RELATIONAL AGGRESSION AMONG MIDDLE SCHOOL GIRLS

By

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To my grandma and my mom for all the love, support, encouragement, and guidance you have provided along the way. This accomplishment is really yours too and I am grateful to you both for the example you have provided. To the rest of my family for the patience, understanding, and cheerleading you have never ceased to show throughout this journey!
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Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

RELATIONAL AGGRESSION AMONG MIDDLE SCHOOL GIRLS

By

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Chair: Edil Torres-Rivera
Major: Mental Health Counseling

The purpose of this study was to examine the correlates that define relational aggression among middle school girls, the relationships among these factors, and the association between the correlates of relational aggression and the type of relational aggression (e.g., verbal, withdrawal) exhibited among middle school girls. The findings of this study contribute to the theoretical understanding of relational aggression among middle school girls, suggest evidence-based efficacious interventions, and describe the etiology of internalizing (e.g., individual features: withdrawal, depression) and externalizing (e.g., social features: peer relationships, type of aggression exhibited) behaviors unique to middle school girls. This study examined the relationship between individual factors (e.g., withdrawal, depression) and social factors (peer relationships) related to relational aggression among middle school girls. A convenience sample of 273 middle school students was drawn from similarly sized schools in the southeastern United States. Participants completed a thirty-nine-item survey, which included the Direct Indirect Aggression Scale, the Children’s Social Behavior Scale-Peer Report and seven demographic questions. Data were analyzed using chi-square analyses and 3-way ANOVA analyses. Overall, the findings indicated significant relationships between relational aggression and age, relational aggression and socioeconomic status, relational aggression and ethnicity, relational aggression
and age, socioeconomic status, and ethnicity. The present study contributes to the theoretical underpinnings of relational aggression in middle school girls by focusing exclusively on this underrepresented population in the literature and posits that developmental theories, social-information processing, and social-psychological models influence the exhibition of externalizing and internalizing behaviors in adolescent girls. Identifying the theoretical foundation for relationally aggressive behaviors among middle school girls has illuminated appropriate interventions for professional counselors to consider in future investigations.
CHAPTER 1
INTRODUCTION

Relational aggression, defined as “behaviors that harm others through damage (or threat of damage) to relationships or feelings of acceptance, friendship, or group inclusion” (Crick, 1996, p 77), is of considerable interest to researchers (Cillessen & Mayeux, 2004; Cullerton-Sen & Crick, 2005; de los Reyes & Prinstein, 2004; Prinstein, Cheah, & Guyer, 2005; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005). Relational aggression includes such behaviors as excluding the victim from the peer group, gossiping, calling the victim names, threatening, and intentionally manipulating a victim’s friendships (Artz, 1998; Crick, 1996; Crick & Grottpeter, 1995; Grottpeter & Crick, 1996; Prinstein, Boergers, & Vernberg, 2001; Zimmer-Gembeck, Geiger, & Crick, 2005). Researchers have been investigating individual (loneliness, depression, global self worth, learning difficulties, and poor academic achievement; Prinstein, Boergers, & Vernberg, 2001; Zimmer-Gembeck, Geiger, & Crick, 2005) and social (relationships with family members, teachers, and peers; Chang, 2003; Meehan, Hughes, & Cavell, 2003; Prinstein, Cheah, & Guyer, 2005) correlates of relational aggression to enhance the understanding of the issue. This chapter will introduce the research related to relational aggression by addressing a) the nature and scope of aggression, b) incidence of physical aggression and criminal behavior, c) the need for the study, d) the purpose of the study, and e) the significance of the study. This chapter will conclude with the operational definition of terms that will be used throughout the investigation.

Nature and Scope of Aggression

Elucidating the distinction between overt and relational aggression has been a challenge that several researchers have begun to undertake (Cillessen & Mayeux, 2004; Crick, 1996; Cullerton-Sen & Crick, 2005; de los Reyes & Prinstein, 2004; Prinstein, Cheah, & Guyer, 2005;
In the past decade, awareness of girls’ overt aggression has risen dramatically, prompted by such media attention as the fatal beating of a girl by six other girls in a school restroom (Smith & Taylor, 2000) and documented by governmental agencies (Office of Juvenile Justice and Delinquency Prevention [OJJDP]). For example, the rate of girls’ externalizing behavior increased by 83% between 1988 and 1997, compared to a 39% increase for boys during the same period of time (OJJDP, 2000). Of this increase in externalizing behavior, the number of person-directed, or hostile, crimes committed by girls has increased 155%, which is almost double the rate for boys (OJJDP, 2000). Similarly, there was a 54% increase in property-directed, or instrumental, crimes committed by girls, more than five times the rate of increase for boys (OJJDP, 2000). According to national youth risk surveillance data, within a one-year period nearly one in four high-school aged girls were involved in a physical altercation and within a one-month period an estimated 6% of girls carried a weapon to school (Centers for Disease Control [CDC], 2002). Yet Prinstein and La Greca (2004) report that there is a stunning lack of research focused solely on the aggressive behavior of girls, since several of the studies (e.g., Coie, Dodge, & Kupersmidt, 1990; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005) include both boys and girls in the sample and many studies (e.g., Cillessen, van Ijzendoorn, van Lieshout, & Hartup, 1992; Dishion, Capaldi, & Youerger, 1999; Haselager, Cillessen, van Lieshout, Riksen-Walraven, & Hartup, 2002) have only males in the sample.

Incidence of Physical Aggression and Criminal Behavior

Along with rising rates of externalizing behavior among girls, research is revealing considerable evidence connecting relational aggression (e.g., lying, gossiping) in girls (Keenan,
Loeber, & Green, 1999; Prinstein & La Greca, 2004). Several investigations and governmental statistics illustrate the need for an examination of the individual and social correlates of relational aggression and the types of aggression (e.g., verbal, withdrawal, relational) exhibited among girls (CDC, 2002; OJJDP, 2000; Prinstein & La Greca, 2004). It is important to distinguish between verbal aggression, withdrawal, and relational aggression so that the extent to which each of these features contributes to the development or maintenance of relational aggression can be ascertained. It is equally important to distinguish the externalizing behavior of girls from that of boys. The externalizing behaviors exhibited by girls are distinct from those exhibited by boys (Crick, 1996; Prinstein & La Greca, 2004). In terms of overt aggression (e.g., hitting, pushing, kicking), boys demonstrate greater levels than girls (Crick, 1996; Prinstein & La Greca, 2004). In contrast, girls are more likely to engage in relational aggression, such as excluding the victim from the peer group, lying, spreading rumors, or gossiping (Crick, 1996; Prinstein & La Greca, 2004). Thus, it is not surprising that the externalizing behaviors exhibited by early adolescent girls may have far-reaching consequences (i.e., impact their academic performance and social psychological adjustment) (Masten, 2005). Middle school girls involved in relational aggression (i.e., victim or aggressor) may be at risk for learning difficulties, low academic performance, or negative emotional adjustment (e.g., loneliness, depression, withdrawal) that is influenced by the peer group (Masten, 2005). Relationships with peers, teachers, and parents may impact the development and maintenance of relational aggression (Chang, 2003; Meehan, Hughes, & Cavell, 2003; Prinstein, Cheah, & Guyer, 2005). Björkqvist, Lagerspetz, and Österman (1992) reported that verbal aggression and withdrawal are associated with relational aggression among children and adolescents. These features may lead to negative consequences for girls (e.g., low grades, poor social-psychological adjustment) (Prinstein & La Greca, 2004). To summarize,
girls are just as likely as boys to demonstrate multiple problem behaviors, such as engaging in aggressive and criminal behaviors (Prinstein & La Greca, 2004).

Clearly, relational aggression among girls is a problem that needs to be investigated. The relationship between bullying and relational aggression must be explicated so that professionals understand the unique correlates (e.g., individual and social) of relational aggression among middle school girls, how the correlates of relational aggression interact with one another (i.e., how self worth interacts with peer relationships), and the impact relational aggression has upon middle school girls. This may lead to understanding the differences between relational aggression among elementary, middle, and high school girls and assist counselors with the implementation of an efficacious intervention program (e.g., Olweus Bullying Prevention Program [OBPP]) that has demonstrated improvements of such behavior (e.g., excluding peers, lying, gossiping).

Need for the Study

The importance of developing positive interpersonal skills is considered essential to our society (Werner & Crick, 2004). Prior studies (Coie, Dodge, & Kupersmidt, 1990; Zimmer-Gembeck, Geiger, & Crick, 2005) have examined the role of individual and social correlates of relational aggression among girls, but none were found at the time of this investigation that focused solely on middle school girls. Recent research, described in the introduction, shows that relational aggression appears to be increasing among middle school age students (Zimmer-Gembeck, Geiger, & Crick, 2005). This trend, as a social observation, is alarming and suggests the need for the studies aimed at identifying the etiology of relational aggression and treatment that will ameliorate this type of maladaptive behavior (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Such research has implications for guiding successful social adjustment among middle school girls and training programs for counselors.
Purpose of the Study

The purpose of this study is to examine the correlates that define relational aggression among middle school girls, the relationship among these factors, and the association between the correlates of relational aggression and the type of relational aggression (e.g., verbal, withdrawal) exhibited among middle school girls. The findings of this study will contribute to the theoretical understanding of relational aggression among middle school girls, suggest evidence-based efficacious interventions, and describe the etiology of internalizing (e.g., individual features: withdrawal, depression) and externalizing (e.g., social features: peer relationships, type of aggression exhibited) behaviors unique to middle school girls. This study will examine the relationship between individual factors (e.g., withdrawal, depression) and social factors (peer relationships) related to relational aggression among middle school girls. This study will also discuss the implications for counselors. The research questions to be investigated include (1) is age related to relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the Direct Indirect Aggression Scales [DIAS] (Björkqvist, Lagerspetz, & Österman, 1992) and the Children’s Social Behavior Scale-Peer Report [CSBS-P] (Crick, 1997), (2) is socioeconomic status related to relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997), (3) is there a significant difference in ethnicity and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997), and (4) is there a significant difference in the relational aggression subscales (e.g., verbal aggression and withdrawal) between age, ethnicity, and socioeconomic status as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997). The expected outcomes for this study include an explication of the unique factors.
associated with relational aggression among middle school girls, the relationship among those factors, and the relationship between the features of relational aggression and the type of aggression exhibited among middle school girls. Questions one through four will be investigated using the Direct Indirect Aggression Scales [DIAS] (Björkqvist, Lagerspetz, & Österman, 1992) and the Children’s Social Behavior Scale—Peer Report [CSBS-P] (Crick, 1997). Descriptive statistics will be reported, along with Pearson correlations and multiple regression analyses to ascertain relationships among the predictor variables.

**Significance of the Study**

The present study contributes to the theoretical underpinnings of relational aggression in middle school girls by focusing exclusively on this underrepresented population in the literature and posits that developmental theories, social-information processing, and social-psychological models influence the exhibition of externalizing and internalizing behaviors in adolescent girls. This study will extend the findings in previous investigations through the incorporation of developmental and social-psychological theories in an investigation that targets middle school girls. Identifying the theoretical foundation for relationally aggressive behaviors among middle school girls may illuminate appropriate interventions for professional counselors to consider. Implications for further research will be outlined as a result of examining the correlates of relational aggression specifically with middle school girls.

Researchers (Margolin, 2001; Prinstein & La Greca, 2004) have examined the role of peer acceptance and rejection in predicting externalizing behavior among adolescents. This body of research explores the development of aggression, the nature of interpersonal relationships as moderating or exacerbating behavior, and investigates the role of preventive interventions across developmental stages (Prinstein & La Greca, 2004). Other researchers (Dodge, Lansford, Burks, Bates, Pettit, Fontaine, & Price, 2003) have examined the role of social-information processing
and social-psychological theories related to relational aggression. This line of inquiry examines the nature of peer relationships and individual attributions to ambiguous and non-ambiguous social interactions (Card, Hodges, Little, & Hawley, 2005; Dodge, et al., 2003; Masten, 2005). For example, peer relationships can ameliorate or exacerbate the impact of relationally aggressive behaviors according to whether the relationship is positive (i.e., assisting a new student in the transition to school, protecting targets of aggression, decreasing the likelihood of externalizing behavior) or negative (i.e., reinforcing health risk behaviors through peer pressure, highlighting the effects of adverse parenting styles) and the context in which situations occur (Masten, 2005). In terms of attributing hostile or friendly intent to peers in ambiguous situations, whether the individual is rejected by the peer group plays a critical role (Card, Hodges, Little, & Hawley, 2005; Dodge, et al., 2003). Still other researchers (Cairns, Xie, & Leung, 1998; Cillessen & Bukowski, 2000) have investigated the role of reputation or social power with regard to relational aggression. To illustrate, the social power an individual possesses may indicate collective conflict between girl and boy cultures, developmental risk factors under certain conditions (e.g., exposure to community or family violence), or the inequitable distribution of power between bullies and victims and accepted versus rejected children (Cairns, Xie, & Leung, 1998; Cillessen & Bukowski, 2000; Rodkin, et. al, 2003). A review of the literature will address the individual features (e.g., withdrawal, depression) of relational aggression, the social features (e.g., peer relationships) of relational aggression, and the association between the type (e.g., verbal, physical, withdrawal) of relational aggression exhibited and the features of relational aggression among middle school girls.

**Operational Definition of Terms**

- **Academic Performance** refers to a girl’s actual performance (e.g., grades) in each course during the current academic year.
• **Age** refers to the chronological length of time a person has lived. This study focuses on middle school children, ages eleven through fifteen.

