pepler, 1997). Clearly, teachers are intervening inconsistently and infrequently. These findings indicate that teachers may be largely unaware of the bullying that takes place at schools, either because it is difficult to detect, as with relational bullying, or because it is under-reported by students (Limber, 2002).

Another explanation for teachers’ seeming ineffectiveness with regard to intervening in bullying situations may have to do with their attitudes toward bullying, particularly when it involves different types of aggression. For example, teachers tend to label any physical conflict as bullying, even if it is not ongoing and does not involve a power differential between the people involved (Hazler et al., 2001). This is consistent
with research indicating that teachers, pre-service teachers, and parents view physical aggression as more serious, and more likely to warrant intervention, than other forms of aggression (Bauman & Del Rio, 2006; Craig et al., 2000; Hazler et al., 2001; Werner et al., 2006). Further, Hazler et al. (2001) found that when compared to physical conflict, teachers show less concern toward, and are less likely to intervene in, situations that involve social or emotional harm to the victim.

This is consistent with other research that reveals differential attitudes among teachers with regard to physical, verbal, and relational aggression/bullying (Craig et al., 2000). It appears that defining bullying is, to a large extent, subjective, and that it may be reflective of a social climate in which school shootings have lead to violence prevention initiatives aimed primarily at curbing physical violence in schools (Callahan, 2000; Craig et al., 2000). While teachers indicate that bullying can be either physical or emotional (Siann et al., 1993), including behaviors such as physical attacks and verbal threats, many do not identify relationally aggressive behaviors intended to cause emotional distress, such as spreading rumors and social exclusion, as bullying (Boulton, 1997). Obviously, if teachers’ definitions of bullying do not include relational aggression, then they are unlikely to intervene when they witness relationally aggressive acts.

In addition to differential attitudes toward different types of aggression and subjective definitions of bullying, other contextual and dispositional factors can influence teachers’ likelihood of intervening in relationally aggressive situations as well (Craig et al., 2000). For example, teachers who witness acts of verbal aggression and social exclusion are more likely to view these acts as bullying, and are more likely to intervene. In contrast, teachers are less likely to intervene in bullying situations that are reported by
students, as opposed to directly witnessed (Limber, 2000; Nicolaides et al., 2002). It comes as no surprise, then, that students question the commitment of their teachers to stopping bullying (Limber, 2000). One study found that only 35% of students surveyed believed that their teachers were interested in trying to stop bullying, while 44% were unsure, and 21% believed that their teachers were not interested (Harris, Petrie, & Willoughby, 2002).

Dispositional factors, such as self-efficacy and empathy, can influence the likelihood of teachers intervening in relationally aggressive and bullying situations as well. For example, some teachers do not feel prepared to handle aggressive and/or bullying situations, and this lack of self-efficacy affects their teaching (Bauman & Del Rio, 2005; Boulton, 1997; Craig et al., 2000; Nicolaides et al., 2002; Yoon, 2004). In contrast, teachers who are confident in their ability to address bullying situations are better able to focus on classroom instruction (Boulton, 1997).

Another dispositional factor that can impact teachers’ likelihood of intervening in relationally aggressive and bullying situations is empathy (Craig et al., 2000; Yoon, 2004). Teachers with higher empathy scores perceive bullying behaviors in general to be more serious, and are more likely to intervene in bullying situations (Bauman & Del Rio, 2006; Craig et al., 2000; Yoon, 2004). It is suggested that this is because people higher in empathy are better able to understand the experience of the person being bullied (Craig et al., 2000). However, while teachers higher in empathy are more likely to intervene in all types of aggressive/bullying situations (physical, verbal, and relational), teachers in one study had the least empathy for victims of relational bullying, and were least likely to intervene in relational bullying incidents (Bauman & Del Rio, 2006). It has been
recommended that teachers be educated about relational aggression and bullying, and that they also receive empathy training, in an effort to increase understanding of the seriousness of relational aggression and bullying, and to increase the likelihood of teacher intervention (Craig et al., 2006).

**Empathy as an Intervening Variable**

Empathy, known by some researchers as ‘dispositional empathy’, refers to one’s characteristic tendency to empathize with others, and is considered to be a stable dispositional trait (Archer, 1991; Davis, 1983; Miller & Eisenberg, 1988; Richardson et al., 1994). Empathy has been defined more specifically either as a cognitive or an affective response, or both (Feshbach & Feshbach, 1969; Miller & Eisenberg, 1988). Hogan (1969) defined empathy as a cognitive process involving the ability to identify the emotional state of others, or to assume the role of others. Other researchers have defined empathy as primarily an affective response, characterized by sensitivity to others’ feelings, or more specifically, as a vicarious emotional response to another person’s emotional state or situation (Berger, 1962; Feshbach, 1978; Feshbach & Roe, 1968; Hoffman, 1984; Kaukiainen et al., 1999; Mehrabian & Epstein, 1972; Stotland, 1969; Stotland & Dunn, 1963). Most researchers, however, believe that empathy involves both a cognitive and an affective component (Feshbach & Feshbach, 1982; Kaukiainen et al., 1999; Miller & Eisenberg, 1988).

The cognitive component of empathy is frequently referred to as role taking or perspective taking, and involves the ability to identify or differentiate between the emotional states of others, or to assume the cognitive or affective perspective of others (Coke, Batson, & McDavis, 1978; Davis, 1983; Feshbach, 1978; Feshbach & Feshbach,
Some researchers differentiate between these two cognitive abilities, labeling the ability to identify the emotional states of others as ‘affective role taking’, and the ability to understand another’s cognitive perspective as ‘cognitive role taking’ (Eisenberg & Miller, 1987).

The affective component of empathy is referred to as empathic concern (Davis, 1983; Miller & Eisenberg, 1988), which involves an emotional response to another person’s emotional state or situation, or in other words, one’s emotional responsiveness to others (Davis, 1983; Feshbach, 1978; Feshbach & Feshbach, 1982; Hoffman, 1984; Mehrabian & Epstein, 1972; Stotland, 1969). More specifically, some researchers define empathy as affective matching, or the ability to feel the same or similar emotions of another person in a given situation (Feshbach & Roe, 1968; Stotland, 1969). Other researchers define empathy as concern for another’s well being (Batson & Coke, 1981), while still others believe that a combination of affective matching and concern for another’s well being constitute empathy (Eisenberg & Miller, 1987; Hoffman, 1984; Mehrabian & Epstein, 1972). Perspective taking and empathic concern are known collectively as ‘dispositional empathy’ (Davis, 1983; Miller & Eisenberg, 1988; Richardson et al., 1994).

Empathy and relational aggression. There is considerable evidence for an inverse relationship between empathy and aggression, regardless of whether the aggression is physical, verbal, or relational, and regardless of gender (Feshbach & Feshbach, 1969; Kaukiainen et al., 1999; Mehrabian & Epstein, 1972; Miller & Eisenberg, 1988; Richardson et al., 1994; Rose & Feshbach, 1991). However, this relationship has not been consistently replicated, depending on how empathy is assessed (Richardson et al., 1994).
Miller and Eisenberg (1988) found that if empathy was manipulated, with participants being instructed to either observe another person or to notice similarities between the participant and the person being observed, there was no significant relationship between empathy and aggression. However, questionnaire measures of empathy, which have been used primarily with older children and adults, consistently found inverse relationships between empathy and aggression (Miller & Eisenberg, 1988; Richardson et al., 1994; Rose and Feshbach, 1991).

As previously stated, the cognitive and affective components of empathy are known collectively as ‘dispositional empathy’ (Davis, 1983; Miller & Eisenberg, 1988; Richardson et al., 1994). Some research has found that role-taking, i.e., perspective taking, or the cognitive component of dispositional empathy, is negatively related to aggressive behavior (Feshbach & Feshbach, 1986; Letourneau, 1981). However, one research group has found that both the cognitive component (perspective taking) and the affective component (empathic concern) of dispositional empathy are inversely related to various measures of aggression (Richardson et al., 1994). However, perspective taking is negatively correlated to more measures of aggressiveness than is empathic concern. Specifically, perspective taking is negatively correlated to aggression toward a sibling, irritability, assault, verbal aggression, and relational aggression. Empathic concern was found to be negatively correlated to two measures of aggressiveness: negativism and assault. Conversely, Richardson and colleagues (1994) found empathic concern to be positively correlated to constructive responses to conflict; specifically, problem solving.

Interestingly, Richardson and colleagues (1994) found that the inverse relationship between perspective taking and aggression only held true under conditions of
moderate threat. In this study, participants who were highly provoked responded more aggressively than did participants exposed to lower levels of provocation. In situations involving no provocation, there was no relationship found between perspective taking and aggression (Richardson et al., 1994). This seems to suggest that the influence of perspective-taking may be over-ridden when one is highly stressed or experiencing heightened emotion, as would be expected when one is feeling threatened.

Finally, Richardson and colleagues (1994) examined the relationship between dispositional empathy and verbal retaliation to provocation. Perspective taking was negatively related to retaliative responding. With regard to empathic concern, Richardson and colleagues (1994) found no relationship between empathic concern and retaliative responding. Further, they found no interaction effect between empathic concern and perspective taking. These results support the researchers’ assertion that perspective taking is a more effective inhibitor of unprovoked aggression and/or aggressive responding to conflict, while empathic concern is more related to pro-social approaches to conflict resolution (Richardson et al., 1994).

_Empathy and pro-social/helping behavior/altruism._ Research indicates that empathy is related both to aggression and to pro-social/helping behavior and altruism (Eisenberg, 1983; Eisenberg & Fabes, 1990; Eisenberg, Fabes, Murphy, Karbon, Maszk, Smith, O'Boyle, & Suh, 1994; Eisenberg & Miller, 1987; Feshbach & Feshbach, 1969; Kaukiainen, Bjorkqvist, Lagerspetz, Osterman, Salmivalli, Rothberg, & Ahlbom, 1999; Mehrabian, Young, & Sato, 1988; Mehrabian & Epstein, 1972; Miller & Eisenberg, 1988; Richardson, Hammock, Smith, Gardner, & Signo, 1994; Rose & Feshbach, 1991). The latter seem to be related concepts, as there tends to be considerable overlap between
the definitions of pro-social behavior, altruism, and helping behavior in the scholarly literature (Archer, 1991; Eisenberg & Miller, 1987; Roberts & Strayer, 1996).

Researchers have operationalized pro-social behavior in numerous ways (Eisenberg & Miller, 1987). Some operational definitions have included helping behavior, while others have not (Eisenberg & Miller, 1987; Roberts & Strayer, 1996). Further, there is some debate in the literature regarding whether or not pro-social behavior, and particularly, helping behavior, stems from an altruistic (other-oriented) desire to meet the needs of another, or from a non-altruistic (self-oriented) desire to decrease one’s own personal distress (Archer, 1991; Batson, 1997; Cialdini et al., 1997; Dovidio et al., 1990; Neuberg et al., 1997). Research indicates that helping behavior is, in fact, influenced by both altruistic and non-altruistic motivations (Archer, 1991).

Pro-social behavior has been defined as that which benefits others, whether the motivation is positive, negative, or both (Eisenberg, 1982; Eisenberg & Miller, 1987; Midlarsky et al., 2005). Using this definition, helping is an example of pro-social behavior. Altruism, on the other hand, is considered a subtype of pro-social behavior (Eisenberg & Miller, 1987; Midlarsky et al., 2005). Altruism is defined as voluntary behavior that is intended to benefit others, which is performed with no expectations with regard to rewards or punishments (Eisenberg & Miller, 1987; Midlarsky et al., 2005).

Empathy has been found to be positively correlated to pro-social tendencies, both in children and in adults (Eisenberg, 1983; Eisenberg & Miller, 1987; Mehrabian et al., 1988). Mehrabian and colleagues (1972, 1988) found that, when compared to low-empathy individuals, high-empathy individuals are more altruistic, are less aggressive, rate positive social traits as more important, and score higher on measures of moral
judgment. High-empathy individuals are also more sensitive to other factors, such as possible social evaluation, personal distress over the state/situation of another individual, and proximity to the person with whom they are empathizing, which further increases the likelihood that these individuals will engage in pro-social/helping behavior (Archer, 1991; Mehrabian & Epstein, 1972).

However, there do seem to be some differences by age and gender with regard to the relationship between empathy and pro-social behavior. For example, the majority of evidence showing a positive relationship between empathy and pro-social behavior comes from adult samples (Batson et al., 1987; Eisenberg & Miller, 1987; Roberts & Strayer, 1996). However, Roberts and Strayer (1996) did find that, in children, both empathy and pro-social behavior increase with age. They posit that this is due to an increasing ability to understand the plight of others as one ages, with greater empathy leading to increased pro-social behavior (Roberts & Strayer, 1996).

However, the relationship between empathy and pro-social behavior in children is not consistent. Research indicates a main effect for gender with regard to the relationship between empathy and pro-social behavior in children (Lennon & Eisenberg, 1987; Roberts & Strayer, 1996). While research indicates that girls are more empathic than boys (Lennon & Eisenberg, 1987; Roberts & Strayer, 1996), Roberts and Strayer (1996) found that a positive relationship between empathy and pro-social behavior was found more frequently for boys than for girls age 13 years old or younger. For girls in the study, empathy was related to pro-social behavior with friends only, while boys’ empathy was related to pro-social behavior not only with friends, but with other peers as well. Further, researchers found that the strength of the correlation was stronger for boys than for girls,
indicating that empathy is an important determining factor for boys’ pro-social behavior, but is less important in determining pro-social behavior in girls (Roberts & Strayer, 1996). This is consistent with prior research (Lennon & Eisenberg, 1987; Strayer & Roberts, 1989).

Gender socialization may be one possible explanation for this difference in the relationship between empathy and pro-social behavior in boys and girls (Roberts & Strayer, 1996). Roberts and Strayer (1996) posit that social norms encourage girls to engage in more pro-social behaviors whether they feel empathy or not. Boys, in contrast, receive less gender-related pressure to behave in a pro-social manner, and empathy, therefore, becomes a more important factor in motivating pro-social behavior (Roberts & Strayer, 1996).

Regardless of gender or age, however, the relationship between empathy and pro-social behavior seems to be affected by the way in which empathy is assessed. For example, Eisenberg and Miller (1987) found that picture/story indices of empathy had no relationship with pro-social behavior, while mood induction studies found a low to moderate relationship between empathy and pro-social behavior. The strongest relationships between empathy and pro-social behavior, on the other hand, were found on self-report measures in simulated experimental situations, physiological indices of empathy, and manipulations of similarity designed to induce empathy (Eisenberg & Miller, 1987).

The majority of the self-report and physiological indices of empathy were assessing participants’ reactions to empathy-inducing situations on television, in movies, or in live or filmed reenactments (Eisenberg & Miller, 1987). In studies that used
manipulation of similarity, participants were encouraged to believe that they were similar
to another person in values, behaviors, preferences, or physical traits (Eisenberg &
Miller, 1987; Feshbach, 1978; Stotland, 1969). In these studies, similarity induction
increased empathic responding (Eisenberg & Miller, 1987; Feshbach, 1978; Stotland,
1969).

In mood induction studies, the relationship between empathy and pro-social
behavior seems to depend on what specific mood is being induced. For example,
researchers have found that imagining the distress of another person in a given situation
is more strongly associated with pro-social behavior than is imagining one’s own distress
in the same situation (Barnett et al., 1979/1982; Thompson et al., 1980). In other words,
imagining another’s distress enhances helping behavior. Other researchers have found,
conversely, that imagining one’s own joy is more strongly associated with pro-social
behavior than is imagining the joy of another (Rosenhan et al., 1981; Salovey &
Rosenhan, 1983). These researchers posit that other-focused joy may result in feelings of
self-deprivation or neediness, which may hinder helping in some situations (Salovey &
Rosenhan, 1983).

Barnett (1979), Thompson (1980), and their colleagues’ findings are consistent
with other research, which asserts that affective empathy, i.e., empathic concern, may
mediate pro-social and other related behaviors (Batson & Coke, 1981; Eisenberg &
Miller, 1987; Hoffman, 1984; Miller & Eisenberg, 1988). Richardson and colleagues
(1994) found empathic concern to be positively correlated to constructive responses to
conflict; specifically, problem solving. Feshbach & Feshbach (1982) found that children
who received training in affective empathy exhibited more pro-social behavior. This was
not the case for the control group, who received training in cognitive problem-solving (Feshbach & Feshbach, 1982).

Empathy is considered by many researchers to be an integral motivator in helping behavior (Midlarsky, Jones, & Corley, 2005). Research on the relationship between empathy and helping typically indicates that people who report relatively high levels of empathy (or empathic concern) generally try to assist others in distress, even if escape from the situation and the person in need is possible (Eisenberg & Fabes, 1990; Eisenberg & Miller, 1987; Eisenberg et al., 1994). Similarly, Krebs (1975) found that people who empathized the most with a person in a need situation not only offered greater degrees of help to the person, but were also willing to help the other person at a cost to themselves. Goldman (1983) and colleagues, on the other hand, found that participants who empathized with a person in need consistently acted to help the other person, but only when a direct request for a specific helping behavior (making a phone call on the other person’s behalf) was made. There was no relationship found between empathy and helping when no request was made, or when the request was made indirectly, despite the fact that it was clear that the person was in need of assistance (Goldman et al., 1983). Goldman (1983) and his colleagues suggested that, even though participants empathized with the person in need and may have wanted to help, they may not have been able to think of what they could do to help without a direct request.

Research on naturalistic helpers (as opposed to helpers in a laboratory setting) also shows a positive relationship between empathy and helping (Gini, Albiero, Benelli, & Altoe, 2008; Midlarsky et al., 2005). For example, Gini (2008) and colleagues studied adolescents’ active defending behavior in bullying incidents, and found that high
empathic responsiveness was positively related to helping, but only when accompanied by high social self-efficacy. Midlarsky, Kahana, Corley, Nemeroff, and Schonbar (1999) found that older people who help family, friends, and neighbors with no expectation of reciprocation, and at times at high cost to themselves, are characterized by empathy, social responsibility, and altruistic moral reasoning. Further, in a study of Holocaust heroes, they found that people who had provided aid to Jews in Nazi Germany during World War II, and who had been identified as altruistic by rescued survivors, had a greater sense of social responsibility, as well as high empathy for people in pain (Midlarsky et al., 2005). In another study of Holocaust heroes, Staub (1993) found that people who endanger themselves in order to help others are guided by moral values, empathy, and an inclusive attitude toward others.

Interestingly, much of the research examining the relationship between empathy and helping defines empathy as either an affective or a cognitive process (Coke et al., 1978). Coke, Batson, & McDavis (1978), however, proposed a two-stage model for the empathic mediation of helping, which takes into account both the cognitive and affective components of empathy. These components of empathy are perspective taking (Coke et al., 1978; Davis, 1983; Feshbach, 1978; Feshbach & Feshbach, 1982; Miller & Eisenberg, 1988) and empathic emotion (known by other researchers as empathic concern) (Coke et al., 1978; Davis, 1983; Miller & Eisenberg, 1988).

Building on the assertion that empathy involves both cognitive and emotional processes (Feshbach, 1975), and incorporating the idea that taking another person’s perspective will intensify the empathic emotional reaction to that person’s distress (Krebs, 1975; Stotland, 1969), Coke and colleagues (1978) developed their two-stage
model for the empathic mediation of helping. They propose that 1) taking the perspective of another will increase one’s empathic emotional response to that person’s need, and 2) this empathic emotion will, in turn, increase the motivation to see the other person’s need met (Coke et al., 1978).

Coke and colleagues (1978) conducted a series of experiments which offered support to their model. They found that perspective taking was significantly related to vicarious arousal. They tested the relationship between perspective taking and helping by misattributing the participants’ arousal to factors other than the person in distress and found that, when arousal was attributed to something other than the person in distress, helping did not increase. Conversely, when arousal was correctly labeled as a response to the other person’s distress, it increased helping. They then conducted additional experiments in which they asked participants whether they interpreted their arousal as empathic emotion or personal distress. Participants experienced empathic emotion as qualitatively different from personal distress, and researchers found that, in this case, empathic emotion led to increased helping, although they did acknowledge that personal distress may encourage helping behavior in other need situations (Coke et al., 1978).

Role of altruism. Not only have researchers examined the relationship between empathy and helping behavior, but several research efforts have attempted to explain why this relationship exists (Coke et al., 1978). There are two main lines of reasoning that attempt to explain the motivation behind empathy-related helping, which center around whether or not helping behavior is purely altruistic. Some authors propose that empathy-related helping is other-oriented (altruistic) (Batson, 1987; Batson, 1997; Coke et al., 1978; Dovidio et al., 1990; Hoffman, 1984; Krebs, 1975), while others propose that

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empathy-related helping is self-oriented (egoistic) (Cialdini et al., 1997; Neuberg et al., 1997).

Most researchers favor an altruistic interpretation of empathy-related helping, suggesting that it is intended solely to enhance the well being of another (Batson, 1987; Batson, 1997; Coke et al., 1978; Dovidio et al., 1990; Hoffman, 1984; Krebs, 1975). In 1987, Batson proposed an empathy-altruism hypothesis which suggests that purely altruistic helping can occur as long as it is preceded by empathic concern. Empathic concern is characterized by feelings of tenderness, soft-heartedness, and sympathy toward another, and, consistent with Coke and colleagues’ (1978) two-stage model of empathy-related helping, is believed to be brought about by perspective taking (Batson, 1987). Numerous experiments have shown that perspective taking leads to greater empathic concern, and that increased empathic concern leads to helping that appears to be motivated by an altruistic desire to improve the situation of the person in need (Batson, 1987; Batson, 1997; Coke et al., 1978; Dovidio et al., 1990; Hoffman, 1984; Krebs, 1975).

In contrast, Neuberg (1997), Cialdini (1997) and their colleagues propose two self-oriented explanations of empathy-related helping. First, empathy-related helping can be viewed as a means of reducing one’s own personal distress. From this perspective, empathy can elicit personal distress in the form of emotional over-arousal, fear of social evaluation, shame, or guilt (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Neuberg, Cialdini, Brown, Luce, Sagarin, & Lewis, 1997). The goal of helping behavior, therefore, is to reduce one’s own personal distress (Cialdini et al., 1997).
Cialdini and colleagues (1997) take the self-oriented explanation a step further by suggesting that, when one takes the perspective of another (a key component of the empathy-altruism hypothesis), one begins to see himself/herself in the other, and the boundaries between self and other begin to merge. They propose that increased self-other merging leads to greater oneness, or a sense of interpersonal unity, and that this oneness (an egoistic factor) leads to greater empathic concern. They suggest that empathy-related helping behavior under conditions of oneness, therefore, is directed at helping the part of oneself that one sees in the other (Cialdini et al., 1997).