• **At-Risk** refers to behaviors (e.g., substance use, early sexual activity) or attitudes (e.g., school is not important), which may lead to a potentially negative outcome for an individual. For the purpose of the present investigation, ‘at-risk’ may be used interchangeably with ‘high risk’ behavior; it is similar to the term ‘health risk behaviors’.

• **Bullying** refers to repeated negative actions toward a victim who cannot easily defend him or herself and may involve the use of physical or relational aggression.

• **Children’s Social Behavior Scale- Peer Report [CSBS-P]** a fourteen-item instrument designed to measure physical aggression, relational aggression, and prosocial behavior (Crick, 1997).

• **Composite Score** refers to the physical aggression, verbal aggression, and withdrawal subscales as measured by the Direct Indirect Aggression Scales [DIAS] (Björkqvist, Lagerspetz, & Österman, 1992) and the Children’s Social Behavior Scale- Peer Report [CSBS-P] (Crick, 1997). For the purposes of the current study, composite scores for each instrument will be reported, as well as scores for each subscale (e.g., physical aggression, verbal aggression, and withdrawal).

• **Depression** refers to a girl’s feelings of sadness or helplessness to change the peer group situation.

• **Direct Indirect Aggression Scales [DIAS]** a twenty four-item instrument designed to measure three types of aggression: physical, verbal, and indirect, as well as withdrawal (Björkqvist, Lagerspetz, & Österman, 1992).

• **Ethnicity** refers to a population whose members identify with each other, usually on the basis of a presumed common ancestry; the concept of ethnicity is rooted in the idea of social groups, marked especially by shared nationality, tribal affiliation, genealogy, religious faith, language, or cultural and traditional origins (Smith, 1986). For the purposes of this study, the following ethnic categories will be used: Caucasian, African American, Asian American, Hispanic, and Native American.

• **Exclusion from the Peer Group** refers to a girl’s actions or verbalizations, directly relayed to the target girl or indirectly planned without the target girl’s awareness, that serve to isolate a target girl from the typical group of friends.

• **Externalizing Symptoms** refers to the outward acts of socially victimizing (e.g., excluding, gossiping, name-calling, lying, spreading rumors, threatening) a target girl. For the purposes of this study, externalizing symptoms and social factors (e.g., peer relationships) will be used concurrently.
• **Global Self-worth** refers to the overall self-esteem or opinion of one’s self a girl believes is true and accurately represents the person she is. For the purpose of this study, the term global self-worth is synonymous with the term self-worth.

• **Gossip** refers to the deliberate spreading of rumors, regardless of their truthfulness, to harm a girl’s self-esteem or friendships.

• **Health Risk Behaviors** refers to early sexual activity or substance use; for the purposes of this study, the terms ‘health risk behavior’ and ‘risk factors’ may be used interchangeably; it is similar to the term ‘at-risk’.

• **Individual Correlates** refers to internal factors of a target girl that may contribute to relational aggression (e.g., loneliness, depression, global self-worth, learning difficulties, and poor academic achievement). For the purposes of this study, individual correlates and internalizing symptoms (e.g., withdrawal, depression) will be used concurrently.

• **Internalizing Symptoms** refers to the feelings of depression, loneliness, and poor self-worth a girl experiences as a result of social victimization. For the purposes of this study, internalizing symptoms and individual features/individual correlates/individual factors (e.g., withdrawal, depression) will be used synonymously.

• **Learning Difficulties** refers to problems a girl experiences academically due to the stressors of social relationships.

• **Loneliness** refers to a girl’s feelings of isolation or exclusion from the peer group.

• **Name-calling** refers to intentionally calling a girl names to hurt the target girl’s feelings.

• **Relational aggression** refers to behaviors that harm others through damage or threat of damage to relationships or feelings of acceptance, friendship, or group inclusion (e.g., intentional manipulation of friendships that excludes particular girls from activities, gossips, threatens, or intimidates a target girl).

• **Social Correlates** refers to external factors, such as interpersonal relationships (e.g., family, teachers, peers), that may contribute to relational aggression. For the purposes of this study, externalizing symptoms and social correlates/social features/social factors (e.g., peer relationships) will be used synonymously.

• **Social-psychological Adjustment** refers to the level of adaptability a girl demonstrates (as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) when assuming developmentally appropriate tasks while in middle school).

• **Socioeconomic Status** refers to a child’s family’s income as compared to the state of Florida’s median income (US Census, 2000). Each participant’s socioeconomic status will be categorized by the free/ reduced lunch indicated in school records.
CHAPTER 2
LITERATURE REVIEW

The purpose of this study is to examine the influence of two variables (e.g., verbal aggression and withdrawal) that define relational aggression among middle school girls, the relationship among these factors, and the association between the factors of relational aggression and the type of relational aggression (e.g., verbal, withdrawal) exhibited among middle school girls. The purpose of this chapter is to present an overview of the research relevant to this study. An overview of research studies concerning the following topics will be presented: (a) correlates of relational aggression (i.e., individual: loneliness, depression, global self worth, learning difficulties, poor academic achievement; social: relationships with family, teachers, and peers) features of relational aggression, (b) type (e.g., verbal, withdrawal) of relational aggression exhibited, (c) relational aggression and interpersonal relationships, and d) theoretical foundation and emerging trends in relational aggression inquiry. This chapter will conclude with a summary.

Correlates of Relational Aggression

Relational aggression involves behaviors such as excluding the victim from the peer group, gossiping, calling the victim names, threatening, and intentionally manipulating a victim’s friendships (Artz, 1998; Crick, 1996; Crick & Grotpeter, 1995; Grotpeter & Crick, 1996; Prinstein, Boergers, & Vernberg, 2001; Zimmer-Gembeck, Geiger, & Crick, 2005). A brief review of the individual and social correlates of relational aggression that have been examined in previous studies will be presented as a foundation for conceptualizing relational aggression and substantiate the need for the present study. Individual factors, such as loneliness, depression, global self-worth, learning difficulties, and poor academic achievement have previously been investigated based upon theory, empirical evidence, and to clarify the role of each in relational
aggression among children and adolescents (Prinstein, Boergers, & Vernberg, 2001; Zimmer-Gembeck, Geiger, & Crick, 2005). Social factors, such as interpersonal relationships with family members, teachers, and peers have been examined for their contribution to the relationally aggressive behaviors exhibited among children and adolescents (Chang, 2003; Meehan, Hughes, & Cavell, 2003; Prinstein, Cheah, & Guyer, 2005). Therefore, each of these features will be discussed briefly to highlight their influence on the development and/or maintenance of relational aggression and to elucidate the connection between the types (e.g., verbal, withdrawal) of relational aggression exhibited by middle school girls.

Although individual (e.g., loneliness, depression) and social correlates (e.g., peer relationships) are not the focus of the present study, they represent the previous investigations that established the theoretical and conceptual framework the current study is based upon (Cillessen & Mayeux, 2004; Cullerton-Sen & Crick, 2005; de los Reyes & Prinstein, 2004; Prinstein, Cheah, & Guyer, 2005; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005). Initial conceptualizations of aggressive girls portrayed individual and family dysfunction as an explanation for such uncharacteristic behavior (Zimmer-Gembeck, Geiger, & Crick, 2005). As relational aggression studies began to focus on girls, alternative theoretical perspectives emerged. Less pathological perspectives of relational aggression, such as social-psychological adjustment (Crick & Grotpeter, 1995; Prinstein, Boergers, & Vernberg, 2001) and developmental models (Chang et. al, 2005) have been posited. Individual and social correlates of relational aggression will be examined, followed by a review of the literature related to the type of relational aggression exhibited among middle school girls.

**Individual Correlates of Relational Aggression**

Historically, researchers have examined overt physical aggression without attending to gender differences in the presentation of aggressive behavior (Crick & Grotpeter, 1995).
Investigations of individual behaviors and peer status found peer rejection to be a correlate of physical aggression, especially occurring among males (Bierman & Wargo, 1995; Cillessen, van Ijzendoorn, van Lieshout, & Hartup, 1992). Further, researchers found physical aggression to be more common among males when compared to females as early as age four (Hood, 1996). Several studies have excluded girls and focused solely on boys (Bierman & Wargo, 1995; Cillessen, van Ijzendoorn, van Lieshout, & Hartup, 1992). An exclusive focus on physical forms of aggression, and an exclusion of girls from research investigations, has resulted in a dearth of knowledge regarding the difficulties girls encounter with peers (Crick & Grotpeter, 1995; Zimmer-Gembeck, Geiger, & Crick, 2005). Combined with the studies that found nearly half of boys who are socially rejected do not exhibit overt physical aggression (Bierman & Wargo, 1995; French, 1988), and that the correlation between peer rejection and overt aggression decreases as children transition from elementary to middle school (Franzoi, Davis, & Vasquez-Suson, 1994), researchers began to examine alternative explanations related to developmental difficulties negotiating peer groups (Zimmer-Gembeck, Geiger, & Crick, 2005).

**Loneliness**

Zimmer-Gembeck, Geiger, and Crick (2005) have reported that the transition from elementary school into middle school represents developmental challenges (e.g., simultaneous changes in the cognitive, social, and biological characteristics), for some children that results in loneliness, depression, decreased self-esteem, poor academic achievement, and learning difficulties. These internalizing symptoms can lead to emotional maladjustment that may be a precursor for mental health problems (e.g., depression) and criminality (e.g., instrumental aggression that is directed toward obtaining an object, hostile aggression that is directed toward a person and designed to inflict harm) in adolescence and adulthood (Coie, Dodge, & Kupersmidt, 1990; Parker & Asher, 1987; Zimmer-Gembeck, Geiger, & Crick, 2005). To illustrate, victims
of relational aggression exhibit higher levels of loneliness, social anxiety, and depression (Grotpeter & Crick, 1996; Prinstein, Cheah, & Guyer, 2005). However, these behaviors can be mediated by peer relationships, which adolescents rely heavily upon for support (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996; Masten, 2005; Prinstein, Cheah, & Guyer, 2005; Zimmer-Gembeck, Geiger, & Crick, 2005). Feelings of loneliness may foreshadow the development of depression among victims of relational aggression (Grotpeter & Crick, 1996; Prinstein, Cheah, & Guyer, 2005).

**Depression**

Depression has been singled out by researchers (Grotpeter & Crick, 1996; Hankin & Abramson, 2001; Nolen-Hoeksema, 2001; Prinstein & Aikins, 2004; Prinstein, Cheah, & Guyer, 2005; Rudolph & Asher, 2000; Zimmer-Gembeck, Geiger, & Crick, 2005) as specifically impacting girls to a greater extent than boys when relational aggression is involved. This may be due, in part, to developmental differences between adolescent males and females. Engaging in relationally aggressive behaviors has been shown to improve the social status of adolescent girls, but has not demonstrated increased social status among adolescent boys (Adler & Adler, 1995; Zimmer-Gembeck, Geiger, & Crick, 2005). For example, adolescent girls have been found to utilize relationally aggressive behaviors as a tactic to gain and maintain friendships (Adler & Adler, 1995; Zimmer-Gembeck, Geiger, & Crick, 2005). In contrast, girls who are victims of relational aggression tend to be more isolated from the peer group, experience more social dislike from their peers, and consequently tend to withdraw from the peer group (Caldwell, Rudolph, Troop-Gordon, & Kim, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005). This combination of isolation, withdrawal, and peer rejection may lead to negative feelings of self-worth.
**Global Self-worth**

Early adolescent girls’ self-esteem is derived in large part from relationships with peers (Harter, 1999; Zimmer-Gembeck, Geiger, & Crick, 2005). Views of oneself in early adolescence can be enhanced in the context of positive peer relationships (Zimmer-Gembeck, Geiger, & Crick, 2005) or diminished in the context of negative peer relationships (Zimmer-Gembeck, Geiger, & Crick, 2005). Additionally, girls engaging in relationally aggressive behaviors have been found to value maintaining relationships (Crick, 1995). The inability to maintain a friendship may have a negative impact on girls who engage in relationally aggressive behaviors, which may lead to a decreased view of oneself (Grotpeter & Crick, 1996). Furthermore, Underwood (1999) reported that although girls and boys felt worse about themselves following incidences of physical aggression, girls reported feeling more hurt by incidences of relational aggression than boys. Additionally, girls reported negative feelings of self-worth based upon the frequency of relationally aggressive incidences they experienced more than boys (Underwood, 1999). These findings indicate that the negative effects of relational aggression may be more pronounced for girls, even though both boys and girls experience relational aggression (Merrell, Buchanan, & Tran, 2006). This decreased self-worth may also contribute to learning difficulties for relationally aggressive girls.

**Learning Difficulties**

Victims of relational aggression receive different opportunities to learn interpersonal relationship skills, social, and emotional skills. Peer groups provide the benefit of practice and positive social skills (Cillessen, Bukowski, & Haselager, 2000; Zimmer-Gembeck, Geiger, & Crick, 2005). This differential learning opportunity can lead to individual maladjustment (Zimmer-Gembeck, Geiger, & Crick, 2005). In contrast, positive peer relationships enhance the learning experience for socially appropriate skills such as conflict resolution and prosocial
behaviors (e.g., offering assistance to others) (Zimmer-Gembeck, Geiger, & Crick, 2005). Poor academic achievement may result from learning difficulties for both victims of relational aggression and girls exhibiting relationally aggressive behaviors.