Despite the fact that their research supports their assertions, even proponents of self-oriented explanations of empathy-related helping concede that previous research has supported the empathy-altruism hypothesis as well (Cialdini et al., 1997). Interestingly, however, Batson (1997), the main proponent of the empathy-altruism hypothesis, acknowledges that most need situations and helping opportunities are likely to elicit a variety of motivations, some altruistic and some egoistic. He asserts that even though egoistic concerns may lead people to help, including empathically aroused people, this does not nullify the empathy-altruism hypothesis. He argues that altruism and egoism are mutually exclusive as long as self and other are not one and the same (Batson, 1997), seeming to lend some credence to the idea that increased self-other merging may lead to egoistic motivations to help another (Cialdini et al., 1997). These concessions by Batson (1997) and Cialdini et al. (1997) bring the research on empathy-related helping full circle, back to Krebs’ (1975) early assertion that people help others for a variety of reasons, some of which are altruistic, and some not.
Effect of Class Size on Relational Aggression

The majority of class size research has to do with the effects of class size on academic achievement (Finn, Pannozzo, & Achilles, 2003; Pedder, 2006). Therefore, it may seem illogical to study the potential impact of class size on the way in which college instructors respond to relational aggression in their students. However, some class size research has identified mediating factors between class size and academic achievement related to teacher characteristics, student characteristics, and the nature of teacher-student interactions, that may play a role in how college instructors perceive and respond to relational aggression in their students. Therefore, this section will review the literature on class size research, focusing particularly on the aforementioned mediating factors between class size and academic achievement.

Class size, academic achievement, and relational aggression. Class size has been a highly researched factor in American and European schools for over a century (Finn et al., 2003; Pedder, 2006). Much of the research has shown that classes with fewer students are associated with improved academic performance, particularly in early elementary grades, and particularly among economically disadvantaged and/or minority students (Achilles, 1996; Blatchford & Mortimore, 1994; Finn et al., 2003; Pate-Bain, Achilles, Boyd-Zaharias, & McKenna, 1992; Pedder, 2006). Because of this evidence, politicians in the United States and Europe have seen pressure to reduce class sizes, or to at least prevent class sizes from increasing (Pedder, 2006).

However, the campaign to reduce class sizes is contested on two fronts: First, the cost of reducing class size across the board would be quite substantial (Pedder, 2006),
and second, many researchers argue that the evidence regarding class size and student achievement is inconsistent (Blatchford & Martin, 1998; Goldstein & Blatchford, 1998; Pedder, 2006). For example, Hartmann (1935) found that improvements in student achievement had less to do with class size and more to do with quality of teaching. Similarly, the British Office for Standards in Education (OFSTED, 1995) found that effective teaching is more a determinant of student achievement than class size alone, and suggested that effective teaching includes high expectations, good planning, enthusiasm, and good feedback to students. Further, statistical analysis of research conducted by some researchers shows no clear link between class size and student achievement (Glass & Smith, 1978; Robinson & Wittebols, 1986; Slavin, 1989). This inconsistency in the research findings has allowed politicians of differing opinions to choose research findings that support their own particular policy positions (Blatchford & Martin, 1998). While there is no current research which examines the relationship between class size and relational aggression, it stands to reason that mediators between class size and academic achievement may also contribute to an educator's likelihood of intervening in relationally aggressive incidents in the classroom.

*Mediators.* The majority of research on class size and student achievement has assumed effects of class size in isolation from other contextual variables that may impact student learning; an approach that has failed to yield consistent findings (Englehart, 2007; Pedder, 2006). Because research findings on class size and student achievement has been inconsistent, a recent body of research has attempted to identify mediators between class size and student achievement (Englehart, 2007; Finn et al, 2003; Hargreaves, Galton, & Pell, 1998; Pedder, 2006). Among these mediators are teacher characteristics, student
characteristics, and teacher-student interaction (Achilles, Finn, & Pate-Bain, 2002; Biddle & Berliner, 2002; Englehart, 2007; Finn, Gerber, Achilles, & Boyd-Zaharias, 2001; Finn et al., 2003; Hargreaves et al., 1998).

Teacher characteristics. Research has indicated that class size has an impact on teacher characteristics and behaviors. For example, teachers in smaller classes tend to have better morale and attitude, and tend to tolerate a broader range of student behaviors (Cooper, 1989; Finn et al., 2003). Teachers in one study reported an increased tolerance for noise and movement in the classroom (Johnston, 1990). This is consistent with other research, which found that in smaller classrooms, the teachers gave students more freedom (Molnar, Smith, & Zahorik, 1999). In other words, behaviors that teachers may find unacceptable in larger classrooms, such as low talking or walking around the room, are tolerated in smaller classes because they create less disruption in classrooms with fewer students. As a result of this increased tolerance for a wider range of student behaviors, teachers with smaller classes devote less time to classroom discipline and more time to direct instruction (Egelston, Harman, & Achilles, 1995; Finn et al., 2003).

Teachers in smaller classrooms are also better able to assess individual students’ needs in a shorter period of time (Hargreaves et al., 1998). Further, if they identify a student who needs additional instruction in order to understand the concepts being taught, teachers in smaller classrooms have more time to provide supplemental, individualized instruction to that student (Pedder, 2006). Additionally, teachers with fewer students not only ask more questions, but they also tend to ask more challenging questions, to wait longer for students’ responses, and to give considerably more direct feedback, which has been consistently positively correlated with student achievement (Bourke, 1986;
Hargreaves et al., 1998). Interestingly, many of these characteristics are also consistent with OFSTED’s (1995) description of effective teaching (Hargreaves et al., 1998).

Further, teachers in smaller classes have greater opportunities to provide individualized instruction, are able to cover more of their curriculum, and are better able to improve the quality of their teaching (Blatchford & Mortimore, 1994).

However, researchers also acknowledge that while the opportunity for these improvements exists, there is no guarantee that a given teacher will utilize the opportunities afforded him or her by a smaller class (Englehart, 2007; Finn, 2002). Whether or not they take advantage of these opportunities depends on their specific teaching context, their attitude and beliefs about teaching, and their specific skills and knowledge (Englehart, 2007). For example, teachers who emphasize relationships with students, or who typically employ hands-on teaching techniques, are likely to benefit from small class sizes without changing their teaching methods (Ehrenberg, Brewer, Gamoran, & Willms, 2001; Englehart, 2007). Other teachers, however, may need to adjust their teaching methods in order to capitalize on the opportunities inherent to smaller classes (Englehart, 2007).

This is consistent with Hargreaves et al.’s (1998) findings that teachers tend to maintain their habitual teaching methods even if their class size changes. Teachers in this study acknowledged, however, that after participating in the study, they would have a better idea of how to adjust their teaching methods to suit their class size in the future (Hargreaves et al., 1998). This is also consistent with Finn and his colleagues’ (2003) findings that teachers tend to adapt their teaching practices slowly over time, as new materials, knowledge, and techniques are introduced. These findings suggest that teachers
would benefit from training that helps them to adapt their teaching approach to the size of their class (Englehart, 2007; Hargreaves et al., 1998).

**Student characteristics.** Class size has also been found to influence students in various ways. Some researchers have found that in smaller classes, there is increased visibility of individual students, as well as an increased sense of belonging (Biddle & Berliner, 2002; Finn et al., 2003). The result is improved social behavior, fewer behavioral problems/discipline referrals, increased student academic and social engagement, and improved student learning (Achilles et al., 2002; Biddle & Berliner, 2002; Finn et al., 2003). This is because the high visibility of individual students in smaller classes makes any disruptive behavior more noticeable, and is therefore easier for teachers to address promptly and directly (Finn et al., 2003). This presumably holds true for incidents of relational aggression in the classroom as well. Conversely, pro-social behavior, such as following the rules and academic/social engagement, is facilitated in smaller classrooms because students in smaller classes are more likely to feel a sense of connection or affiliation with other students and with the teacher (Biddle & Berliner, 2002; Finn et al., 2003).

Students in smaller classes also tend to be more motivated and attentive (Finn et al., 2003; Pate-Bain et al., 1992), to spend more time on task (Achilles et al., 2002; Cooper, 1989; Finn et al., 2003), to ask more academic questions (Finn et al., 2003; Ozerk, 2001), and are less likely to ‘slip through the cracks’ (Walsey, 2002). Further, students in smaller classes have been shown to be more supportive and caring toward one another (Finn et al., 2003), to have improved self-concept (Egelston et al., 1995; Pate-Bain et al., 1992), and even show better adjustment to school when compared to students
in larger classes (Blatchford & Martin, 1998). Conversely, Blatchford and colleagues (2001) found that students’ work, concentration, and contribution to class activities/discussions are negatively impacted by increases in class size.

**Interaction.** Even though there is a paucity of research that directly examines the link between class size and teacher-student interaction, some researchers propose that teachers’ interpersonal styles are influenced by class size, and that teacher-student interactions actually improve as class size decreases (Biddle & Berliner; 2002; Finn et al., 2001/2003). For example, in smaller classes, it is easier for teachers to establish and maintain rapport with their students (Pedder, 2006). Further, teachers in smaller classes are able to interact with students more on an individual basis, they get to know their students better, and they are better able to provide supportive guidance to students in need (Biddle & Berliner; 2002; Blatchford & Martin, 1998; Finn et al., 2001/2003; Pedder, 2006). Hargreaves and her colleagues (1998) argue that it is not simply the frequency of one-to-one interaction between teachers and students that matters, but also the *type* of one-to-one interaction that occurs. For example, use of short, to the point interactions between teachers and individual students increases with class size. Conversely, use of extended, sustained interactions between teachers and individual students, which are positively related to student achievement, increases as class size decreases (Hargreaves et al., 1998).

Finally, Hargreaves (1998) and her colleagues found that not only do teachers in smaller classes use more sustained interactions with individual students, often involving challenging question and answer sessions, but they also tend to have more positive interactions with students involving a good deal of encouragement and praise. Similarly,
Kreiger (2001, as cited in Finn et al., 2003) found that, when compared to larger classes, there were more positive verbal interactions and fewer negative verbal interactions between teachers and students in smaller classes. Finn and his colleagues’ (2003) also found that as teachers’ morale and enjoyment of teaching increases with smaller class size, their interactions with students improve, which further facilitates students’ academic and social engagement.

Other researchers have found improved teacher-student interactions with smaller class sizes as well. Johnston (1990) found that teachers in smaller classes, as well as teachers in regular sized classes who worked with teachers’ aides in the classroom, not only had more positive interactions with students, but also knew more about the students, their families, and their home environments. Teachers in this study also noted that students in smaller classes were more willing to approach the teachers, frequently initiating personal conversations (Johnston, 1990). This is consistent with other research findings that teachers in smaller classes were perceived by students to be more approachable, had more personal conversations with students, had more time to listen to students who wanted to share, and knew more about each student and the students’ families (Blatchford & Martin, 1998; Kiser-Kling, 1995). Because of the improvements in student-student and teacher-student relationships associated with smaller class size, many teachers with small classes also report an increased sense of community within the classroom (Finn et al., 2001). It seems logical to assume that teachers who have more positive relationships with their students will be more likely to intervene when they witness a relationally aggressive incident among their students.
Summary

In summary, the literature suggests that relational aggression is not easily identified by educators due to its covert nature. Further, even though research indicates it is prevalent among and holds negative long-term consequences for both males and females, educators tend not to perceive relational aggression as having serious consequences worthy of an immediate, corrective response. However, the research on empathy and helping behavior suggests that college instructors with high levels of empathy may empathize more with the targets of all forms of aggression, including relational aggression, and may therefore be more likely to intervene when they witness relational aggression in their students. Further, class size research indicates that instructors in smaller classes tend to have closer, more positive relationships with their students than do instructors in larger classes. Due to this closer relationship to students, college instructors in smaller classes may be more inclined to intervene when they witness relational aggression in their students. The following section describes the intended methodology for assessing the influence of gender, empathy, and class size, and perceived seriousness of relational aggression on college instructors’ responses to relational aggression in their students.
III. METHODOLOGY

This study explored the relationship of gender, empathy, class size, and college professors’ perceptions of relational aggression to their likelihood of intervening when they witness relational aggression in their students. Contained within this chapter are the research question, sample selection and description, an overview of the instruments used in this study, data collection procedures, and the methods of data analysis.

Research Question

What amount of variance in college professors’ likelihood of intervention when witnessing relational aggression in their students can be predicted by the professors’ ratings of seriousness of relational aggression, instructor empathy, the professors’ gender, the gender of the perpetrator and target in a given relationally aggressive scenario, and class size?

Design

This study utilized a prediction design (Mertens, 1998), intended to predict college professors’ likelihood of intervening when witnessing relational aggression in their students. The following predictor variables framed the study: the professors’ ratings of seriousness of relational aggression, instructor empathy, gender of the participant, gender of the perpetrator and target in a relationally aggressive scenario, and class size.
Participants

The population of this study was comprised of a non-random sample of university professors. These professors were recruited from each of 12 undergraduate schools and colleges from a large, southeastern university (College of Agriculture; College of Architecture, Design, and Construction; College of Business; College of Education; College of Engineering; School of Forestry and Wildlife Services; College of Human Sciences; College of Liberal Arts; School of Nursing; School of Pharmacy; College of Sciences and Mathematics; College of Veterinary Medicine). The list of potential participants was compiled using publicly available directory information taken from the university website. Only assistant professors, associate professors, and full professors who teach undergraduate classes were included. Since participants were not asked to identify which school or college in which they teach, in an effort to ensure anonymity and a maximum response rate, no effort was made to recruit equal numbers of professors from the 12 schools and colleges. All participants were over 19 years of age, making them eligible to provide informed consent for participation. Using the general rule of at least 15 participants per variable for multiple regression research (Mertens, 1998), and given the five variables involved in this study (professor ratings of seriousness of relational aggression, professor empathy, gender, class size, and professors’ likelihood of intervention), this study required at least 75 participants in order to yield statistically significant results. However, in an effort to ensure an adequate response rate of 30% (Mertens, 1998), 300 professors were invited to participate in the current study, in two separate mailings of 150 each.
Instruments

Demographics

A very brief demographics instrument was created for the purpose of describing the participants of this study (see Appendix A). Participants were asked to identify their gender and the number of classes that they have taught in the 2008-2009 academic year in the following ranges: 1-19 students, 20-39 students, or 40+ students. Class size ranges are based on a study by Bedard and Kuhn (2008) in which a significant negative relationship was found between university instructors’ evaluations by students and class size. As class size increased from one range to the next, student ratings of instructors decreased (Bedard & Kuhn, 2008).

Relational Aggression Perception and Intervention Questionnaire

A brief questionnaire was created to assess college professors’ perceptions regarding the seriousness of relational aggression, as well as their likelihood of intervening when they witness relational aggression (see Appendix B). Participants were asked to read a scenario depicting relational aggression in their classroom. They were then asked to rate the seriousness of the scenario as either ‘not serious’, ‘potentially serious’, or ‘definitely serious’. Finally, they were asked to rate their likelihood of intervening in this situation as either ‘not at all likely’, ‘somewhat likely’, or ‘very likely’. Each participant responded to one of four possible scenarios. While the situation described in these four scenarios is the same, each scenario has a different gender pairing of perpetrator and target (e.g., male perpetrator and male target, female perpetrator and female target, male perpetrator and female target, female perpetrator and male target). Seventy-five of each gender pairing were included in the 300 surveys that were mailed
out in an effort to ensure that each gender pairing was represented in the returned surveys. This strategy appeared to be successful, as participants returned 26 male-male dyads, 25 male-female dyads, 25 female-female dyads, and 22 female-male dyads.

The scenarios were developed by the researcher in an effort to accurately exemplify a relationally aggressive situation. The scenarios were reviewed by a panel of college professors with varying degrees of familiarity with the topic of relational aggression. The researcher provided the panel with the characteristics of relational aggression, as defined in the current study, and requested feedback to ensure that the scenarios accurately depict relational aggression as it is defined. The final version of the questionnaire is the result of this feedback. While prior studies have used scenarios from multiple settings to examine the perceptions of college students regarding relational aggression (i.e., in class, at a bar, at a party, etc.) (Basow et al., 2007), the current study utilized only one scenario describing an incident of in-class relational aggression, as this is the setting where college and university professors are most likely to witness relational aggression in college students.

*Emotional Empathy*

This study used the Balanced Emotional Empathy Scale (BEES) (Mehrabian, 1997) to assess the level of empathy of the participants. Mehrabian and Epstein (1972) originally developed the Emotional Empathic Tendency Scale (EETS), and over the next two decades, continued to update and improve the measure until the BEES was ultimately released in 1996 (Mehrabian, 1997). The BEES measures a person’s tendency to vicariously experience the feelings of others (Mehrabian, 2000). The scale contains 30 items; 15 positively worded and 15 negatively worded (Mehrabian, 2000). Positively
worded items include “Unhappy movie endings haunt me for hours afterward” and “It upsets me to see someone being mistreated” (Mehrabian, 2000). Negatively worded items included “I cannot feel much sorrow for those who are responsible for their own misery” and “I don’t get caught up easily in the emotions generated by a crowd” (Mehrabian, 2000).

Participants respond to these prompts using a 9-point Likert format ranging from -4 (representing “very strong disagreement”) to +4 (representing “very strong agreement”) (Mehrabian, 2000). A total scale score is calculated by subtracting the algebraic sum of responses to all negatively worded items from the algebraic sum of responses to all positively worded items (Mehrabian, 2000). Norms for the BEES are as follows: Mean (M) = 45; Standard Deviation (SD) = 24 (Mehrabian, 2000). These norms can then be converted to z-scores ranging from -2.5 to +2.5, which correspond to percentile scores ranging from 0.6 to 99.4. Scores ranging from the 32nd to 68th percentile (or z-scores of -0.5 to +0.5) are interpreted as ‘average’ (Mehrabian, 2000). Scores falling below the 32nd percentile are interpreted as below average to varying degrees, ranging from ‘slightly below average’ to ‘very extremely below average’ with each .5 drop in the z-score (Mehrabian, 2000). Conversely, scores falling above the 68th percentile are interpreted as above average to varying degrees, ranging from ‘slightly above average’ to ‘very extremely above average’ with each .5 increase in the z-score (Mehrabian, 2000).

Some research has indicated gender differences with regard to emotional empathy (Mehrabian, Young, & Sato, 1988). Therefore, the BEES provides separate norming information for males and females. For males, M = 29 and SD = 28; and for females, M
= 60 and SD = 21 (Mehrabian, 2000). No norming information is available for race, socioeconomic status, or other individual characteristics.

Cronbach’s alpha for the Balanced Emotional Empathy Scale (BEES) is .87, indicating strong internal consistency. The BEES is strongly and positively correlated to the Emotional Empathic Tendency Scale (EETS) ($r = .77, P < .05$) (Mehrabian, 1997), which is in turn positively correlated with the Empathic Concern subscale of Davis’ (1983) Interpersonal Reactivity Index, indicating concurrent validity (Mehrabian et al., 1988). Further, in comparison to the EETS, the BEES consistently yields stronger negative correlations with measures of aggression and violence, and stronger positive correlations with optimism and helping behavior, making it a superior measure of pro-social orientation (Mehrabian, 2000).

More recent research has provided additional validity evidence. Singer, Seymore, O'Doherty, Kaube, Dolan, and Frith (2004) used functional brain imaging to examine the brain activity of participants who observed loved ones receiving a painful stimulus. BEES scores correlated significantly with the level of activity in the affective component of the pain matrix within the brain (Singer et al., 2004). In a study of FBI negotiators, BEES scores were significantly positively correlated to skills such as paraphrasing, reflecting and mirroring, and active listening (Van Hasselt, Baker, Romano, Sellers, Noesner, & Smith, 2005). In studies examining the outcomes of empathy training, BEES scores were shown to increase significantly after the training was complete (Farkas, 2002; Shapiro, Morrison, & Boker, 2004). Macaskill, Maltby, and Day (2002) found that participants with higher BEES scores found it easier to forgive others. Finally, in a study of adolescents in a group home, BEES scores of the adolescents were negatively
correlated with aggression toward peers and staff, and were positively correlated with compliance with house rules and frequency of completed chores (LeSure-Lester, 2000).

Procedure

Three hundred survey packets containing the instruments were sent via postal mail (in two separate mailings of 150 each) to professors in each of 12 undergraduate schools and colleges: College of Agriculture; College of Architecture, Design, and Construction; College of Business, College of Education, College of Engineering, School of Forestry and Wildlife Services, College of Human Sciences, College of Liberal Arts, School of Nursing, School of Pharmacy, College of Sciences and Mathematics, and the College of Veterinary Medicine. Each packet contained an informational letter, the demographics instrument, the relational aggression questionnaire, the Balanced Emotional Empathy Scale (BEES), instructions for completing and returning the instruments and a self addressed return envelope. The information letter provided a description of the study and its purpose, and informed participants that their participation was voluntary, and anonymous as results would not be connected to individual participants.

Participants were instructed to complete the demographics, relational aggression, and empathy instruments, and to return them via postal mail using a self addressed return envelope. Survey packets were not coded for matching to individual professors. After 75 responses were not acquired with the initial mailing of 150 surveys, a second mailing was sent to a new list of 150 professors. This procedure ensured the anonymity of those who chose to participate. One hundred three survey packets were returned, although five were excluded from data analysis because they were incomplete or completed incorrectly,
leaving 98 surveys in the data analysis. All of the instruments were hand scored, with results then entered into SPSS for statistical analysis.