**Poor Academic Achievement**

Girls who are victims of relational aggression are at a greater risk for poor academic achievement (Zimmer-Gembeck, Geiger, & Crick, 2005). Kupersmidt and Coie (1990) examined school functioning in terms of school grades and number of absences with respect to individual adjustment. The findings of this study indicated that peer-rejected adolescents are at greater risk for subsequent nonspecific, multiple difficulties (e.g., school dropout, truancy, police contact) and/or adjustment disorders (Kupersmidt & Coie, 1990). The positive, prosocial relationships with peers (e.g., protective factor) as opposed to negative peer relationships (e.g., risk factor) may influence healthy social-psychological adjustment during this developmental phase, allowing adolescents to spend more class time learning the material instead of focusing on relational aggression (Cillessen, Bukowski, & Haselager, 2000; Zimmer-Gembeck, Geiger, & Crick, 2005). The additional time devoted to learning may positively impact girls’ academic achievement, while the decline in time spent engaged in relationally aggressive behaviors (e.g., gossiping, lying, excluding others) may improve girls’ relationships with their peers.

**Social Correlates of Relational Aggression**

Developmental models assist researchers in determining the nature of peer relationships in terms of influencing adolescent behavioral and emotional adjustment (Adams, Bukowski, & Bagwell, 2005; Masten, 2005). The emergence of developmental deficiencies in adolescence can be investigated using developmental theories as an integrative framework to determine the level of adaptation and peer relationships over the course of development (Adams, Bukowski, & Bagwell, 2005; Bukowski, 2005; Cicchetti & Bukowski, 1995; Masten, 2005). To illustrate,
peers can influence adolescents positively and negatively as developmental tasks or stages are negotiated. Therefore, complex interactions between peer, family, and school relationships impact an adolescent’s adaptation and social-psychological adjustment (Masten, 2005). Poor relationships with peers often become a source of maladjustment for adolescents, representing “relational stress” (Ladd & Troop-Gordon, 2003) and are demonstrated by relational aggression and peer victimization (Prinstein, Cheah, & Guyer, 2005).

**Relationships with Peers: Peer Status, Peer Preference, and Peer Reputation**

Researchers have reported that in adolescence, relational aggression is related to higher peer status in some peer groups (Salmivalli, Kaukiainen, & Lagerspetz, 2000; Zimmer-Gembeck, Geiger, & Crick, 2005). This finding supports the contention that relation aggression is utilized as a means of gaining and maintaining friendships (Adler & Adler, 1995, Pellegrini, 1995; Zimmer-Gembeck, Geiger, & Crick, 2005). Card, Hodges, Little, and Hawley (2005) examined aspects of the Social Relations Model (e.g., actor and partner variance, group means, and generalized and dyadic reciprocity) in order to gain a deeper understanding of children's interpersonal perceptions of each construct. The researchers investigated four facets of social status: peer influence, victimization, perceived popularity, and social preference (Card, Hodges, Little, & Hawley, 2005). Findings indicated that children exhibiting relationally aggressive behaviors perceived their friendships to be characterized by relationally aggressive patterns (Card, Hodges, Little, & Hawley, 2005). There was a high level of consensus among girls as to which children were popular or not, and there were greater levels of same-gender than cross-gender nominations of positive (i.e., social preference) and negative (i.e., victimization) facets of social status (Card, Hodges, Little, & Hawley, 2005). By intentionally manipulating friendships, early adolescent girls also influence peer preferences and victims’ reputations (Card, Hodges, Little, & Hawley, 2005).
Peer relationships serve to enhance or decrease life experiences of adolescents, impact the way adolescents behave in various situations, and mediate interactions between an adolescent’s developmental level and their unique experiences (Adams, Bukowski, & Bagwell, 2005; Masten, 2005). For example, peer relationships serve to encourage protection from bullies (Hodges, Boivin, Vitaro, & Bukowski, 1999), positive adjustment to deleterious life experiences (Dubow & Tisak, 1989), or attenuate externalizing symptoms due to negative family circumstances (Criss, Pettit, Bates, Dodge, & Lapp, 2002). Conversely, peer relationships may also increase the negative impact of deleterious family circumstances, individual experiences, and developmental challenges (Lansford, Criss, Pettit, Dodge, & Bates, 2003) or intensify one another’s symptoms through reinforcement and continuous rumination (Adams, Bukowski, & Bagwell, 2005; Dishion, Nelson, & Yasui, 2005; Rose, 2002; Masten, 2005). Relationships with family members will be discussed next.

**Relationships with Family Members**

Specific research investigations focusing on relational aggression in middle school girls and relationships with family members were not found at the time of this review of the literature. However, Olweus (2003) discussed the important role of relevant adults in terms of the extent to which bullying and relational aggression are manifested. Olweus (2003) proposes an intervention program created from evidence-based research related to aggressive behavior. This program is based upon creating a home and school environment that is characterized by positive interest, warmth, and involvement from adults, teaching and setting firm limits regarding acceptable and unacceptable behavior, consistently enforcing non-physical sanctions for breaking limits, and having adults that serve as positive role models and authority figures (Olweus, 2003). Olweus (2003) maintains that restructuring a non-aggressive environment requires the active and continuous participation of parents, teachers, administrators, and students.
Although not specifically focused upon middle school girls, Cournoyer (2000) investigated parental warmth with regard to positive social and cognitive behaviors of children. The findings of Cournoyer's (2000) study supported broad-based positive effects of parental warmth for children's cognitive and social behaviors. Adolescents who experience parental warmth may have improved feelings of self-worth, which may reduce the incidence of relational aggression. Teacher warmth may also serve as a protective factor for adolescents.

**Relationships with Teachers**

Teacher warmth is a related, though less extensively studied, variable in investigations of relational aggression among middle school girls. Teacher warmth appears to have a comparable, overarching positive influence on children's social and cognitive behaviors as does involvement with a caring, supportive adult (Brody, Dorsey, Forehand, & Armistead, 2002; Chang, 2003). Three lines of inquiry regarding teacher warmth will be discussed: teacher-student relationships, school climate, and teacher attitudes, beliefs, and behaviors in the classroom.

Teacher warmth was demonstrated through teacher-student relationships and teacher behaviors that exhibit a supportive, caring, and personal relationship with individual students (Chang, 2003). Researchers who focused on adolescents reported that teacher warmth and support were related to positive student adjustment and prosocial behaviors (Chang, 2003), academic motivation (Chang, 2003), and social self-concept (Chang, 2003). Furthermore, teacher warmth affected the students’ transition from elementary to middle school (Brody, et al., 2002; Wentzel, 2002). Teacher-student relationships also have a deep impact upon the school’s climate, which will be addressed next.

The Olweus Bullying Prevention Program (OBPP; Olweus & Limber, 1999; Olweus, 2001) examined the impact of environmental factors, such as teachers and school administrators, on teachers’ attitudes about bullying and school climate. Specifically, Olweus (2003) posits that
the attitudes, routines, and behavior of important adults determine in large part whether bullying and relational aggression are acceptable in the classroom. Olweus (2003) proposes that teachers who receive training in the OBPP, in combination with the maintenance of a warm, positive involvement with students that establishes limits and consequences, demonstrate significant improvement in the social climate of the classroom. This improvement in the learning environment is attained as teachers become aware of the issue of bullying and relational aggression, school administrators provide support in combating this issue, the teacher conducts regular meetings with students and parents, and the teacher develops and enforces classroom rules, individual intervention plans, and acts as a positive role model (Olweus, 2003). The OBPP has demonstrated significant results in an elementary school using a sample of boys and girls (Olweus, 1991; Ortega & Lera, 2000; Salmivalli, Kaukiainen, Voeten, 2005). Examining teachers’ attitudes toward the school climate is one facet of social correlates of relational aggression; teachers’ beliefs and behaviors will be discussed next.

Chang (2003) examined teachers' beliefs and behaviors in the classroom, which were expected to define the cultural context of the classroom and directly influence the expectations of the classroom setting. In particular, Chang (2003) focused on teachers' beliefs about withdrawn and aggressive student behavior and teachers' behaviors in terms of caring and support offered to students. Chang (2003) operated under the theoretical model of social context to examine teachers as socializing agents, with a great deal of influence over student behaviors as a result of teachers' interpretations of institutional values, societal norms, and cultural expectations. In this manner, teachers as individuals vary in their interpretation of such cultural values and in their tolerance of students' deviation from the expected and explicit classroom rules (Chang, 2003). Such variation in teachers' attitudes and implementation of classroom norms influences the
degree to which students assess one another's peer status and reputations (Chang, 2003). Thus, an individual student's peer status may vary according to types of behaviors approved of by other students as well as according to the teacher's preference of certain behaviors (Chang, 2003). Teacher-student relationships, school climate, and teacher attitudes, beliefs, and behaviors are important components of interpersonal relationships middle school girls experience and each impacts the adjustment of middle school girls as they transition from elementary to middle school. A discussion of the type (e.g., verbal, withdrawal) of relational aggression, as well as a brief summary, follows.

**Types of Relational Aggression**

Although researchers have examined physical aggression (Olweus, 1999, 2001, 2003; Salmivalli, Kaukiainen, & Lagerspetz, 2000), and relational aggression (Crick, 1996; Crick & Grotpeter, 1995; Zimmer-Gembeck, Geiger, & Crick, 2005) among males and females, studies conducted solely on relational aggression among middle school girls were not found at the time of this review. This is an important area of investigation, as many maladaptive emotional and behavioral symptoms may be ameliorated with a deeper understanding of the processes involved in early adolescent female relationships (Rubin, Wojcieszewicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006; Werner & Crick, 2004). The present study focuses on middle school girls and the factors of relational aggression that exist during this specific developmental period of time. The lack of available investigations into this particular area necessitated the use of studies (Crothers, Field, & Kolbert, 2005; Prinstein & LaGreca, 2004; Remillard & Lamb, 2005) with older girls (i.e., high school) as the foundation from which to derive the research questions and hypotheses, as well as the individual and social correlates of relational aggression that are specifically related to middle school girls.
Relational aggression may be less physical and less visible to teachers, parents, and others outside of the peer group than overt forms of aggression, it can be equally damaging (Crick, 1996; Crick & Grotpeer, 1995; Merrell, Buchanon, & Tran, 2006). Crick (1996) and Crick and Grotpeer (1995) reported that relationally aggressive children may have higher levels of internalizing behaviors (e.g., withdrawal, loneliness, depression) than non-relationally aggressive peers and are at serious risk for adjustment difficulties (e.g., relationships with peers).

Researchers (Crick, 1996, 1997; Crick & Bigbee, 1998; Crick, Casas, & Ku, 1999) have studied the associations between psychological adjustment and non-physical or non-verbal forms of victimization. This research has demonstrated the importance of examining the types of aggression (e.g., relational and overt) and victimization exhibited by children and adolescents (Dill, Vernberg, Fonagy, Tremlow, & Gamm, 2004). This line of inquiry focuses on relational aggression, which harms an individual’s social relationships and reputation through rumors and other forms of ostracism (Crick, 1996, 1997; Crick & Bigbee, 1998; Crick, Casas, & Ku, 1999; Dill, Vernberg, Fonagy, Tremlow, & Gamm, 2004). In samples of elementary school children, relational victimization has been associated with internalizing problems (e.g., loneliness) and interpersonal maladjustment (e.g., depression) after controlling for the effects of overt aggression (Crick et al., 1999; Crick & Bigbee, 1998; Crick & Grotpeer, 1996). Additionally, relational victimization was significantly related to the presence of internalizing distress (e.g., depression, low self-esteem) for adolescent boys and girls, after controlling for the effects of overt aggression (Prinstein, Boegers, & Vernberg, 2001).

Adolescents who are victimized by their peers may adopt a self-blaming attitude, or attribute blame to their own behavior, which may lead to an experience of internalizing distress (Dill, Vernberg, Fonagy, Tremlow, & Gamm, 2004; Graham & Juvonen, 1998, 2001). An
investigation of middle school students who reported being victimized by their peers and who attributed their mistreatment to internal (e.g., their own personal characteristics led to peers’ mistreatment), uncontrollable (e.g., the adolescent was unable to control the peer group or situation), and stable causes (e.g., unchangeable characteristics of the victimized individual), reported increased adjustment problems such as depression (Graham & Juvonen, 1998). Thus, there is evidence that self-blaming attributions mediate the relationship between victimization and internalizing difficulties (Dill, Vernberg, Fonagy, Tremlow, & Gamm, 2004; Graham & Juvonen, 1998, 2001). Social information processing theory provides one explanation for this association.

According to the social information processing theory, children develop their self-and interpersonal schemata based on their social interactions; these schemata influence a variety of aspects regarding social information processing, such as the interpretation of and response to interpersonal events like forming and maintaining friendships, the attitudes and attributions of peers, and learning prosocial skills (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996; Masten, 2005; Prinstein, Cheah, & Guyer, 2005; Zimmer-Gembeck, Geiger, & Crick, 2005). To illustrate, if an adolescent is repeatedly victimized by peers and consequently develops an interpersonal schema that aggression is acceptable when imposed upon peers who deserve punishment, then he/she may be expected to respond to such interpersonal events with self-deprecating messages, which further contribute to the development of negative affect (Dill, Vernberg, Fonagy, Tremlow, & Gamm, 2004).