Data Analysis

Because the current study used a prediction design with more than two continuous predictor variables, with interval data, a multiple regression analysis was conducted (Mertens, 1998). Two of the predictor variables (ratings of seriousness and empathy) are continuous in that changes in these variables are quantitative (changes in amount) rather than qualitative. However, three variables (gender of participant, gender of the perpetrator/target in a relationally aggressive scenario, and class size) are categorical rather than continuous. Gender is a categorical variable in that changes in this variable are qualitative (male versus female) rather than quantitative. The same is true for the gender pairing in the relationally aggressive scenario. The scenario consists of four gender pairings (male perpetrator/male target, male perpetrator/female target, female perpetrator/female target, and female perpetrator/male target). Class size is categorical because, rather than using raw numbers of students for professors’ classes, the study uses four categories: mostly small classes, mostly medium classes, mostly large classes, and various class sizes. For the purposes of this study, dummy coding was used in order for participant gender, gender pairing in the relationally aggressive scenario, and class size to serve as predictor variables in the multiple regression analysis (Shannon & Davenport, 2001). This procedure uses 1 or 0 to assign membership in a particular category, which allows for examination of the overall relationship of these categorical predictor variables to professors’ likelihood of intervention (Shannon & Davenport, 2001). The goal of the multiple regression analysis was to determine the amount of variance in college
professors’ likelihood of intervening when witnessing relational aggression in their classroom that can be predicted by the variance in college professors’ empathy, class size, gender, their ratings of seriousness of a relationally aggressive situation, and the gender pairing in a given relationally aggressive scenario.

Preliminary analyses were conducted in order to obtain descriptive statistics for the participants, as well as to determine the magnitude of the relationship of each individual predictor variable (empathy, class size, participant gender, rating of seriousness, and perpetrator/target gender) to the outcome variable (likelihood of intervention).

First, demographics were examined. The percentage of male and female professors was determined. Next, the percent of professors who teach classes ranging from 1-19, 20-39, or 40+ at least 2/3 of the time (i.e., 2 out of 3 classes, or 3 out of 4 classes) during 2008-2009 academic year was determined. Response rates for each option on the relational aggression questionnaire were examined, as well as the professors' level of empathy. Finally, the demonstrated empathy scores on the BEES, as well as means and standard deviations, for men and women were examined and compared. This provided a general description of the professors who participated in this study.

Once descriptive statistics were examined, the relationship of each individual predictor variable (empathy, class size, gender, and rating of seriousness) to the outcome variable (likelihood of intervention) was analyzed. Pearson correlations were conducted to determine the direction and magnitude of the relationship between empathy and likelihood of intervention, class size and likelihood of intervention, gender and likelihood
of intervention, rating of seriousness and likelihood of intervention, and gender pairing of the perpetrator and target and likelihood of intervention.

Finally, a hierarchical multiple regression analysis was conducted in order to determine the amount of variance of college professors’ likelihood of intervention that can be predicted by the variance of the predictor variables (empathy, class size, gender of participant, rating of seriousness, and perpetrator/target gender pairing), both individually and in conjunction with one another. The predictor variables were entered in steps according to the magnitude of their relationship to the outcome variable (likelihood of intervention), with the variable with the strongest correlation to likelihood of intervention entered first, and the variable with the weakest correlation to likelihood of intervention entered last. This type of analysis allowed the researcher to track the change in $R^2$ at each step in the analysis in order to determine whether or not each predictor variable (empathy, class size, gender, rating of seriousness, and gender pairing) contributes significantly to the predicted variance in the outcome variable (likelihood of intervention).
IV. RESULTS

Introduction

The purpose of this study was to examine college professors' perceptions of and responses to relational aggression in college students. Specifically, this study sought to determine the amount of variance in college professors' likelihood of intervention when witnessing relational aggression that can be predicted by the following variables: gender of the professor, the class size that the professor typically teaches, the gender of the perpetrator and target in a relationally aggressive scenario, the empathy score of the professor, and the level of seriousness that the professor assigns to the relationally aggressive scenario. This chapter will summarize the data collection methods used in the current study, as well as describe the population of the study, the statistical analyses that were conducted to answer the research question, and the results of those analyses.

Data was collected by asking participants to complete a brief demographics instrument, a relational aggression questionnaire, and the Balanced Emotional Empathy Scale. The demographics instrument asked participants to identify their gender, as well as the number of classes that they taught during the 2008-2009 academic year in the following ranges: 1-19 students, 20-39 students, and 40+ students.

The relational aggression questionnaire provided the participants with a scenario depicting a classroom incident of relational aggression. All participants were provided with the same scenario; however, there were four different gender pairings of perpetrator and target within the scenario (i.e., male perpetrator/male target, male perpetrator/female target, female perpetrator/male target, female perpetrator/female target).
target, female perpetrator/female target, or female perpetrator/male target). Each participant received only one scenario with one gender pairing. Participants were asked to rate the seriousness of the incident depicted, where 1 = not serious, 2 = potentially serious, and 3 = definitely serious. Participants were also asked to rate their likelihood of intervening if they were to witness such a scenario in their own classroom, where 1 = not at all likely, 2 = somewhat likely, and 3 = very likely.

Finally, participants were asked to complete the Balanced Emotional Empathy Scale (BEES). Participants responded to prompts using a 9-point Likert scale ranging from -4 (representing "very strong disagreement") to +4 (representing "very strong agreement"). The BEES contained 15 positively worded items and 15 negatively worded items. Sample items from this instrument include: "It upsets me to see someone being mistreated" and "I don't get caught up easily in the emotions generated by a crowd". This scale was used to determine if participants had below average empathy, average empathy, or above average empathy.

Participants

This study used a non-random sample of university professors, which were recruited via postal mail from 12 undergraduate colleges and schools from a large, southeastern university. Of the 300 professors who were invited to participate, 103 completed and returned the survey instruments. Of those, however, only 98 returned survey packets were included in the data analysis. Five returned survey packets were not included because they were incomplete or because they had not been completed correctly.
Of the 98 participants who were included for statistical analysis, 40 were female and 58 were male. Twenty-four participants taught mostly small classes (1-19 students) during the 2008-2009 school year. During the same school year, 19 participants taught mostly medium sized classes (20-39 students), and 21 participants taught mostly large classes (40+ students). For the purposes of this study, the term "mostly" was defined as at least 66% (or 2 out of 3 classes in a given size range). Participants who did not teach at least 66% of their classes in a given size range were classified as teaching "various class sizes". Thirty-four participants were included in this latter category. These data are summarized in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Demographic Information of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Category</td>
</tr>
<tr>
<td>------------------------------</td>
</tr>
<tr>
<td>Gender of Participant</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Class Size Taught During 2008-2009 Academic Year</td>
</tr>
<tr>
<td>Mostly Small Classes (1-19 students)</td>
</tr>
<tr>
<td>Mostly Medium Classes (20-39 students)</td>
</tr>
<tr>
<td>Mostly Large Classes (40+ students)</td>
</tr>
<tr>
<td>Various Class Sizes</td>
</tr>
</tbody>
</table>

Response rates for the Relational Aggression Perception and Intervention Questionnaire and empathy scores on the Balanced Emotional Empathy Scale (BEES) are summarized in Table 2. In the current study, only 7 participants rated the relationally aggressive scenario as "not serious", while 47 rated the scenario as "potentially serious" and 44 rated the scenario as "definitely serious". Regarding the empathy levels of the
participants, 27 demonstrated low empathy scores, while 42 demonstrated average empathy scores, and 49 demonstrated high empathy scores.

Table 2

Response Rates for the RA Perception and Intervention Questionnaire and Demonstrated Empathy Scores on the Balanced Emotional Empathy Scale (BEES)

<table>
<thead>
<tr>
<th>Instrument</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA Perception and Intervention Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Serious</td>
<td>7</td>
<td>7.1</td>
</tr>
<tr>
<td>Potentially Serious</td>
<td>47</td>
<td>48.0</td>
</tr>
<tr>
<td>Definitely Serious</td>
<td>44</td>
<td>44.9</td>
</tr>
<tr>
<td>Balanced Emotional Empathy Scale (BEES)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Empathy</td>
<td>27</td>
<td>27.6</td>
</tr>
<tr>
<td>Average Empathy</td>
<td>42</td>
<td>42.9</td>
</tr>
<tr>
<td>High Empathy</td>
<td>49</td>
<td>29.6</td>
</tr>
</tbody>
</table>

Additionally, post hoc analysis using an independent samples t-test was conducted to compare the mean empathy scores for men and women. This analysis revealed no significant difference between men's and women's mean empathy scores (t = 1.134, p = .260, two-tailed). Demonstrated empathy scores, means, and standard deviations for men and women are summarized in Table 3. The data contained in Tables 1, 2, and 3 provide a general description of the participants in the current study.

Table 3

Empathy Scores, Means, and Standard Deviations Demonstrated by Men and Women on the Balanced Emotional Empathy Scale (BEES)

<table>
<thead>
<tr>
<th>Empathy Level by Gender</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>1.95</td>
<td>.78</td>
<td>19</td>
<td>32.8</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td>23</td>
<td>39.7</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>16</td>
<td>27.6</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(table continues)
Table 3 (continued)

<table>
<thead>
<tr>
<th>Empathy Level by Gender</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>2.13</td>
<td>.72</td>
<td>8</td>
<td>20.0</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>13</td>
<td>32.5</td>
</tr>
</tbody>
</table>

Reliability Analysis

Balanced Emotional Empathy Scale (BEES)

The reported Cronbach's alpha for the Balanced Emotional Empathy Scale (BEES) is .87, which is consistent with the original Emotional Empathic Tendency Scale (EETS), which had a coefficient alpha of .85 (Mehrebian, 2000). The coefficient alpha for the current study was .42. Table 4 compares the reliability of the current study to that reported by Mehrabian (2000) for the BEES.

Table 4

Reliability Analysis for the Balanced Emotional Empathy Scale

<table>
<thead>
<tr>
<th></th>
<th>Mehrabian (2000)</th>
<th>Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.87</td>
<td>.42</td>
</tr>
</tbody>
</table>

Research Question

What amount of variance in college professors' likelihood of intervention when witnessing relational aggression in their students can be predicted by the professors' ratings of seriousness of relational aggression, instructor empathy, the professors'
gender, the gender of the perpetrator and target in a given relationally aggressive scenario, and class size?

Statistical Analysis

Bivariate Correlations

Individual bivariate correlations were run between each of the independent variables and the dependent variable. These procedures found no significant correlation between professors' likelihood of intervention when witnessing relational aggression in their classrooms and the professors' gender, the professors' class size, or the gender of the perpetrator and target in a relationally aggressive scenario.

Significant correlations were found, however, between the dependent variable (professors' likelihood of intervention when witnessing relational aggression in their classrooms) and the professors' level of empathy ($r = .283$, $p < .01$), as well as between the dependent variable and the professors' ratings of seriousness of a relationally aggressive scenario ($r = .642$, $p < .01$). These correlations are summarized in Table 5.

Table 5

<table>
<thead>
<tr>
<th>Bivariate Correlations between the dependent variable (Professors' Likelihood of Intervention when Witnessing Relational Aggression in their Classrooms) and the independent variables (Professors' Gender, Class Size, Gender of Perpetrator and Target in RA Scenario, Professors' Level of Empathy, and Professors' Ratings of Seriousness of RA Scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors' Likelihood of Intervention When Witnessing RA in Their Classrooms</td>
</tr>
<tr>
<td>Gender of Participant</td>
</tr>
<tr>
<td>Class Size</td>
</tr>
<tr>
<td>Gender of Perpetrator/Target in RA Scenario</td>
</tr>
<tr>
<td>Level of Empathy of Participant</td>
</tr>
<tr>
<td>Rating of Seriousness of Participant</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level (2-tailed).
These correlation coefficients can be squared to produce a coefficient of determination, which indicates the amount of shared variance between each independent variable and the dependent variable. With regard to the level of empathy of the participant, \( r^2 = .080089 \), indicating that the participants' level of empathy and likelihood of intervention share approximately 8% of their variance. Regarding ratings of seriousness, \( r^2 = .412164 \), indicating that the participants' ratings of seriousness of a relationally aggressive scenario share approximately 41% of their variance with participants' likelihood of intervention.

*Hierarchical Multiple Regression Analysis*

In addition to individual bivariate correlation analysis, hierarchical multiple regression analysis was conducted in order to determine the shared predictive value of the independent variables together. In hierarchical regression analysis, independent variables are entered in a specific order, which is determined by the researcher, and is rooted in a specific rationale (Shannon & Davenport, 2001). The rationale for the current study was to enter the independent variables according to the strength of their individual correlations with the dependent variable, with the most strongly correlated independent variable entered in the first block, and the independent variable with the weakest correlation entered in the last block. This allowed the researcher to track the contribution of each individual independent variable to the change in the shared variance (\( R^2 \)).

In Block 1 of the regression analysis, the rating of seriousness was added to the model, with the following results: \( R = .642 \), \( R^2 = .412 \), and \( F = 67.282 \). These results are significant at the 0.01 level, and they indicate that approximately 41% of the variance in professors' likelihood of intervention when witnessing relational aggression in their
classroom can be predicted by the variance in professors' ratings of seriousness of a relationally aggressive scenario.

In Block 2 of the regression analysis, level of empathy was added to the model, with the following results: $R = .664$, $R^2 = .441$, $R^2 \text{ Change} = .029$, and $F \text{ Change} = 4.854$. These results are significant at the 0.05 level, and they indicate that the addition of level of empathy increased $R^2$ by .029, or approximately 3%. In other words, approximately 44% of the variance in professors' likelihood of intervention when witnessing relational aggression in their classroom can be explained by the combined influence of the professors' ratings of seriousness of a relationally aggressive scenario and the professors' level of empathy. The remaining independent variables were added in Blocks three, four, and five, but did not contribute to $R^2 \text{ Change}$ at a statistically significant level. The results of the hierarchical multiple regression analysis are summarized in Table 6.

Table 6

Summary of Hierarchical Multiple Regression Analysis for Variables Predicting Professors' Likelihood of Intervention when Witnessing Relational Aggression in their Classroom

<table>
<thead>
<tr>
<th></th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2 \text{ Change}$</th>
<th>$F \text{ Change}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>.642(a)</td>
<td>.412</td>
<td>.412</td>
<td>67.282*</td>
</tr>
<tr>
<td>Model 2</td>
<td>.664(b)</td>
<td>.441</td>
<td>.029</td>
<td>4.854**</td>
</tr>
<tr>
<td>Model 3</td>
<td>.684(c)</td>
<td>.468</td>
<td>.027</td>
<td>1.562</td>
</tr>
<tr>
<td>Model 4</td>
<td>.687(d)</td>
<td>.472</td>
<td>.004</td>
<td>.740</td>
</tr>
<tr>
<td>Model 5</td>
<td>.688(e)</td>
<td>.473</td>
<td>.001</td>
<td>.072</td>
</tr>
</tbody>
</table>

a Predictors: Participants' rating of seriousness of RA scenario
b Predictors: Participants rating of seriousness of RA scenario, Participant's level of empathy
c Predictors: Participants rating of seriousness of RA scenario, Participant's level of empathy, Gender of perpetrator/target in RA scenario
d Predictors: Participants rating of seriousness of RA scenario, Participant's level of empathy, Gender of perpetrator/target in RA scenario, Gender of participant

e Predictors: Participants rating of seriousness of RA scenario, Participant's level of empathy, Gender of perpetrator/target in RA scenario, Gender of participant, Class size

* p < .01, ** p < .05
V. DISCUSSION

Introduction

This chapter provides an in-depth discussion of the results of this study. A brief overview of the study is presented first, followed by a discussion of the results in the context of the current literature on relational aggression. Finally, the limitations of the study are presented, followed by the implications of the study, suggestions for future research, and conclusions.

Overview of the Current Study

Relational aggression refers to non-physical forms of aggression that are intended to cause harm to others through manipulation of and/or damage to their social relationships (Crick & Grotpeter, 1995). There are serious long-term consequences associated with this form of aggression, ranging from feelings of low self-worth (Paquette & Underwood, 1999) to increased loneliness and depression (Crick & Grotpeter, 1996) and even to anti-social personality features (Werner & Crick, 1999). Research suggests that relational aggression develops in childhood and adolescence and continues into adulthood (Bjorkqvist, Osterman, & Kaukiainen, 1992; Bjorkqvist, Osterman, & Lagerspetz, 1994), and it has been found to be predictive of future social maladjustment (Crick & Grotpeter, 1996).

The majority of relational aggression research has been conducted with children (Werner & Crick, 1999), although some more recent studies have begun to explore relational aggression among college students (Basow et al., 2007; Klem, 2008; Loudin et
al., 2003; Storch et al., 2003; Werner & Crick, 1999). Because the majority of relational aggression research has been conducted with children, research that examines adult perceptions of and responses to relational aggression tend to focus on the parents and/or teachers of students in grades pre-K through 12 (Bauman & Del Rio, 2006).

Currently, there is no research which examines the perceptions of authority figures beyond the elementary and secondary school level, such as in the workplace or on college campuses. The current study sought to begin filling this gap in the literature by examining the perceptions of college professors regarding relational aggression, as well as their likelihood of intervening when they witness relational aggression in their students. This is worth examining due to the serious long-term consequences associated with relational aggression, particularly now that research is beginning to identify negative consequences specific to college students. In addition to the feelings of low self-worth (Paquette & Underwood, 1999), social anxiety, loneliness, and depression (Werner & Crick, 1999) that are shared by younger age groups, relational aggression in college students has been correlated to eating disorders, higher rates of alcohol use and other self-destructive behaviors, and borderline and anti-social personality features (Storch et al., 2003; Storch et al., 2004). Further, relational aggression has been found to be negatively correlated with overall college adjustment (Klem, 2008). Since college professors have more regular contact with students than do other college/university staff, they are in an integral position to observe and possibly identify students experiencing relational aggression, to intervene on students' behalf, and to refer students for counseling or other student support services if necessary.
This study examined college professors' likelihood of intervening when witnessing relational aggression in their students, as well as variables that may impact professors' likelihood of intervention. Specifically, this study sought to determine the amount of shared variance between professors' likelihood of intervention when witnessing relational aggression and the following independent variables: the professors' gender, the class size typically taught by the professors, the gender of the perpetrator and target in a relationally aggressive scenario, the professors' level of empathy, and the seriousness ratings that the professors assigned to the relationally aggressive scenario. This shared variance determines the predictive value, or influence, of the independent variables over professors' likelihood of intervening when they witness relational aggression in their students.

**Professors' Likelihood of Intervention and Ratings of Seriousness**

This study found a strong positive correlation between professors' ratings of seriousness of a relationally aggressive scenario and their likelihood of intervening when witnessing relational aggression in their classrooms. This is consistent with prior research, which suggests that teachers of pre-K through twelfth grade students are more likely to intervene in aggression/bullying situations that they perceive as more serious (Bauman & Del Rio, 2005; 2006). Interestingly, however, prior research has also shown that teachers and parents of children and adolescents tend to view physical aggression as more serious than other forms of aggression, and that they are less likely to intervene in situations that involve social or emotional harm to the target (Bauman & Del Rio, 2006; Hazler, Miller, Carney, & Green, 2001). In the current study, however, the vast majority of the participants rated the relationally aggressive scenario as either "potentially serious"
or as "definitely serious". Further, very few indicated that they would not intervene, while the majority indicated they were either "somewhat likely" or "very likely" to intervene. While this study did not compare the perceptions of participants regarding physical versus relational aggression, the majority of professors in the current study appear to consider relational aggression serious enough to warrant intervention, or to at least consider intervention.

It is possible that an emphasis on classroom management may contribute to the current sample's perceptions of and responses to the relationally aggressive scenario presented. One participant actually wrote on her survey instrument that this type of "disrespectful" behavior would be considered a "serious violation" in her classroom. This is consistent with current literature on learning theory, which asserts that creating a classroom environment conducive to learning involves, in part, ensuring that students feel safe and secure in the classroom (Ormrod, 2009). Unfortunately, however, this study did not explore participants' classroom management styles, so it is not possible in the current study to determine whether or not professors at this university share similar views regarding respectful classroom interactions as a classroom management issue.

**Professors' Likelihood of Intervention and Level of Empathy**

This study also found a moderate positive correlation between professors' level of empathy and their likelihood of intervention when they witness relational aggression in their classrooms. This is also consistent with prior research, which has found that teachers of pre-K through twelfth grade students who have high empathy are more likely to intervene in all types of bullying situations, whether they are physical, verbal, or relational (Bauman & Del Rio, 2006; Craig, Henderson, & Murphy, 2000; Yoon, 2004).
However, one study did find that teachers had the least empathy for targets of relational aggression, and were least likely to intervene in relational bullying incidents (Bauman & Del Rio, 2006).

Interestingly, in the current study, while nearly a third of the sample demonstrated low empathy scores, very few rated the relationally aggressive scenario as "not serious", and fewer still indicated that they would not intervene. This speaks to the moderate correlation of empathy scores to likelihood of intervention. In other words, while the variance of empathy does contribute to the variance of likelihood of intervention at a statistically significant level, there are other potential factors that may have a far higher degree of shared variance with professors' likelihood of intervention.

*Professors' Likelihood of Intervention and Gender of the Perpetrator/Target*

This study found no significant correlation between professors' likelihood of intervention and the gender of the perpetrator and target in the relationally aggressive scenario that was presented. This is not consistent with previous research which found that college students' perceptions of relational aggression are correlated to the gender of the perpetrator and target in relationally aggressive incidents (Basow et al., 2007). Among college students, relational aggression that was carried out by female characters was perceived more negatively, except in the case of a male perpetrator targeting a female, which was perceived as even less acceptable (Basow et al., 2007). The current study did not seek to examine the how the gender of the perpetrator and target in the presented RA scenario impacted professors' perceptions of the situation, but it is evident that the perpetrator/target gender pairing has no significant relationship to professors' likelihood of intervention when they witness relational aggression in their classrooms.
Again, it appears that other factors that were not examined in the current study may play a role in professors' decision making process.

*Professors' Likelihood of Intervention and Professors' Gender*

This study found no significant relationship between professors' gender and their likelihood of intervention when witnessing relational aggression in their classrooms. Past research has found that among college students, females tend to view relational aggression as more harmful and less acceptable than males (Basow et al., 2007). Further, females tend to have higher emotional empathy than men (Mehrabian, Young, & Sato, 1988), and emotional empathy has been found in this study to be significantly correlated to professors' likelihood of intervention. However, in the current study, the mean empathy score of females is only slightly higher than that of men, and is not statistically significant. Therefore, this gender difference does not appear to play a role in predicting professors' likelihood of intervention when witnessing relational aggression in their classrooms.

*Professors' Likelihood of Intervention and Typical Class Size*

This study found no significant correlation between the class size that participants typically teach and their likelihood of intervention. This is somewhat surprising because prior research suggests that smaller class sizes make disruptive behavior more noticeable, and it is therefore easier for teachers to address (Finn et al., 2003). This effect may have been over-ridden in the current study, however, because regardless of the class sizes reported by participants, the scenario presented to them asserted that the instructor did notice the relationally aggressive behavior. In a real-world situation, this may not be the case, as one of the challenges associated with relational aggression is its covert nature,
which makes it difficult to observe (Young, Boye, & Nelson, 2006). Therefore, in the real world, professors in smaller classes may indeed be more likely to intervene simply because they are more likely to notice the behavior.