**Verbal Aggression**

Tapper and Boulton (2004) define verbal aggression as behavior that is directed toward a victim by the aggressor while the victim is within hearing distance or behavior that is directed at a child other than the victim but the victim is within hearing distance (e.g., Suzie tells Katie in a
loud voice ‘Joy is ugly’ while Joy is sitting next to Katie). Tapper and Boulton (2004) define direct verbal aggression as an utterance directed toward the victim that includes either naming/calling the victim an unpleasant term or describing the victim or the victim’s family in an unpleasant manner. The term ‘unpleasant’, as mentioned above, is defined by the meaning of the word or words used (e.g., words that typically have negative connotations, for example ‘slut’, ‘stupid’, ‘wuss’), unless the exact meaning of the word or words is unknown (e.g., ‘odis’) or is technically descriptive (e.g., ‘gay’, ‘girl’), wherein the term ‘unpleasant’ is defined by the aggressor’s use of heavy emphasis on the word (Tapper & Boulton, 2004). Utterances that are part of an ongoing sequence, in such cases as the original victim restates that the name he or she has just been called, or the insult he or she has just received, and then applies the same name to the original aggressor (e.g., Child A: ‘you’re stupid’; Child B: ‘I’m rubber and you’re glue-whatever you say bounces off me and sticks to you’) are also classified by Tapper and Boulton (2004) as instances of direct verbal aggression. Tapper and Boulton (2004) are careful, however, to exclude instances of abuse from the definition of direct verbal aggression by defining abuse as any of the following behaviors: an abusive gesture (e.g., sticking one’s middle finger up at another person), an abusive command (e.g., ‘piss off’), or making a rude face (e.g., sticking one’s tongue out at another person).

Longitudinal investigations have demonstrated that physical aggression during childhood is the strongest, most robust risk factor for delinquency, substance abuse, and crime in adolescence and adulthood (Patterson, Capaldi, & Bank, 1991; Werner & Crick, 2004). Relational aggression has recently been implicated as a risk factor for future aggression and other types of antisocial behavior during childhood, adolescence, and adulthood (Crick, Werner, Casas, O’Brien, Nelson, Grottpeter, & Markon, 1999; Werner & Crick, 2004). This intimation is
based on research that demonstrates intraindividual differences in relational aggression during middle childhood (i.e., second through fourth grade) are moderately stable and comparable to those of physical aggression after six-month, one-year, and three-year intervals (Crick, 1996; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2002). Another investigation provided evidence that relationally aggressive children became increasingly delinquent between the third and fourth grades (Crick, Ostrov, & Werner, 2004). Although research on relational aggression is still developing, the features of relational aggression that serve as risk factors for deteriorating behavior problems have begun to be examined (Werner & Crick, 2004). For example, there are several lines of research that investigate the theoretical foundations of relational and physical aggression and offer empirical evidence regarding the extent to which changes in the level of aggression are associated with maladaptive friendships (Werner & Crick, 2004).

Social information processing theory emphasizes the role of attribution and the peer group in socializing children into aggressive behavior as children develop their self-and interpersonal schemata based on their social interactions; these schemata influence a variety of aspects regarding social information processing, such as the interpretation of and response to interpersonal events like forming and maintaining friendships, the attitudes and attributions of peers, and learning prosocial or aggressive response sets (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996; Masten, 2005; Prinstein, Cheah, & Guyer, 2005; Zimmer-Gembeck, Geiger, & Crick, 2005). This line of inquiry focuses specifically on the nature of children’s friendships, such as the degree of affiliation with conventional versus deviant peers (Werner & Crick, 2004). There is evidence that girls and boys form friendships and peer networks as early as preschool that are based upon similarity in aggressive behavior (Snyder, Horsch, & Childs,
1997). There is strong evidence that deviant peer networks are well established by early adolescence (Masten, 2005). The correlations between adolescents’ antisocial behavior and that of their peer group have been consistently high (Thronberry & Krohn, 1997). Many investigations have demonstrated that aggressive children’s pre-existing antisocial tendencies are exacerbated by associating with deviant peers (Masten, 2005).

Developmental theory posits that establishing positive, prosocial relationships with peers is a central task during childhood (Masten, 2005). Research regarding peer rejection is based on this assumption and presumes that children are deprived of opportunities to learn and practice crucial social skills (e.g., entering continuous peer activities, emotion regulation, conflict resolution) when they are rejected by their peers (Masten, 2005; Werner & Crick, 2004). Socially rejected children typically possess maladaptive behavioral styles (e.g., withdrawal, aggression), which may result their peers’ initial rejection (Werner & Crick, 2004). Socially rejected children may also remain socially unskilled in comparison to their peers due to the isolation they endure (Werner & Crick, 2004). This combination of maladaptive behavioral style, isolation, and social rejection further hinders aggressive children’s accomplishment of developmental tasks ((Werner & Crick, 2004).

**Withdrawal**

More than seventy-four years ago, Jean Piaget hypothesized that peer relationships offer children an exclusive context for social and emotional development (Piaget, 1932). Piaget (1932) posited that the symmetrical distribution of power unique to peer relationships allowed children the opportunity to develop social competence, the ability to see the perspective of others, and enhance their moral reasoning skills. Likewise, nearly fifty-two years ago, Harry Stack Sullivan speculated that the intimacy inherent children’s same-gender friendships promotes the development of identity and contributes to successful romantic relationships as
children mature into adolescents and adults (Sullivan, 1953). The implication of Piaget’s (1932) and Sullivan’s (1953) arguments was that children who were not involved in peer relationships would be deprived of developmental opportunities that are critical for positive psychosocial adjustment and growth (Rubin, Burgess, Kennedy, & Stewart, 2003; Rubin, Wojlawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006).

The peer relationships literature corroborates these early theories (Piaget, 1932; Sullivan, 1953), and provides evidence regarding the significance of peer relationships, specifically friendships, in children’s social and emotional development (Rubin, Bukowski, & Parker, 1998; Rubin, Wojlawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). To illustrate, friendship has been positively related to measures of self-esteem and feelings of global self-worth (e.g., Bagwell, Newcomb, & Bukowski, 1998) and is regarded as a crucial source of social support, specifically during stressful situations (Hodges, Boivin, Vitaro, & Bukowski, 1999). Additionally, investigations have demonstrated that friendship offers protection from the negative externalizing (e.g., discipline problems) and internalizing (e.g., depression) symptoms that are associated with peer victimization among children (e.g., Hodges, Boivin, Vitaro, & Bukowski, 1999). There is evidence that children who do not establish or maintain close peer relationships and children who experience difficult peer relationships (e.g., exclusion from the group), frequently experience social and emotional problems (Brendgen, Vitaro, & Bukowski, 2000; Parker & Seal, 1996). Specifically, researchers have demonstrated that children who report that they do not have any friends suffer from loneliness (Brendgen, Vitaro, & Bukowski, 2000; Grotipeter & Crick, 1996; Prinstein, Cheah, & Guyer, 2005; Zimmer-Gembeck, Geiger, & Crick, 2005) and fail to demonstrate age-appropriate social skills, such as communication and conflict resolution skills (Zimmer-Gembeck, Geiger, & Crick, 2005). Assiduous lack of friendships
throughout childhood has been associated with heightened sensitivity and social timidity (Parker & Seal, 1996), and later internalizing symptoms (Ladd & Troop-Gordon, 2003). Shy and socially withdrawn children are often on the periphery of the social arena (Gazelle & Rudolph, 2004; Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006) and have a tendency to actively isolate themselves due to the social anxiety they experience around others (Gazelle & Rudolph, 2004). Therefore, shy and socially withdrawn children are typically isolated physically from their peers and thus are deprived of the benefits of close peer relationships, such as peer support, positive self esteem, and social competence (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006).

There is evidence to support the significant psychosocial maladjustment and difficulties with peers that are associated with shyness and social withdrawal (Rubin, Burgess, Kennedy, & Stewart, 2003). Socially withdrawn children and early adolescents who are shy (i.e., passively withdraw from peers) and socially anxious experience loneliness, negative self-perceptions of their social competence and friendships, and suffer from depressive symptoms (Gazelle & Ladd, 2003; Nilzon & Palmerus, 1998; Rubin, Burgess, Kennedy, & Stewart, 2003). Compared to nonwithdrawn children, shy, socially anxious, withdrawn children are socially unskilled (Gazelle & Rudolph, 2004; Rubin, Burgess, Kennedy, & Stewart, 2003). Shy, socially anxious, withdrawn children do not have the same opportunities to learn social skills, such as communication, conflict resolution, and negotiation skills, that nonwithdrawn children have because withdrawn children are not participating in social interactions with their peers (Gazelle & Rudolph, 2004; Rubin, Burgess, Kennedy, & Stewart, 2003). These differential social learning experiences increase as children mature.
Shyness and social withdrawal become increasingly salient and negative to peers as children grow (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). For example, shy and socially withdrawn children do not seem to be rejected by their classmates in early childhood (Hart, C., Yang, Nelson, Robinson, Olsen, Porter, Jin, Olsen, & Wu, 2000; Ladd & Burgess, 1999). During middle to late childhood and early adolescence, however, many shy, socially withdrawn children are rejected by their peers (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Furthermore, shy and withdrawn children become the targets of peer victimization (Hanish & Guerra, 2004).

While the aforementioned findings clearly demonstrate that shyness and social withdrawal are associated with adjustment difficulties at both the individual (e.g., internalizing problems: loneliness, depression) and group (e.g., externalizing problems: peer rejection) levels of social development, less is known about the relationship between social withdrawal and adjustment at the dyadic friendship level (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). While shy and socially withdrawn children may remove themselves from the peer group due to discomfort and social anxiety, it is not known whether this discomfort is also overwhelming and intolerable when in the company of only one peer or a few close peers (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Few researchers have examined social withdrawal at the dyadic level of social interaction (Schneider, 1999); thus, very little is known about the interpersonal relationships of socially withdrawn children (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006).

Given the plethora of presumed advantages that friendship offer (e.g., support of peers, positive communication skills) and the risks associated with not participating in such peer relationships (e.g., loneliness, depression), an investigation of shy and socially withdrawn
children’s participation in such relationships may further the understanding of the specific risks associated with being shy and socially withdrawn during adolescence (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). The association between social withdrawal and peer rejection has been established in the developmental psychology literature (Masten, 2005); however, it is unclear whether the reported difficulties associated with shyness and social withdrawal may be explained by shy and withdrawn children and adolescent’s involvement in friendships and other close dyadic relationships (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006).

**Relational Aggression and Interpersonal Relationships**

Research that focuses on relational aggression among early adolescent girls may provide a greater understanding of interpersonal relationships during middle school. A focus on the development of adaptive interpersonal relationship skills may promote positive communication and conflict resolution skills, enhance adolescent girls’ emotional adjustment, and improve academic performance (Adams, Bukowski, & Bagwell, 2005; Bukowski, 2005; Card, Hodges, Little, & Hawley, 2005; Dodge & Pettit, 2003; Grotpete & Crick, 1996; Ladd, 1999; Masten & Coatsworth, 1998). These findings corroborate research (Card, Hodges, Little, & Hawley, 2005; Cillessen & Mayeux, 2004; Cullerton-Sen & Crick, 2005; de los Reyes & Prinstein, 2004; Dodge, et al., 2003; Masten, 2005; Prinstein, Cheah, & Guyer, 2005; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005) discussed in the introduction and in part (a) of this section. Here, such findings are expanded upon to enhance the understanding of individual and social correlates of relational aggression as exhibited in the interpersonal relationships of middle school girls. An examination of the individual and social correlates of relational aggression and interpersonal relationships follows.
Individual Correlates of Relational Aggression and Interpersonal Relationships

Positive relationships with peers, maintaining friendships, and developing romantic relationships are developmental tasks that originate in childhood and continue through adulthood (Masten & Coatsworth, 1998). It is common across societies to measure an individual’s successful navigation of developmental tasks in terms of positive peer, family, and school/work relationships (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996; Masten, 2005). To illustrate, there are positive and negative consequences for an individual’s peer relationships, including peer victimization or popularity, depression or positive adjustment, intervention/special education settings or mainstream/advanced programs (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996; Masten, 2005).

Adams, Bukowski, and Bagwell (2005) and Grotpeter and Crick (1996) examined dyadic characteristics of friendships at the individual level. Adams, Bukowski, and Bagwell (2005) posited that friendships would be important in the stability of maintaining aggression. Findings from this study indicated that although the stability of aggression was high, it varied depending upon the level of aggression of both adolescents in the friendship and whether the friendship was reciprocated (Adams, Bukowski, & Bagwell, 2005). Grotpeter and Crick (1996) examined features of elementary school children's friendships that were less positive than typically assessed in previous investigations (Parker & Asher, 1993). To illustrate, Grotpeter and Crick (1996) focused on conflictual aspects of the friendship (i.e., relational and overt aggression) and coalitional aspects of the friendship (e.g., relational and overt aggression toward others, exclusivity). These characteristics were examined to determine factors that may make a friendship less satisfying to individuals (Grotpeter & Crick, 1996). Both Adams, Bukowski, and Bagwell (2005) and Grotpeter and Crick (1996) reported that investigating aggressive behaviors of individuals in the dyadic context of friendships revealed greater insight into the understanding...
of peer experiences than studying group interactions (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996) though neither of the investigations focused exclusively on middle school girls.

This finding is further corroborated by research conducted on dyadic relationships (Card, Hodges, Little, & Hawley, 2005) that focused on interpersonal perceptions of adolescents. This research reported that girls perceive the interpersonal characteristics (e.g., social status and aggressiveness) of other girls more accurately than boys, while boys perceive the interpersonal characteristics of other boys more accurately than girls (Card, Hodges, Little, & Hawley, 2005). In addition, this study reported similar processes (i.e., consensus and degree of assimilation) to explain such perceptions (Card, Hodges, Little, & Hawley, 2005). This tendency of adolescents to perceive others as aggressive based upon the actor's gender also leads to adolescents attributing high or low social status to the actor (Card, Hodges, Little, & Hawley, 2005).

Grotpeter and Crick (1996) reported findings from a previous pilot study (Grotpeter, 1993) that exclusively investigated relationally aggressive girls in the fourth through fifth grades. This pilot study examined the friendship qualities present in relationally aggressive girls' friendships and assessed the value of the friendship qualities to relationally aggressive girls (Grotpeter, 1993). Characteristic qualities of relationally aggressive girls' friendships included conflict and betrayal, ease of conflict resolution, intimate exchange, validation and caring, help and guidance, and companionship and recreation (Grotpeter, 1993). The results of the pilot study indicated that relationally aggressive girls reported higher levels of intimate exchange and more relational aggression (i.e., intentionally spreading rumors or lies about a victim to damage the victim's status in the peer group, isolating the peer by refusing to speak to her or include her in activities) present in their friendships than non-relationally aggressive girls' friendships (Grotpeter, 1993).
Bukowski (2005) corroborates the positive or negative effect of negotiating the developmental stages for an individual by examining how peer relationships act as moderators or mediators. Peer interactions have also been studied as causal models in individual-peer relationships and suggest transaction effects that increase as adolescents become adults (Dodge & Pettit, 2003; Ladd, 1999; Masten, 2005). Shy, aggressive, or unexpected behavior has the potential to lead to peer rejection, avoidance, or approval (Masten, 2005). Peer rejection, peer avoidance, or peer approval may then enhance or ameliorate emotional and behavioral symptoms, such as depression, loneliness, or happiness (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996; Masten, 2005). Peer relationships have the potential to reinforce or punish an individual’s behavior and emotions depending upon the individual’s desired reaction from peers (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996; Masten, 2005). Thus, depending upon the individual’s expectations of the peer group and the peer group’s reaction to the individual’s behavior, peer groups have the capacity to enhance or diminish maladjusted behaviors.

Social Correlates of Relational Aggression and Interpersonal Relationships

Children and adolescents who fail to attain developmental tasks, such as developing and maintaining positive peer relationships, friendships, and later romantic relationships, meet criterion for problem behavior and/or disorders (e.g., social phobia, withdrawal, bullying, adolescent delinquency, adult criminality) and may describe individual and/or social impairments (e.g., loneliness, depression, peer rejection, dropping out of school) as a result of such disorders (Grotpeter & Crick, 1996; Kupersmidt, Coie, & Dodge, 1990; Masten, 2005; Zimmer-Gembeck, Geiger, & Crick, 2005). Additionally, physically aggressive and relationally aggressive children have been reported to demonstrate significant difficulties with their peer group both concurrently and as they mature into adulthood (Crick & Grotpeter, 1995; Grotpeter
& Crick, 1996; Parker & Asher, 1987). Evidence from research investigations demonstrates that gender normative forms of aggression, such as overt aggression for boys and relational aggression for girls, is more acceptable among the respective genders and is less strongly related to maladjustment (Card, Hodges, Little, & Hawley, 2005; Crick, 1997; Phillepsen, Deptula, & Cohen, 1999). Additionally, physical aggression is reported to be more common among boys than girls (Card, Hodges, Little, & Hawley, 2005; Crick, 1997; Crick & Grotpeeter, 1995; Salmivalli, Kaukiainen, & Lagerspetz, 2000). This may be due to social relationships that encourage gender differences in the expression of aggressive behaviors.

The significance of peer, family, and school relationships as a potential mediator or moderator, risk factor, or protective factor in terms of diminishing negative influences and difficult life circumstances represents an area that has not been widely researched, despite the importance of these factors for adolescents (Bukowski & Adams, 2005; Dishion, Nelson, & Yasui, 2005; Ge, Brody, Conger, Simmons, & Murry, 2002; Masten, 2005). Furthermore, investigations that focus on intervention within peer interactions and study the degree of influence that peers have, the importance of reputation, and the quality of peer interactions are scarce. A multidimensional, comprehensive intervention study that targets peer interaction may prevent or ameliorate deficits in social functioning, interpersonal relationships, and academic performance is needed (Adams, Bukowski, & Bagwell, 2005; Dishion, Nelson, & Yasui, 2005; Hawkins, Catalano, Kostermann, Abbott, & Hill, 1999; Hoza, Gerdes, Mrug, Hinshaw, Bukowski, Gold, et al., 2005; Masten, 2005). Internalizing symptoms (e.g., depression, low self-worth) and externalizing symptoms (e.g., gossiping, ostracizing) may be ameliorated for middle school girls who are provided the opportunity to learn adaptive interpersonal relationship skills. A discussion of the present study’s methodology follows.
CHAPTER 3
METHODOLOGY

The purpose of this study was to examine the correlates that define relational aggression among middle school girls, the relationships among these factors, and the association between the factors of relational aggression and the type of relational aggression (e.g., verbal, physical, withdrawal) exhibited among middle school girls. The purpose of this chapter is to present an overview of the methodology of the study. A summary of the following topics will be presented: (a) research design, (b) participants, (c) materials, (d) procedure, (e) instrumentation, (f) data collection, and (g) data analysis. This chapter will conclude with a summary of limitations and assumptions.

Research Design

The study was a descriptive and inferential survey research design. Descriptive statistics are reported for all variables; Chi-Square analyses and 3-Way ANOVA analyses are reported for all hypotheses. The method of inquiry used in this study was a scientific, positivistic approach. The steps that were used to test the research questions included collecting relevant demographic data, administering the survey instruments (DIAS- Björkqvist, Lagerspetz, & Österman, 1992; CSBS-P (Crick, 1995; Crick & Grotpeter, 1995) and analyzing the data using SPSS 14.0.

Research Questions

The following research questions were investigated in the present study:

- RQ1. Is age related to relational aggression scores (i.e., composite of verbal aggression, and withdrawal subscales) as measured by the Direct Indirect Aggression Scales [DIAS] (Björkqvist, Lagerspetz, & Österman, 1992) and the Children’s Social Behavior Scale-Peer Report [CSBS-P] (Crick, 1997)?

- RQ2. Is socioeconomic status related to relational aggression scores (i.e., composite of verbal aggression, and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997)?
• RQ3. Is ethnicity related to relational aggression scores (i.e., composite of verbal aggression, and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997)?

• RQ4. Is there a significant difference in the relational aggression subscales (e.g., verbal aggression, withdrawal) between age, socioeconomic status, and ethnicity as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997)?

Hypotheses

The following null hypotheses were evaluated in this study.

• Ho(1): There is no relationship between age and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls.

• Ho(2): There is no relationship between socioeconomic status and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls.

• Ho(3): There is no significant difference in ethnicity and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls.

• Ho(4): There is no significant difference in relational aggression subscales (i.e., verbal aggression and withdrawal) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) across all dependent variable categories (age, socioeconomic status, and ethnicity) among middle school girls.

Participants

Two hundred participants were selected from middle schools in north central Florida. Effort was made to select participants from diverse backgrounds (e.g., age, ethnicity, and socioeconomic status). Age (e.g., as measured by grade level), socioeconomic status (e.g., as measured by free/reduced lunch status), and ethnicity (e.g., as measured by self-report) were determined from demographic data collected from a questionnaire completed by participants.
Participants completed the survey during the spring semester, between April 1, 2007 and May 30, 2007. The survey was administered during study skills classes. The researcher or a trained assistant administered paper copies of the survey.

**Setting**

Data was collected from two middle schools in north central Florida (Agresti & Finaly, 1997; Creswell, 2005). Both schools serviced a range of students with regard to age (e.g., middle school students), ethnicity (e.g., Caucasian, African American, Hispanic, Asian American, and Native American), linguistic background (e.g., speakers of English as a first language, speakers of other languages as a first language), and socioeconomic status (e.g., free and reduced lunch). School A is composed of students from kindergarten through twelfth grade and represents a range of students in terms of socioeconomic background, ethnicity, and academic ability. The number of middle school students enrolled is 342; the total population of the school, including staff and students is 1,150. Of the 342 middle school students, 176 are male and 166 are female. There are 195 middle school students who are identified as Caucasian, 83 as African American, 39 as Latino/a, 17 as Multiracial, 7 as Asian and 1 as Native American. The socioeconomic background of the middle school students is as follows: 9.9% are receiving lunches at a reduced rate and 13.5% obtain their lunches at no cost.

Data for sample School B was obtained from the county the school is located in. There were 921 students enrolled. Of the 921 middle school students enrolled in School B, 45% are male and 55% are female. Thirty-one percent of middle school students are identified as Caucasian, 57% as African American, 2% as Latino/a, and 9% as Asian. The socioeconomic background of the middle school students is as follows: 6% are receiving lunches at a reduced rate and 49% obtain their lunches at no cost. See Appendix I for tables representing the demographic characteristics of the schools in the sample for the purposes of this study.
Materials

The relational aggression survey included thirty-nine items total that are related to verbal aggression and withdrawal (see Appendices B & C). The DIAS (Björkqvist, Lagerspetz, & Österman, 1992) consists of twenty-four items designed to measure verbal aggression and withdrawal. The CSBS-P (Crick, 1997) consists of fifteen items designed to measure overt and covert aggression. Participants used a five-point Likert-type scale to rate the occurrence of relationally aggressive behaviors that they engage in (e.g., they are the aggressor) and receive (e.g., they are the victim). The measure consisted of items that inquired about participants’ level of verbal aggression and withdrawal.

Procedure

The relational aggression survey was administered to every student in a classroom after obtaining permission from the school board, principals, parents, teachers, and students at each school. Two hundred participants were asked to complete the survey during the last eight weeks of the semester. Each administration of the survey took thirty minutes. The first five minutes were devoted to introduction of the researcher and the survey and explanation of instructions for completing the survey. The survey required approximately twenty minutes to complete. The remaining five minutes were allotted to collect completed surveys and answer any questions participants had. Although all students whose parents consented to participation in the classroom were given a survey to complete, only the surveys completed by girls were used in the data analysis. Any student whose parents refused consent to participate in the survey were asked to read a book in their seats. The researcher or a trained survey administrator disseminated and collected the survey and pencils from participants. The researcher facilitated the administration of the survey using a standardized procedure (see Appendix H).
Girls were selected to participate in the survey based upon their age at the time of administration (e.g., only sixth through eighth grade girls, ages eleven to fifteen). Participants who did not understand or speak English fluently, and students who were unable to complete the survey due to classification as emotionally or physically disabled were excluded from participation. The survey was administered once all consent and assent forms were received.

**Independent Variable**

The independent variable in this study was relational aggression, which is composed of a composite of verbal aggression and withdrawal scores from the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and CSBS-P (Crick, 1997). These behaviors are defined by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997). The independent variable was assessed using the questionnaires discussed below.

**Dependent Variables**

The dependent variables that were measured in this study include age, socioeconomic status, and ethnicity. The categorical variable (i.e., ethnicity), together with the continuous variable (i.e., socioeconomic status) as the covariate, were control variables. A discussion of the instrumentation, data collection, and data analyses follows.

**Instrumentation**

**Direct Indirect Aggression Scales**

The Direct Indirect Aggression Scales [DIAS] (Björkqvist, Lagerspetz, & Österman, 1992) is a twenty-four item instrument designed to measure three types of aggression: physical, verbal, and indirect. There are seven items that measure physical aggression, five items related to verbal aggression, and twelve items regarding indirect aggression (Björkqvist, Lagerspetz, & Österman, 1992). The DIAS questionnaire is administered in groups (i.e., to each student in a class) (Björkqvist, Lagerspetz, & Österman, 1992). Children and adolescents above ten years of age
are able to complete the DIAS using paper and pencil, while younger children must be interviewed (Björkqvist, Lagerspetz, & Österman, 1992). The DIAS may be used in different forms (e.g., victim version and aggressor version) and for different purposes: for peer estimations, teacher estimations, and self estimations (Björkqvist, Lagerspetz, & Österman, 1992). In the victim version, the items are revised as follows: (1) "Who is hit by others?", (2) "Who is shut out of the group by others?" (Björkqvist, Lagerspetz, & Österman, 1992). The aggressor version will be used in the present study to measure the features of relational aggression as they relate specifically to middle school girls. Sample items on the aggressor version of the instrument for the purposes of the present study include directions that instruct participants to answer how “you and your friends act when you have problems or get angry with each other”. Items include (1) Yell at or argue with the person I’m angry with, (2) Become friends with another person as a kind of revenge.

The original investigation of the DIAS was administered to 2,094 children ages eight, eleven, and fifteen in Turkey, Finland, Poland, Rome, and Chicago. Reliability for the subscales was reported in terms of internal consistency ranging from 0.78 to 0.96 (Björkqvist, Lagerspetz, & Österman, 1992). Validity has been established in multiple studies (Kaukiainen, Björkqvist, Lagerspetz, Österman, Salmivalli, Rothberg, & Ahlborn, 1999; Österman, Björkqvist, Lagerspetz, Charpentier, Caprara, & Pastorelli, 1999; Owen, 1996; Pakaslahti & Keltikangas-Jarvinen, 2000; Salmivalli & Kaukiainen, 2004) that used the DIAS to examine overt and relational aggression in children and adolescents, as well as correlating the subscale and total scores with the self, peer, and teacher ratings. An investigation conducted by Pakaslahti and Keltikangas-Jarvinen (2000) examined the relationships between peer nomination, teacher ratings, and self report of direct and indirect aggression using the DIAS. Pakaslahti and
Keltikangas-Jarvinen (2000) report that the correlation (Pearson's r) between the scales was 0.58 (p < 0.001) for peer nominations of direct and indirect aggression, while reliability for the direct aggression scale was Cronbach's Alpha = 0.76. The teacher rating of aggressive behavior reports that the correlation (Pearson's r) between the direct and indirect aggression scales was 0.57 (p < 0.001), while reliability for direct aggression scale was Cronbach's Alpha = 0.72 (Pakaslahti & Keltikangas-Jarvinen, 2000). The self-rating portion of the study reported that the correlation (Pearson's r) between the scales was 0.65 (p < 0.001), while the reliabilities reported were Cronbach's Alpha = 0.81 and 0.70, for direct aggression and indirect aggression, respectively (Pakaslahti & Keltikangas-Jarvinen, 2000).