**Combined Effects and Likelihood of Intervention**

Not surprisingly, the two variables that significantly correlated individually to likelihood of intervention were also found to have a statistically significant shared predictive value. While professors' ratings of seriousness explained a significant amount of variance with likelihood of intervention, the addition of level of empathy to the multiple regression model increased the predictive value of both independent variables. In other words, these two variables combine to increase their predictive value over professors' likelihood of intervention when they witness relational aggression in their classrooms.

**Implications of the Current Study**

The results of this study suggest that professors with higher empathy, who perceive relational aggression as a serious issue, will be more likely to intervene when they witness relational aggression among their students. With professors' ratings of seriousness having the most shared variance with their likelihood on intervening when they witness a relationally aggressive incident, it stands to reason that raising professors' awareness of relational aggression and its associated long-term negative consequences may be an avenue worth pursuing. Empathy training may also be useful in increasing professors' likelihood of intervening when they witness relational aggression in their students. These efforts, however, will not happen without also raising the awareness of relational aggression among administrators at colleges and universities, since they will be
the ones to authorize such training for college/university professors. Counseling
departments and other student support staff could be an integral part of these awareness-
raising and empathy training efforts.

Awareness-raising should primarily focus on what relational aggression is, and its
negative long-term consequences for college students. In college students, relational
agression has been correlated with higher rates of peer rejection and relationship
conflict, as well as eating disorders, alcohol abuse, and other self-destructive behavior
(Storch et al., 2003; 2004; Werner & Crick, 1999). It has also been correlated to
antisocial and borderline personality features, as well as to loneliness and depression
(Storch et al., 2003; 2004; Werner & Crick, 1999). A more recent study found that
victimization by relational aggression in college students is negatively correlated with
personal-emotional adjustment to college, social adjustment to college, and overall
college adjustment, while perpetration of relational aggression by college students is
positively correlated with anxiety (Klem, 2008). These are serious issues that can have a
very negative impact on college students' social functioning as well as on academic
learning and retention, which could in turn influence student retention rates. For these
reasons, college administrators and professors need to be made aware of these issues.
Furthermore, the recent research that shows a link between relational aggression and
physical aggression (Talbott et al., 2002) suggests that relational aggression could be
considered a legitimate safety concern for the general student population on college and
university campuses.

Campus counseling departments can also teach professors how to identify
students who appear to be struggling with the emotional consequences associated with
both relational and physical aggression, as well as students who are contemplating lashing out against themselves or others. While professors may notice more obvious problems such as violent statements in class discussions or writing assignments, they may not take notice of more subtle signs that a student is in need of help. Such signs include, but are not limited to, social withdrawal, rapid decline in academic performance, excessive alcohol or drug use, poor coping skills, or poor impulse control (Watson, Andreas, Fischer, & Smith, 2005). Teaching professors to recognize potential warning signs that students are struggling emotionally can help them to feel more prepared to refer students to campus counseling services or other student services that they deem necessary.

If awareness of relational aggression and its associated negative long-term consequences for college students can be raised, then the next obvious step will be to monitor college campuses for relationally aggressive incidents. The classroom is the one place that provides convenient and consistent access to the student population. For this reason, college and university professors in particular can serve as a first line of defense in identifying students who are coping (or perpetrating) with relational aggression. These professors can not only reinforce the message that this type of behavior is unacceptable by addressing it in their classrooms, but with proper training, they may also be able to identify students who appear to be struggling with the emotional impact of relational aggression, and to refer those students to campus counseling centers or other student support services as needed.
Recommendations for Classroom Interventions

While awareness-raising efforts regarding relational aggression and empathy-training may increase professors' willingness to intervene, such efforts do little to instruct professors regarding specific interventions that can be used to prevent or put a stop to relationally aggressive behavior in the classroom. College and university professors may benefit from reviewing scholarly literature on classroom management. Strong classroom management skills can go a long way toward preventing or curbing any disruptive classroom behavior, including incidents of relational aggression.

On the prevention side, professors can arrange tables and chairs so that they can easily interact with students and monitor their behavior (Ormrod, 2009). Professors can also communicate caring and respect for students, and encourage students to let the professor know if they are having difficulties with the class. They can also establish reasonable rules and procedures at the beginning of class that include respectful interactions with the professor and other students, as well as supporting one another's learning efforts by participating fully in group projects and discussions. Professors can also create a goal-oriented, professional, yet non-threatening atmosphere which emphasizes the accomplishment of classroom tasks each day. In keeping with this businesslike atmosphere, professors can plan their classes so that class time is continually filled with meaningful activity that leaves little time for students to become distracted.

Professors can also facilitate a sense of community by offering students opportunities to interact on productive activities such as group projects and class discussions (Ormrod, 2009). A sense of community and positive classroom interactions are also associated with
small classes (Finn et al., 2001), so it may be worth limiting college and university class sizes whenever possible.

On the intervention side, professors must first continually monitor student behavior (Ormrod, 2009). They can separate disruptive groups of students when needed, and can utilize assigned seating if necessary to keep consistently disruptive students close at hand. If students are required to work in groups, professors may assign groups in order to encourage students to get to know new people in the class. If the professor notices relationally aggressive interactions taking place, they can first remind students as a group that the professor is monitoring student behavior, and that there are established expectations for respectful and professional classroom interaction. If this does not stop the disruptive interaction, the professor may choose to speak privately with the student(s) before or after class, and if the inappropriate behavior still continues, the professor may eventually resort to disciplinary action (Ormrod, 2009) such as a reduction in class participation points or dismissal from the classroom. Finally, if a particular pair or group of students appears to have an ongoing conflict, the professor can privately instruct the students involved to keep the conflict out of the classroom, and if this does not eliminate the classroom disruptions, the professor may consult with campus counseling services and possibly refer the students involved for conflict mediation.

Limitations and Suggestions for Future Research

The most obvious limitation to the current study lies in the discrepancy in the internal consistency, as indicated by Cronbach's alpha, between this study and that which was reported by Mehrabian (2000). Internal consistency is a measure of the consistency of the actual items within a given instrument (Ross & Shannon, 2008). If an instrument is
designed to measure a particular construct, such as empathy, then the items within that instrument should be consistent with one another (Ross & Shannon, 2008). The current study's internal consistency is much lower than that reported by the author of the instrument.

A closer examination of the BEES raises questions of face validity (what a test appears superficially to measure) and content validity (degree to which items on a test are representative of the intended content domain) (Drummond & Jones, 2006). While the BEES is intended as a measure of emotional empathy, the items contained within the BEES seem to measure both the emotional and cognitive components of empathy. For example, items such as "It pains me to see young people in wheelchairs" appear to be assessing one's vicarious emotional response to the situation of another. However, items such as "I have difficulty knowing what babies and children feel" seem to be measuring the cognitive component of empathy known as perspective-taking. Further, items such as "I do not get overly involved in friends' problems" seem to be measuring behavioral responses to situations rather than emotional responses. It should also be noted that when Cronbach's alpha was computed for the positively-worded and negatively-worded items separately, the alpha nearly doubled. This, combined with concerns regarding face validity, seems to suggest that the BEES may in fact be looking at more than one component of empathy.

Reliability scores from an instrument can also vary based on sample characteristics such as age or background (Ross & Shannon, 2008), so it is possible that the discrepancy in alphas is due to differences between the norming sample for the BEES and the participants in the current study. Unfortunately, very little information is reported
for the norming sample of the BEES. While the author mentioned the norming sample consisting of an equal number of males and females, there was no demographic or background information to describe the norming sample (Mehrabian, 2000). However, given that the current study consisted of a non-random sample of university professors from 12 different schools and colleges, it is possible that the characteristics of the participants could have negatively impacted the internal consistency in this study.

Further, given participants' willingness to voluntarily take part in a graduate student's research project, one might expect this sample to be fairly homogenous in the way they responded to the BEES, as well as to be a fairly high empathy group. Such a low variance response would be expected to yield a higher alpha. However, nearly a third of the participants demonstrated low empathy scores, while the rest demonstrated average or high empathy scores. Given the concerns regarding the content validity of the BEES, it is possible that professors from different schools/colleges may respond differently to different indicators of empathy. This higher variance in responses may have resulted in a lower alpha. Unfortunately, however, since participants were not asked to identify what school or college in which they teach, nor any other background information beyond gender or typical class size, it is not possible to examine and compare the responses of professors based on the academic unit in which they teach or any other background variables which may have contributed to a lower alpha.

This failure to explore more background variables of the participants is another limitation of the current study. While descriptive variables were limited in an effort to ensure anonymity and an adequate response rate, it still would have been interesting and informative to examine other background characteristics which may contribute to
professors' likelihood of intervention when they witness relational aggression in their classrooms. For example, as previously mentioned, it would have been useful to compare the responses of professors from different schools and colleges. Future studies can compare the empathy levels of professors from different academic units, as well as their likelihood of intervening when they witness relational aggression in their classrooms. Years of collegiate teaching experience would be another factor worth examining to see if it influences professors' likelihood of intervention. More experienced professors may be more likely to intervene because of their experience managing student behavior in the classroom. On the other hand, younger professors may be more likely to intervene because they are more familiar with relational aggression in current scholarly literature and popular culture.

The current study also did not explore how and why professors would intervene when they witness relational aggression in their classrooms. Doing so would allow researchers to identify professors' specific strategies for addressing relational aggression in their students, and it would also help to clarify professors' perceptions of relational aggression in their students. For example, if a professor intervenes, it would be worth knowing if a professor is doing so because of a concern for students' emotional well-being, or if the professor simply views the incident as a classroom management issue, as suggested by one of the current study's participants. Future research could include a qualitative study in which professors are presented with relationally aggressive scenarios, and they are simply asked to write whether or not they would intervene, and their thought process in making that decision. This could help to identify additional factors that professors take into account when deciding whether or not to intervene.
Another limitation of this study is that it did not examine the difference between professors who witness relational aggression themselves, and professors to whom students have reported relationally aggressive incidents. Previous research has indicated that teachers who witness a relationally aggressive situation are more likely to intervene than when the situation is reported by students (Craig et al., 2000). In the current study, however, the scenario that was presented to participants asserted that the professor had actually witnessed the relationally aggressive situation. It cannot be determined, therefore, whether or not the participants would respond differently to reported incidents versus incidents that they actually witnessed. Future research could seek to explore this possibility.

Another limitation in this study is that class size effects could not be adequately examined because a scenario was used which asserted that the professor actually witnessed the relationally aggressive incident. In order to adequately examine the effects of class size on intervention in relationally aggressive incidents, future research could include an observational study in which different sized classes were directly observed for relational aggression and professors' responses. Another option would be to survey students in different sized classes. Students could indicate whether or not they have experienced relationally aggressive incidents in the classroom, whether or not the professor noticed the incident, and if the professor did notice the incident, whether or not the professor intervened.