Children’s Social Behavior Scale—Peer Report

The Children’s Social Behavior Scale—Peer Report [CSBS-P] (Crick, 1997) is a fifteen item instrument designed to measure overt and covert aggression. There are five items that measure physical aggression, five items related to relational aggression, and four items regarding prosocial behavior (Crick, 1995; Crick & Grotpeter, 1995; Crick & Werner, 1998, p1632). The CSBS-P questionnaire is administered in groups (i.e., to each student in a class) (Crick, 1995, 1997; Crick & Grotpeter, 1995).

Reliability for the subscales was reported in terms of internal consistency with Cronbach’s alpha ranging from 0.94 to 0.97 for overt aggression and from 0.82 to 0.89 for relational aggression (Crick, 1995, 1996; Crick & Grotpeter, 1995). The measure has also demonstrated high test-retest reliability over a four-week interval, with r = 0.90 for the overt aggression subscale and 0.82 for the relational aggression subscale (Crick, 1995, 1996; Crick & Grotpeter, 1995). Crick (1997) conducted a factor analysis on the measure with elementary school students that yielded three separate factors: overt aggression, relational aggression, and prosocial behavior. The factor loadings of items ranged from 0.70 to 0.90, with all cross-
loadings below 0.43, which demonstrates the distinctive nature of overt and relational aggression. Validity has been established in multiple studies (Crick, 1996, 1997; Crick & Grotpeter, 1995; Crick & Werner, 1998; Crick, Werner, Casas, O’Brien, Nelson, Grotpeter, & Markon, 1999) that used the CSBS-P to examine overt and relational aggression in children and adolescents.

**Data Collection**

The length of time required for the administration of the survey was thirty minutes. The length of time necessary for completing the questionnaire was twenty minutes; five minutes were allotted at the beginning of the administration to explain the purpose of the study and disseminate the survey and five minutes were reserved at the completion of the survey for collection and brief answers to questions. A general outline of the time schedule that the researcher utilized is as follows: administration of the survey occurred from April 1, 2007 through May 30, 2007.

**Data Analysis**

Descriptive statistics and cross-tabs were calculated and reported for all independent and dependent variables, given the ratio level data collected for age (in months), socioeconomic status (free or reduced lunch status based upon annual income), and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997). Chi square correlation coefficients were used to analyze the variables for strength and direction of relationships. Three-way ANOVA analyses were conducted to determine any interaction effects (Agresti & Finaly, 1997).

Specifically, Chi Square correlation coefficients determined the significance (e.g., \( r >0.50 \) and \( P <0.05 \)). According to Leedy and Ormrod (2005), Chi Square correlation coefficient
values above .75 are considered “good” to “excellent”. Sproull (2005) supports this with the report that Chi Square correlation coefficient values between .85 and 1.00 are “high” whereas those between .50 and .84 are “moderate”. Moreover, the use of two tailed Chi Square correlation coefficients are appropriately used when the direction of effect is unknown, as indicated by the research hypotheses.

Given the nominal level data collected for ethnicity, three-way ANOVA analyses were used to test for significant differences in relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls. Three-way ANOVA analyses were used to test for significant differences in relational aggression sub-scores (verbal aggression and withdrawal) between the DIAS and CSBS-P instruments across all dependent variables. Finally, relevant descriptive statistics were analyzed using SPSS 14.0. These data were reported to describe the responses of all participants to the survey (Creswell, 2005). Each of the analyses described above may expose information that will enhance the understanding of relational aggression among middle school girls.

**Study Assumptions and Limitations**

The population of middle school girls available to participate in the study was from one region in the southeastern United States. Although the sample of girls was drawn from demographically representative schools (i.e., diverse range of age, socioeconomic, ethnic, linguistic backgrounds), the use of a convenience sample from one geographical location may impact the extent to which the results are applicable in other populations (i.e., generalizability). A researcher-constructed questionnaire was used in this study. The questionnaire may not include the ideas or components that middle school girls consider integral to the examination of
relational aggression. Finally, the results depended upon participants’ honesty in responding to the instrument.

For the purposes of this study, the following assumptions were made:

1. The participants were selected by means of a convenience sampling technique and participated in the study by completing a thirty-nine item survey.

2. The respondents that returned completed survey packages were middle school students living in a mid-sized city in the southeast.

3. The surveys were distributed during the length of one visit to participating schools by the study's principal researcher and a trained assistant. Each survey required no more than thirty minutes to complete.

4. The participants who completed the survey responded honestly based on guaranteed anonymity.

5. The participants understood their role in the study.

Limitations inherent to this study include the following:

1. The application of the instruments used in this study (e.g., Direct Indirect Aggression Scale, The Children’s Social Behavior Scale - Peer Report), must be determined to be valid measures of verbal aggression and withdrawal.

2. The volunteer status of survey participants restricted the generalizability of findings. Additionally, the sample population, (n size), may restrict generalizability of the findings to any population broader than middle school students living in the southeast United States.

3. In questionnaires that ask participants to self-disclose, limitations arise because the attitudes and beliefs expressed on the survey may not reflect the participants’ true attitudes and beliefs (e.g., respondents falsify positive or falsify negative responses to survey items).

4. The study population was constructed based on a convenience sampling technique to survey a sample of students from selected mid-sized schools in the southeast. However, the proportion of male and female students in mid-sized schools in the southeast may not reflect comparable proportions of student populations at the national or state level. In this case, skewed data may be eliminated by comparing data between male and female participants based on a common trait such as age (Sprinthall, 2003).

5. The demographic characteristic surveyed was gender. Other demographic characteristics that could influence the study findings, such as age range, whether the school setting is urban, rural, or metropolitan, and ranges of grade point average, were not included in the data analysis for this study.
6. Potential identifiable information collected was age, meal status, ethnicity, and grade level.

7. The principal researcher is a mental health counselor from a mid-sized city in the southeast. The researcher's career experience has the potential to bias the interpretation during data analysis. However, every effort was made to eliminate any bias by solely using quantitative data.

8. Social desirability or respondents' desire to acquiesce to what they presume the researcher is interested in finding through conducting the study. This is a limitation that should be addressed, since respondents have a tendency to report as favorably as possible to questionnaires and enhance their social desirability.

9. Self report of participants to the instrument. This is a limitation that may be addressed through gathering teacher and peer estimations in addition to self estimations and using time series measurements. Furthermore, obtaining a random sample that mirrors the city, state, or country would enhance the generalizability of the findings to reflect more accurately what is contained in the population at large.
CHAPTER 4
RESULTS

In this chapter, the results of the study are presented in four sections including (a) the demographics of the sample, (b) analysis of the instruments used in this study, (c) the results and data analyses of each research question and hypothesis, and (d) a summary of the findings.

Sample Demographics

A total sample size of 273 girls completed the survey. Participants ranged in grade level from sixth through eighth (11 to 15 years of age, see Table 4-1). Participants identified ethnically as primarily African American (45.4%, N = 124) and Caucasian (40.7%, N = 111), and then Other (13.9 %, N = 38) ethnically identified participants. Participants represented diverse ethnic backgrounds (see Table 4-2). However the majority of the sample was Caucasian and African American (86.1%).

Table 4-1. Participants’ grade level/age groups

<table>
<thead>
<tr>
<th>Grade Level/Age Group</th>
<th>N</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th Grade</td>
<td>95</td>
<td>34.80</td>
</tr>
<tr>
<td>7th Grade</td>
<td>95</td>
<td>34.80</td>
</tr>
<tr>
<td>8th Grade</td>
<td>83</td>
<td>30.40</td>
</tr>
</tbody>
</table>

Table 4-2. Participants’ ethnic backgrounds

<table>
<thead>
<tr>
<th>Ethnic Background</th>
<th>N</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>124</td>
<td>45.4</td>
</tr>
<tr>
<td>Asian American</td>
<td>14</td>
<td>5.1</td>
</tr>
<tr>
<td>Caucasian</td>
<td>111</td>
<td>40.7</td>
</tr>
<tr>
<td>Hispanic/Latino/a</td>
<td>16</td>
<td>5.9</td>
</tr>
<tr>
<td>Native American</td>
<td>8</td>
<td>2.9</td>
</tr>
</tbody>
</table>
There were 95 participants in the sixth grade, 95 in the seventh grade, and 83 participants in the eighth grade. The majority of study participants did not receive financial assistance to purchase meals at school (57.5%), while the remaining participants received free lunch (31.9%, Table 4-3) or reduced lunch (10.6%, Table 4-3).

<table>
<thead>
<tr>
<th>Meal Status</th>
<th>N</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Lunch</td>
<td>87</td>
<td>31.87</td>
</tr>
<tr>
<td>Reduced Fee Lunch</td>
<td>29</td>
<td>10.62</td>
</tr>
<tr>
<td>No Financial Assistance</td>
<td>157</td>
<td>57.51</td>
</tr>
</tbody>
</table>

**Analysis of Instruments Used in Study**

For the purposes of the current study, each subscale score is reported as part of the total scale score for relational aggression, rather than separating the subscales into separate entities. This decision was made due to the small number of items (e.g., eight) per subscale, which did not contain enough cells for analysis of the data. Thus, a total relational aggression scale score for the DIAS and CSBS-P was used in this study, rather than using subscales as individual scales. As a result, separate subscale scores will not be reported.

**Direct Indirect Aggression Scale (DIAS)**

The reliability analysis using Cronbach’s alpha of the DIAS were conducted in order to determine the reliability of this measure. Results indicated that the items fell into the subscales identified by the authors of the instrument (Björkqvist, Lagerspetz, & Österman, 1992). The subscales identified were as follows: Verbal Aggression, Physical Aggression, and Indirect Aggression. Note that for the purposes of the present study, the Physical Aggression subscale is not included in the analysis. The DIAS was rated on a
five point Likert type response scale of *Never* (0) to *Very Often* (4). Table 4-4 presents the reliability data for the total scale score.

Table 4-4. Measurement properties of the DIAS scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach Alpha</th>
<th>Number of Items</th>
<th>Items Reversed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIAS</td>
<td>.70-.76</td>
<td>24</td>
<td>0</td>
</tr>
</tbody>
</table>

**Children’s Social Behavior Scale – Peer Report (CSBS-P)**

The CSBS-P was developed to measure overt and covert relational aggression. The CSBS-P is a fourteen-item instrument. The reliability analysis using Cronbach’s alpha of the CSBS-P indicated the items fell into the subscales identified by the authors of the instrument (Crick, 1997). The subscales identified were as follows: Relational Aggression, Physical Aggression, and Prosocial Behavior. Note that for the purposes of this investigation, the Physical Aggression and Prosocial Behavior subscales are not included in the analysis. Instead, the items that are indicative of verbal aggression were considered to be part of the overall relational aggression scale score, along with those corresponding items from the DIAS. The CSBS-P was rated on a five point Likert type response scale of *Never* (0) to *Very Often* (4). Table 4-5 presents the reliability data for the total scale score.

Table 4-5: Measurement properties of the CSBS-P scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach Alpha</th>
<th>Number of Items</th>
<th>Items Reversed</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSBS-P</td>
<td>.82-.89</td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

**Data Analysis**

Four hypotheses were addressed in this study of relational aggression among female middle school students. Each hypothesis is addressed individually followed by the analysis used to test the hypothesis. Descriptive statistics, such as skewness, kurtosis, normality, means, frequencies, and plots were used to assess the assumptions of the
analyses and the data was found to meet these assumptions. Chi-Squared and 3-Way ANOVA analyses were used to answer the four hypotheses posed by this study.

Hypotheses 1 was as follows:

HO₁: There is no relationship between age and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls.

A Chi Square analysis was calculated for age/grade level group and the Relational Aggression scale. There was a positive significant relationship between age/grade level group membership and Relational Aggression. Thus, the null hypothesis is rejected for Hypothesis 1; there is a relationship between age/grade level group membership and Relational Aggression. Chi-square = 110.73 (N = 271). A Three-Way ANOVA was conducted and was found to be significant (p=.015, α < .05). The Tukey HSD procedure revealed that pairwise differences among means for sixth and seventh grade students were significant, p < .05.

The second hypothesis addressed by this study was as follows:

HO₂: There is no relationship between socioeconomic status and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls.

A Chi Square analysis was calculated for socioeconomic status and the Relational Aggression scale. Chi-square = 189.18 (N = 271). There was a positive significant relationship between socioeconomic status and Relational Aggression. Thus, the null
hypothesis is rejected for Hypothesis 2; there is a relationship between socioeconomic status and Relational Aggression. A Three-Way ANOVA was conducted and was found to be significant (p=.050, α < .05). The Tukey HSD procedure revealed that pairwise differences among means for no meal assistance and free meals were significant, p < .05.

The third hypothesis posed for this study was as follows:

HO3: There is no significant difference in ethnicity and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls.

A Chi Square analysis was conducted for ethnicity and the Relational Aggression scale. Chi-square = 202.29 (N = 271). There was a positive significant relationship between ethnicity and Relational Aggression. The correlation is low and the null hypothesis is rejected for Hypothesis 3; there is a relationship between ethnicity and Relational Aggression. A Three-Way ANOVA was conducted and was found to be significant (p=.018, α < .05). The Tukey HSD procedure revealed that pairwise differences among means for African American and Latino/a participants were significant, p < .05.

The fourth hypothesis was as follows:

HO4: There is no significant difference in relational aggression subscales (i.e., verbal aggression and withdrawal) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) across all dependent variable categories (i.e., grade level/ age, socioeconomic status, ethnicity) among middle school girls.
This hypothesis tested whether or not there was a significant relationship between grade level/age, socioeconomic status, and ethnicity as measured by the Relational Aggression scale. A Three-Way ANOVA was conducted and was found to be significant (p=.049, \(\alpha < .05\)). Results revealed a significant relationship between ethnicity and Relational Aggression (see Table 4-6). Therefore, the null hypothesis was rejected for the combination of all independent variables (e.g., age, socioeconomic status, and ethnicity) and Relational Aggression. The Tukey HSD procedure revealed that pairwise differences between means for African American and Latino/a, and among socioeconomic status for participants were significant, \(p < .05\).

Table 4-6: Three-way ANOVA for age, socioeconomic status, and ethnicity and relational aggression (N=273)

<table>
<thead>
<tr>
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<th>Relational Aggression</th>
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<tr>
<td>3-Way ANOVA</td>
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<td>Significance (2-tailed)</td>
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<td>Ethnicity</td>
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*Correlation is significant at the 0.05 level

Table 4-7: Tukey HSD comparison for age, socioeconomic status, and ethnicity and relational aggression (N=273)

<table>
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<th>Relational Aggression</th>
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*Correlation is significant at the 0.05 level
CHAPTER 5
DISCUSSION

Although research on aggression is abundant, there has been little examination focused specifically on female middle school students and the characteristics associated with relational aggression. Additionally, there is a lack of research on gender and racial differences related to relational aggression during the middle school years. Therefore, the purpose of this study was to examine ratings of relational aggression among middle school girls, the relationship among these factors, and the association between relational aggression and the type of relational aggression (e.g., verbal, withdrawal) exhibited among middle school girls. This chapter presents a summary of research, the major findings of the study, the limitations, implications to theory and practice and recommendations for future research.

Summary of Study and Major Findings

A convenience sample of 273 middle school students was drawn from similarly sized schools in the southeastern United States. Participants completed a thirty-nine-item survey, which included: the Direct Indirect Aggression Scale, the Children’s Social Behavior Scale- Peer Report and seven demographic questions. Data was analyzed using Chi-Square analyses and 3-Way ANOVA analyses.

Age

The first hypothesis investigated was the relationship between age and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls. Results revealed a significant relationship between age and relational aggression for this population. Thus, results indicate that the
older an individual becomes the more sophisticated communication and relational skills that person rates themselves as having. This is supported by research that suggests that middle school girls often demonstrate higher levels of relational aggression the more advanced their communication skills became (Crick, 1996).

**Socioeconomic Status**

The second hypothesis explored the association between socioeconomic status and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls. Results showed that there was a significant relationship between the socioeconomic status of middle school girls and their reported experience of relational aggression. This supports previous findings by Khoury-Kassabri, Benbenishty, and Astor (2005) who found significant socioeconomic differences in respondents’ reported relational aggression among students in Israel. These results may imply that there are differences in the relational aggression experienced among different socioeconomic brackets among middle school girls.

**Ethnicity**

The third hypothesis addressed the relationship between ethnicity and relational aggression scores (i.e., composite of verbal aggression and withdrawal subscales) as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) among middle school girls. The data analysis indicated that there was a significant relationship between ethnicity and relational aggression among middle school girls. This supports previous findings by Chang (2003) and French, Jansen, and Pidada (2002) who found significant differences among ethnic backgrounds in an investigation.
of peer-reported relational aggression among high school students. These findings may suggest that there are differences in the relational aggression experienced among different ethnic backgrounds among middle school girls.

**Age, Socioeconomic Status, and Ethnicity**

The fourth hypothesis explored whether there was a significant difference in the relational aggression subscales (e.g., verbal aggression and withdrawal) for age, ethnicity, and socioeconomic status as measured by the DIAS (Björkqvist, Lagerspetz, & Österman, 1992) and the CSBS-P (Crick, 1997) existed. This hypothesis investigated whether the combination of age, socioeconomic status, and ethnicity affected respondents’ level of relational aggression. Two relational aggression styles, verbal aggression and withdrawal, were correlated to reported level of relational aggression. Results revealed a significant relationship between age, socioeconomic status, and ethnicity and relational aggression. These results suggest that there are differences in the experience of relational aggression when age, socioeconomic status, and ethnicity are considered in combination.

**Discussion of Aggression**

A number of studies, as mentioned in the introduction, have attempted to distinguish between overt and relational aggression (Cillessen & Mayeux, 2004; Crick, 1996; Cullerton-Sen & Crick, 2005; de los Reyes & Prinstein, 2004; Prinstein, Cheah, & Guyer, 2005; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005). While it is true that investigations of overt (i.e., physical fighting) aggression, or bullying, have been more prolific historically than those of relational aggression, a form of bullying that is more common among girls than boys (Crick, 1996), the present study has undertaken
the process of describing relational aggression specifically for middle school girls. A thorough discussion by Comstock (2005) related to the development of women offers questions for reflection that reveal fascinating insights into this little-researched topic. The author introduces these intriguing reflection questions by describing the birth of her own daughter and described the overwhelming sense of protecting her while teaching her to be authentic and allowing her to find her voice, develop self confidence, and promote her gender, cultural, and sexual identity development (2005). These thought-provoking questions place the spotlight on how girls are socialized to hide their naturally occurring sense of connecting (i.e., through relationships) with others in favor of the values imposed on them by the patriarchal nature of the society in which we live, including sexism, individualism, and racism (Comstock, 2005). The present investigation has found a correlation between girls’ age, ethnic, and socioeconomic backgrounds and their experience of relational aggression, which are interpreted with respect to the theoretical, professional, and societal implications so that the findings may be practically applied. This has implications for parents, teachers, counselors, and society as a whole.

In terms of implications for parents, raising girls to be confident, self-assured, empowered, and unafraid to authentically verbalize their thoughts, feelings, and experiences may appear to be a challenging task. Yet by creating a safe environment for girls to express their unique voices, parents can instill a sense of self-worth at a very early age. To illustrate, by allowing girls the opportunity to verbalize their experiences, and encouraging girls to share their feelings, thoughts, and desires, parents can impart a sense of validity that nourishes her gender, cultural, and social development. Additionally, the language parents use to teach their daughters culturally and socially acceptable behaviors
is important in expressing the value of girls’ experiences. For example, instead of shaming girls for trying to establish or maintain relationships with others, parents can acknowledge the underlying desire while simultaneously imparting their own standards. Parents may use role plays to establish acceptable patterns of relating to others or encourage their daughters to creatively express her emotions through drawing, movement (e.g., dancing, sports), or other creative activities (e.g., pottery, painting,) if she is unable or unwilling to verbalize her feelings, thoughts, or ideas in conversations with others.

For teachers, creating classrooms that validate girls’ need to relate to one another and to boys represents one method for facilitating healthy development. This does not have to occur exclusive of boys’ needs; rather, it can be added to the familiar context of the classroom environment. Teachers can also incorporate affirming language and teaching tools that encourage girls to explore their relational needs via group projects, activities, and teamwork. Again, these teaching tools do not indicate a rejection of the current teaching style, only an addition to the common format of classroom learning. By validating girls’ unique learning needs, poor academic achievement, learning difficulties, and social-psychological adjustment may improve as girls become free to learn without the constraints of forcing themselves to fit into a preconceived notion that does not include room for them to express their true nature.

Counselors have a unique opportunity to encourage and provide a safe environment for girls to discover their own voice, model authenticity, and facilitate the development of healthy esteem for girls, their parents, other professionals, and society. In addition to classroom guidance lessons, small psychoeducational groups, and individual counseling, counselors can assist the school and community by promoting awareness, education, and
engaging in action steps that enhance the social-psychological development of girls. This may be accomplished through open house presentations, hosting family-oriented psychoeducational groups that demonstrate healthy interaction patterns, and regularly presenting their case study observations, counseling experiences, prevention/intervention techniques, or other investigations conducted at professional conferences.

Implications for society as a whole include valuing the contributions of girls and women to create and maintain relationships, nurture, and tend to the needs of their family, friends, and loved ones. Although these are unstated expectations, they are not valued in a patriarchal society that promotes individuality, hierarchical conformity, and self-preservation above all else. It will require tolerance of diversity (e.g., ethnicity, sexual orientation, culture, language), openness to a new paradigm (i.e., a non-patriarchal paradigm, a gender-neutral paradigm), and change the dynamics of relationships by placing emphasis on relationships and self. This investigation has been an attempt to address the deficit reported by Prinstein and La Greca (2004) that there is a stunning lack of research focused solely on the aggressive behavior of girls, since several of the studies (e.g., Coie, Dodge, & Kupersmidt, 1990; Werner & Crick, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005) include both boys and girls in the sample and many studies (e.g., Cillessen, van Ijzendoorn, van Lieshout, & Hartup, 1992; Dishion, Capaldi, & Youerger, 1999; Haselager, Cillessen, van Lieshout, Riksen-Walraven, & Hartup, 2002) have only males in the sample.

**Incidence of Physical Aggression and Criminal Behavior**

Research is revealing increasing rates of externalizing behavior among girls along with considerable evidence connecting relational aggression (e.g., lying, gossiping) in girls (Keenan, Loeber, & Green, 1999; Prinstein & La Greca, 2004). Governmental
statistics and numerous investigations illustrate the need for an examination of the individual and social correlates of relational aggression and the types of aggression (e.g., verbal, withdrawal, relational) exhibited among girls (CDC, 2002; OJJDP, 2000; Prinstein & La Greca, 2004). The present study has attempted to distinguish between verbal aggression, withdrawal, and relational aggression so that the extent to which each of these features contributes to the development or maintenance of relational aggression can be ascertained. Likewise, the current investigation has attempted to differentiate the externalizing behavior of girls from that of boys, since the externalizing behaviors exhibited by girls are distinct from those exhibited by boys (Crick, 1996; Prinstein & La Greca, 2004). To illustrate, boys demonstrate greater levels of overt aggression (e.g., hitting, pushing, kicking), than girls (Crick, 1996; Prinstein & La Greca, 2004). Girls, however, are more likely to engage in relational aggression, such as excluding the victim from the peer group, lying, spreading rumors, or gossiping (Crick, 1996; Prinstein & La Greca, 2004). Thus, it is not surprising that the externalizing behaviors exhibited by early adolescent girls may have far-reaching consequences (i.e., impact their academic performance and social psychological adjustment) (Masten, 2005). What may be surprising is the extent to which Caucasian girls from middle class socioeconomic backgrounds engage in relationally aggressive behaviors as compared to minority girls from lower socioeconomic backgrounds. This study found a higher correlation between girls from Caucasian middle class socioeconomic backgrounds engaging relational aggression to establish or maintain relationships than minority girls from lower socioeconomic backgrounds, who indicated that they typically relied on more physical forms of aggression in their relationships with others. The study also found the greatest
variance among participants’ self reported ethnic background and relational aggression was among the African American and Latina girls. This may represent a trend for minority girls in terms of adapting to the acceptable ways of expressing anger in an academic setting.

Middle school girls involved in relational aggression (i.e., victim or aggressor) may also be at risk for learning difficulties, low academic performance, or negative emotional adjustment (e.g., loneliness, depression, withdrawal) that is influenced by the peer group (Masten, 2005). Relationships with peers, teachers, and parents may impact the development and maintenance of relational aggression (Chang, 2003; Meehan, Hughes, & Cavell, 2003; Prinstein, Cheah, & Guyer, 2005). Björkqvist, Lagerspetz, and Österman (1992) reported that verbal aggression and withdrawal are associated with relational aggression among children and adolescents. These features may lead to negative consequences for girls (e.g., low grades, poor social-psychological adjustment) (Prinstein & La Greca, 2004). To summarize, girls are just as likely as boys to demonstrate multiple problem behaviors, such as engaging in aggressive and criminal behaviors (Prinstein & La Greca, 2004), but for very different reasons.

Clearly, research on relational aggression among girls is a problem that continues to reveal new facets that need to be investigated. The relationship between bullying and relational aggression must be further explicated so that professionals understand the unique correlates (e.g., individual and social) of relational aggression among middle school girls, how the correlates of relational aggression interact with one another (i.e., how self worth interacts with peer relationships), and the impact relational aggression has upon middle school girls. This may lead to understanding the differences between
relational aggression among elementary, middle, and high school girls and assist counselors with the implementation of an efficacious intervention program, such as the Olweus Bullying Prevention Program [OBPP], that has demonstrated improvements of such behavior (e.g., excluding peers, lying, gossiping).

Need for Future Study

The importance of developing positive interpersonal skills is considered essential to our society (Werner & Crick, 2004). Prior studies (Coie, Dodge, & Kupersmidt, 1990; Zimmer-Gembeck, Geiger, & Crick, 2005) have examined the role of individual and social correlates of relational aggression among girls, but none were found at the time of this investigation that focused solely on middle school girls. Recent research, described in the introduction, shows that relational aggression appears to be increasing among middle school age students, especially among girls (Zimmer-Gembeck, Geiger, & Crick, 2005). This trend, as a social observation, is alarming and suggests the need for the studies aimed at identifying the etiology of relational aggression, describing the salient features of the development of relationally aggressive interaction patterns, and treatment that will ameliorate this type of maladaptive behavior (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Such research has implications for guiding successful social-psychological and academic adjustment among middle school girls, raising awareness of parents, teachers, and the community regarding healthy socialization of girls, and improving training programs for counselors.