Finally, this study only examined one specific relationally aggressive scenario. Unfortunately, however, relational aggression can take many various forms, ranging from spreading rumors, to social exclusion, to covert destruction of property (Young, Boye, &
Nelson, 2006). While it was necessary in the current study to use only one scenario so that gender effects could be adequately and accurately examined, it may prove useful in future research to examine various forms of relational aggression, to see if there are differences in professors' perceptions and responses depending on what specific subtype of relational aggression is employed.

Conclusion

This study found that professors' likelihood of intervening when they witness relational aggression in their classrooms is related to their level of empathy and to their perception of how serious the incident is. Ideally, college professors would intervene when witnessing any incident of relational aggression, due to the serious negative consequences to college students that are associated with this form of aggression, in addition to the possible negative impact on campus safety and student retention. In an effort to increase the likelihood of intervention among college and university professors, it is recommended that colleges and universities engage in awareness-raising efforts to educate faculty and administration about relational aggression and its associated negative outcomes. Empathy-training could serve to further reinforce these efforts by helping faculty and administrators to understand the emotional/psychological consequences associated with relational aggression. Finally, counseling departments and other campus student support personnel could take the leading role in these awareness-raising and empathy-training efforts. Such efforts could help to decrease incidents of relational aggression on college and university campuses, thereby improving students' overall college adjustment, social functioning, and academic functioning; and possibly facilitating an improved campus climate and higher student retention rates.
REFERENCES


APPENDICES
APPENDIX A

DEMOGRAPHICS INSTRUMENT
Demographics

Gender (check your answer):

☐ Male
☐ Female

During the 2008-2009 academic year (Summer 2008, Fall 2008 and Spring 2009), how many classes did you teach? Please write your answer in the space provided.
No. of classes taught during 2008-2009 academic year: __________

During the 2008-2009 academic year (Summer 2008, Fall 2008, and Spring 2009), how many classes did you teach with 1-19 students, 20-39 students, or 40+ students?
Please write your answers in the spaces provided.
No. of classes taught with 1-19 students: __________
No. of classes taught with 20-39 students: __________
No. of classes taught with 40 or more students: __________
APPENDIX B

RELATIONAL AGGRESSION PERCEPTION AND INTERVENTION QUESTIONNAIRE
Relational Aggression Perception and Intervention Questionnaire
(Please note that each participant will be asked to respond to ONE of the following scenarios)

Please read the following scenario, and answer the questions that follow:

\[\text{In one of the undergraduate classes for which you are the primary instructor, you notice one day that when Male Student A asked questions during the class discussion, Male Student B leaned over and whispered to students around him, causing them to laugh under their breath. In subsequent class discussions, you notice that occasionally when Male Student A asks questions or contributes to the discussion, Male Student B rolls his eyes and sighs, again causing students around him to laugh under their breath. After several such incidents, you notice that Male Student A does not contribute to class discussions as much as he used to.}\]

**In your opinion, how serious is this situation? (Circle your answer.)**
1. Not serious
2. Potentially serious
3. Definitely serious

**How likely are you to intervene in this situation? (Circle your answer.)**
1. Not at all likely
2. Somewhat likely
3. Very likely

Please read the following scenario, and answer the questions that follow:

\[\text{In one of the undergraduate classes for which you are the primary instructor, you notice one day that when Female Student A asked questions during the class discussion, Female Student B leaned over and whispered to students around her, causing them to laugh under their breath. In subsequent class discussions, you notice that occasionally when Female Student A asks questions or contributes to the discussion, Female Student B rolls her eyes and sighs, again causing students around her to laugh under their breath. After several such incidents, you notice that Female Student A does not contribute to class discussions as much as she used to.}\]

**In your opinion, how serious is this situation? (Circle your answer.)**
1. Not serious
2. Potentially serious
3. Definitely serious

**How likely are you to intervene in this situation? (Circle your answer.)**
1. Not at all likely
2. Somewhat likely
3. Very likely
Please read the following scenario, and answer the questions that follow:

In one of the undergraduate classes for which you are the primary instructor, you notice one day that when Male Student A asked questions during the class discussion, Female Student B leaned over and whispered to students around her, causing them to laugh under their breath. In subsequent class discussions, you notice that occasionally when Male Student A asks questions or contributes to the discussion, Female Student B rolls her eyes and sighs, again causing students around her to laugh under their breath. After several such incidents, you notice that Male Student A does not contribute to class discussions as much as he used to.

In your opinion, how serious is this situation? (Circle your answer.)
1. Not serious
2. Potentially serious
3. Definitely serious

How likely are you to intervene in this situation? (Circle your answer.)
1. Not at all likely
2. Somewhat likely
3. Very likely

Please read the following scenario, and answer the questions that follow:

In one of the undergraduate classes for which you are the primary instructor, you notice one day that when Female Student A asked questions during the class discussion, Male Student B leaned over and whispered to students around him, causing them to laugh under their breath. In subsequent class discussions, you notice that occasionally when Female Student A asks questions or contributes to the discussion, Male Student B rolls his eyes and sighs, again causing students around him to laugh under their breath. After several such incidents, you notice that Female Student A does not contribute to class discussions as much as she used to.

In your opinion, how serious is this situation? (Circle your answer.)
1. Not serious
2. Potentially serious
3. Definitely serious

How likely are you to intervene in this situation? (Circle your answer.)
1. Not at all likely
2. Somewhat likely
3. Very likely
APPENDIX C

BALANCED EMOTIONAL EMPATHY SCALE (BEES)
AUTHOR’S NOTE: Please note that the Balanced Emotional Empathy Scale (BEES) was reproduced for the sole purpose of conducting the current study. Any additional reproduction and/or use of this instrument requires written permission from the original author, Albert Mehrabian. Contact information is provided below:

CONTACT EMAIL: ampsych@gmail.com

BALANCED EMOTIONAL EMPATHY SCALE (BEES)
Please use the following scale to indicate the degree of your agreement or disagreement with each of the statements below. Record your numerical answer to each statement in the space provided preceding the statement. Try to describe yourself accurately and in terms of how you are generally (that is, the average of the way you are in most situations – not the way you are in specific situations or the way you would hope to be).

+4 = very strong agreement
+3 = strong agreement
+2 = moderate agreement
+1 = slight agreement
0 = neither agreement nor disagreement
-1 = slight disagreement
-2 = moderate disagreement
-3 = strong disagreement
-4 = very strong disagreement

1. I very much enjoy and feel uplifted by happy endings.

2. I cannot feel much sorrow for those who are responsible for their own misery.

3. I am moved deeply when I observe strangers who are struggling to survive.

4. I hardly ever cry when watching a very sad movie.

5. I can almost feel the pain of elderly people who are weak and must struggle to move about.

6. I cannot relate to the crying and sniffling at weddings.

7. It would be extremely painful for me to have to convey very bad news to another.

8. I cannot easily empathize with the hopes and aspirations of strangers.

9. I don’t get caught up easily in the emotions generated by a crowd.

10. Unhappy movie endings haunt me for hours afterward.

11. It pains me to see young people in wheelchairs.
12. It is very exciting for me to watch children open presents.

13. Helpless old people don’t have much of an emotional effect on me.

14. The sadness of a close one easily rubs off on me.

15. I don’t get overly involved in friends’ problems.

16. It is difficult for me to experience strongly the feelings of characters in a book or movie.

17. It upsets me to see someone being mistreated.

18. I easily get carried away by the lyrics of love songs.

19. I am not affected easily by the strong emotions of people around me.

20. I have difficulty knowing what babies and children feel.

21. It really hurts me to watch someone who is suffering from a terminal illness.

22. A crying child does not necessarily get my attention.

23. Another’s happiness can be very uplifting for me.

24. I have difficulty feeling and reacting to the emotional expressions of foreigners.

25. I get a strong urge to help when I see someone in distress.

26. I am rarely moved to tears while reading a book or watching a movie.

27. I have little sympathy for people who cause their own serious illnesses (e.g., heart disease, diabetes, lung cancer).

28. I would not watch an execution.

29. I easily get excited when those around me are lively and happy.

30. The unhappiness or distress of a stranger are not especially moving for me.
Information Sheet for Study Examining
College Professors’ Perceptions of in-class Social Behavior of their Students

You are invited to participate in a research project designed to examine factors that may impact college professors’ perceptions of the in-class social behavior of their students. This study is being conducted by Andrea Owens, a Ph.D. candidate in the Department of Special Education, Rehabilitation, & Counseling/School Psychology, under the supervision of Dr. Debra Cobia, Committee Chair and Professor at Auburn University. You have been identified as a potential participant due to your status as a ranked professor (assistant professor, associate professor, or full professor) who teaches undergraduate students.

If you choose to participate, you will complete three brief questionnaires, which will take approximately 10-15 minutes of your time. Once you have completed the questionnaires, please place them in the enclosed self-addressed envelope and mail them back to Andrea Owens. There are no anticipated risks/discomforts associated with your participation in this study; nor are there any direct benefits to those who choose to participate.

Any information you provide as part of this study will remain anonymous. There will be no way to connect questionnaire data to specific individuals. Information collected through your participation will be used for a doctoral dissertation, and possibly for presentations at professional meetings or for publication in professional journals.

You may choose not to participate without penalty. However, after you have provided anonymous information, there will be no way to withdraw your data since there will be no way to identify information from a specific individual. Your decision whether or not to participate will in no way impact your relationship with Auburn University or the Department of Special Education, Rehabilitation, & Counseling/School Psychology.

If you have any questions or concerns related to this study, please feel free to contact me, Andrea Owens, at 334-559-9474 or owensan@auburn.edu; or my Committee Chair and faculty advisor, Dr. Debra Cobia, at 334-844-2880 or cobiadc@auburn.edu. Either of us will be happy to address any questions or concerns you may have.

For more information regarding your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board via phone (334-844-5966) or email (hssubjec@auburn.edu OR IRBChair@auburn.edu).

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Andrea L. Owens, M.A.

Signature ___________________________ Date ____________

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APPENDIX E

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD

APPROVAL TO CONDUCT STUDY
MEMORANDUM TO: Andrea Owens
Special Education, Rehabilitation, Counseling/School Psychology

PROTOCOL TITLE: “College Professors’ Perceptions of and Responses to Relational Aggression in College Students”

IRB FILE NO.: 09-103 EX 0904
APPROVAL DATE: April 1, 2009
EXPIRATION DATE: March 31, 2010

The referenced protocol was approved “Exempt” on April 1, 2009 under 45 CFR 46.101(b)(2):

“Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:

(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and

(ii) any disclosure of the human subjects’ response outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.”

You should retain this letter in your files, along with a copy of the revised protocol and other pertinent information concerning your study. If you should anticipate a change in any of the procedures authorized in this protocol, you must request and receive IRB approval prior to implementation of any revision. Please reference the above IRB file number in any correspondence regarding this project.

If you will be unable to file a Final Report on your project before March 31, 2010, you must submit a request for an extension of approval to the IRB no later than March 15, 2010. If your IRB authorization expires and/or you have not received written notice that a request for an extension has been approved prior to March 31, 2010 you must suspend the project immediately and contact the Office of Human Subjects Research for assistance.

A Final Report will be required to close your IRB project file. Please note that the approved, stamped version of your information letter should be provided to participants during the consent process.

If you have any questions concerning this Board action, please contact the Office of Human Subjects Research at 844-5966.

Sincerely,

Kathy J. Ellison, RN, DSN, CIP
Chair of the Institutional Review Board
for the Use of Human Subjects in Research

cc: Dr. Everette Martin
Dr. Debra Cobia