The purpose of this study was to examine the correlates that define relational aggression among middle school girls, the relationships among these factors, and the association between the correlates of relational aggression and the type of relational aggression (e.g., verbal, withdrawal) exhibited among middle school girls. The findings
of this study contributed to the theoretical understanding of relational aggression among middle school girls, suggested evidence-based efficacious interventions, and described the etiology of internalizing (e.g., individual features: withdrawal, depression) and externalizing (e.g., social features: peer relationships, type of aggression exhibited) behaviors unique to middle school girls. This study examined the relationship between individual factors (e.g., withdrawal, depression) and social factors (peer relationships) related to relational aggression among middle school girls. This study also discussed the implications for counselors.

The present study contributed to the theoretical underpinnings of relational aggression in middle school girls by focusing exclusively on this underrepresented population in the literature and posited that developmental theories, social-information processing, and social-psychological models influence the exhibition of externalizing and internalizing behaviors in adolescent girls. This study extended the findings in previous investigations through the incorporation of developmental and social-psychological theories in an investigation that targeted middle school girls. Identifying the theoretical foundation for relationally aggressive behaviors among middle school girls illuminated appropriate interventions for professional counselors to consider. Implications for further research were outlined as a result of examining the correlates of relational aggression specifically with middle school girls.

Researchers (Margolin, 2001; Prinstein & La Greca, 2004) have examined the role of peer acceptance and rejection in predicting externalizing behavior among adolescents. This body of research explores the development of aggression, the nature of interpersonal relationships as moderating or exacerbating behavior, and investigates the role of
preventive interventions across developmental stages (Prinstein & La Greca, 2004). Other researchers (Dodge, Lansford, Burks, Bates, Pettit, Fontaine, & Price, 2003) have examined the role of social-information processing and social-psychological theories related to relational aggression. This line of inquiry examines the nature of peer relationships and individual attributions to ambiguous and non-ambiguous social interactions (Card, Hodges, Little, & Hawley, 2005; Dodge, et al., 2003; Masten, 2005). For example, peer relationships can ameliorate or exacerbate the impact of relationally aggressive behaviors according to whether the relationship is positive (i.e., assisting a new student in the transition to school, protecting targets of aggression, decreasing the likelihood of externalizing behavior) or negative (i.e., reinforcing health risk behaviors through peer pressure, highlighting the effects of adverse parenting styles) and the context in which situations occur (Masten, 2005). In terms of attributing hostile or friendly intent to peers in ambiguous situations, whether the individual is rejected by the peer group plays a critical role (Card, Hodges, Little, & Hawley, 2005; Dodge, et al., 2003). Still other researchers (Cairns, Xie, & Leung, 1998; Cillessen & Bukowski, 2000) have investigated the role of reputation or social power with regard to relational aggression. To illustrate, the social power an individual possesses may indicate collective conflict between girl and boy cultures, developmental risk factors under certain conditions (e.g., exposure to community or family violence), or the inequitable distribution of power between bullies and victims and accepted versus rejected children (Cairns, Xie, & Leung, 1998; Cillessen & Bukowski, 2000; Rodkin, et. al, 2003). A review of the literature addressed the individual features (e.g., withdrawal, depression) of relational aggression, the social features (e.g., peer relationships) of relational aggression,
and the association between the type (e.g., verbal, physical, withdrawal) of relational aggression exhibited and the features of relational aggression among middle school girls.

**Limitations of the Study**

Although the overall results may be generalized to female middle school students in the southeast, they should be interpreted within the context of this study. There are several limitations to the study that include the sampling procedures, recruiting minority participants, self-reporting, and data collection techniques. A primary concern is with the sampling procedure. The researcher was unable to get a random sample of female middle school students; therefore, a convenience sample was used. Participant recruitment relied on organizational contact persons to distribute information about the investigation to study skills teachers once the investigation was approved by the school district. The response rate and details about who received the invitation to participate in the study is unclear.

Additionally, since the study was conducted at schools that were available to participate, it was difficult to reach equal numbers of various ethnic groups. The overall proportion of White middle school girls to Black middle school girls at School A is 1:8 and at School B is 1:2. Another problem regarding ethnicity is that the researcher asked the participants to choose the ethnic category with which they most identified.

Participant self-reporting bias must also be addressed as a limitation in this study. There is no way to know whether the participants’ responses accurately represent their experiences of relational aggression. The retrospective nature of the instruments required that participants reflect upon the experiences they have had with relational aggression and their own responses/behaviors over time. Finally, data was gathered relatively close to the end of the semester, which may have affected students’ responses.
Crothers, Field, and Kolbert (2005), Prinstein and LaGreca (2004), and Remillard and Lamb (2005) identified a number of variables that influence relational aggression for high school students, although none were found at the time of this study that focused on middle school students, such as loneliness, depression, global self-worth, poor academic achievement, learning difficulties, relationships with peers, relationships with parents and relationships with teachers. It must be recognized that existing differences within ethnic groups may affect perceptions and experiences (Chang, 2003; French, Jansen, & Pidada, 2002). Such individual differences include level of ethnic identity, age, and socioeconomic status (Brody, Dorsey, Forehand, & Armistead, 2002; Chang, 2003; Ge, Brody, Conger, Simmons, & Murry, 2002).

**Implications for Practice**

Counselors and mental health professionals should be aware of the potential for racial and culture specific experiences among middle school girls pertaining to relational aggression. Guidance counselors could institute a questionnaire designed to assess and explore students’ potential general and cultural-specific experiences of relational aggression. This culturally sensitive protocol would help to further contextualize presenting concerns and potentially appropriate interventions (Brody, Dorsey, Forehand, & Armistead, 2002; Chang, 2003; French, Jansen, & Pidada, 2002; Ge, Brody, Conger, Simmons, & Murry, 2002), thus precipitating academic, social and developmental difficulties. Guidance counselors could also address some of these issues by working with other mental health professionals, such as community mental health centers, to create support and psychoeducational groups for middle school girls aimed at increasing coping skills for and/or mediating the effects of relational aggression.
Guidance counselors can create a large group classroom guidance lesson based upon the needs and age of the students they serve. For example, a four-to-eight-week classroom guidance unit that addresses relational aggression, safe expression of feelings, thoughts, and desires, and cultural/gender/socioeconomic issues may have a positive impact on the relational styles students engage in with one another. Following this series of large group lessons, guidance counselors can then implement a small group for students that may benefit from additional teaching and practice with positive interpersonal and communication skills. For students with even greater needs, individual counseling sessions may be arranged to further facilitate healthy development. To meet the needs of teachers, parents, and the larger community, guidance counselors can host open house events that discuss relational aggression, positive ways to encourage and promote healthy development of girls, and offer action steps that adults can take to use the knowledge they have gained. By increasing awareness, education, and outlining concrete behaviors for adults that will enhance the interpersonal, relationship, communication, and problem solving skills of girls, important adults can facilitate healthy development among girls. This prevention strategy may reduce the need for intervention groups, juvenile justice programs, and eventually erase the sexism girls experience in our society.

Implications for Future Research

Research that focuses primarily on relational aggression among middle school girls may provide a greater understanding of interpersonal relationships during middle school. Investigations that concentrate on the development of adaptive interpersonal relationship skills may provide evidence that promotes positive communication and conflict

Further investigation into shy, aggressive, or unexpected friendship behavior, which has the potential to lead to peer rejection, avoidance, or approval (Masten, 2005) is an important area for counselors to consider among middle school girls. Peer rejection, peer avoidance, or peer approval may enhance or ameliorate emotional and behavioral symptoms, such as depression, loneliness, or happiness (Adams, Bukowski, & Bagwell, 2005; Grot Peters & Crick, 1996; Masten, 2005), and therefore represents a worthy line of future inquiry. Likewise, peer relationships have the potential to reinforce or punish an individual’s behavior and emotions depending upon the individual’s desired reaction from peers (Adams, Bukowski, & Bagwell, 2005; Grot Peters & Crick, 1996; Masten, 2005). Thus, depending upon the individual’s expectations of the peer group and the peer group’s reaction to the individual’s behavior, peer groups have the capacity to enhance or diminish maladjusted behaviors. Research related to the individual’s expectations of the peer group and the peer group’s reaction to the individual’s behavior among middle school girls would benefit counselors and counselor preparation programs by enhancing the understanding of such friendship dynamics, contributing to the prevention/intervention of programs designed to positively impact middle school girls’ friendship characteristics, and preparing parents, teachers, and other community members to interact with this unique population.
Another area for further research involves relationships among shy and socially withdrawn middle school girls. Shyness and social withdrawal become increasingly problematic to peers as children transition from elementary to middle school (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). To illustrate, researchers (Hart, C., Yang, Nelson, Robinson, Olsen, Porter, Jin, Olsen, & Wu, 2000; Ladd & Burgess, 1999) have found that shy and socially withdrawn children do not seem to be rejected by their classmates in early childhood. During middle to late childhood and early adolescence, however, many shy, socially withdrawn children experience rejection from their peer group (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Furthermore, shy and withdrawn children become the targets of peer victimization (Hanish & Guerra, 2004). While shy and socially withdrawn children may remove themselves from the peer group due to discomfort and social anxiety, it is not known whether this discomfort is also overwhelming and intolerable when in the company of only one peer or a few close peers (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Few researchers have examined social withdrawal at the dyadic level of social interaction (Schneider, 1999); thus, very little is known about the interpersonal relationships of socially withdrawn children (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Given the plethora of presumed advantages that friendship offers (e.g., support of peers, positive communication skills) and the risks associated with not participating in such peer relationships (e.g., loneliness, depression), an investigation of shy and socially withdrawn children’s participation in such relationships may further the understanding of the specific risks associated with being shy and socially withdrawn during adolescence (Rubin, Wojslawowicz, Rose-
Krasnor, Booth-LaForce, & Burgess, 2006). Thus an investigation of shy and socially withdrawn adolescent friendships may reveal insight into this relationship dynamic.

Additionally, investigating whether friendships are important in maintaining aggression among middle school girls would benefit counselors and counselor preparation programs in terms of providing developmentally appropriate information to conceptualize, prevent/ intervene, and research relationally aggressive patterns for this population. To illustrate, Adams, Bukowski, and Bagwell (2005) and Grotpeter and Crick (1996) reported that investigating aggressive behaviors of individuals in the dyadic context of friendships revealed greater insight into the understanding of peer experiences than studying group interactions (Adams, Bukowski, & Bagwell, 2005; Grotpeter & Crick, 1996) though neither of the investigations focused exclusively on middle school girls. Furthermore, research conducted on dyadic relationships (Card, Hodges, Little, & Hawley, 2005) that focused on interpersonal perceptions of adolescents reported that girls perceive the interpersonal characteristics (e.g., social status and aggressiveness) of other girls more accurately than boys, while boys perceive the interpersonal characteristics of other boys more accurately than girls (Card, Hodges, Little, & Hawley, 2005). Future research on consensus and degree of assimilation to explain such perceptions (Card, Hodges, Little, & Hawley, 2005) among adolescents, such as perceiving others as aggressive based upon the actor's gender and attributing high or low social status to the actor (Card, Hodges, Little, & Hawley, 2005), would be beneficial among middle school girls.

In a related line of inquiry, Grotpeter and Crick (1996) reported findings from a previous pilot study (Grotpeter, 1993) that exclusively investigated relationally
aggressive girls in the fourth through fifth grades. This pilot study examined the friendship qualities present in relationally aggressive girls' friendships and assessed the value of the friendship qualities to relationally aggressive girls (Grotpeter, 1993). Investigating the characteristic qualities of relationally aggressive middle school girls' friendships to determine whether their relationships include conflict and betrayal, ease of conflict resolution, intimate exchange, validation and caring, help and guidance, and companionship and recreation (Grotpeter, 1993) would enhance clinicians' understanding of such friendships. The results of the pilot study (Grotpeter, 1993) indicated that relationally aggressive girls in the fourth and fifth grades reported higher levels of intimate exchange and more relational aggression (i.e., intentionally spreading rumors or lies about a victim to damage the victim's status in the peer group, isolating the peer by refusing to speak to her or include her in activities) present in their friendships than non-relationally aggressive girls' friendships (Grotpeter, 1993). Research related to middle school girls’ levels of intimate exchange and relational aggression may provide insight into non-relationally aggressive girls' friendships versus relationally aggressive girls’ friendships.

The significance of peer, family, and school relationships as a potential mediator or moderator, risk factor, or protective factor in terms of diminishing negative influences and difficult life circumstances represents an area that has not been widely researched, despite the importance of these factors for adolescents (Bukowski & Adams, 2005; Dishion, Nelson, & Yasui, 2005; Ge, Brody, Conger, Simmons, & Murry, 2002; Masten, 2005). Furthermore, investigations that focus on intervention within peer interactions and study the degree of influence that peers have, the importance of reputation, and the
quality of peer interactions are scarce. A multidimensional, comprehensive intervention study that targets peer interaction may prevent or ameliorate deficits in social functioning, interpersonal relationships, and academic performance is needed (Adams, Bukowski, & Bagwell, 2005; Dishion, Nelson, & Yasui, 2005; Hawkins, Catalano, Kostermann, Abbott, & Hill, 1999; Hoza, Gerdes, Mrug, Hinshaw, Bukowski, Gold, et al., 2005; Masten, 2005). Internalizing symptoms (e.g., depression, low self-worth) and externalizing symptoms (e.g., gossiping, ostracizing) may be ameliorated for middle school girls who are provided the opportunity to learn adaptive interpersonal relationship skills. Inquiry in to such internalizing and externalizing symptoms specific to middle school girls represents an important arena for future investigation.

**Summary**

This chapter provided a discussion of the results, the study limitations, implications for theory and practice, and recommendations for future research. Overall, the findings indicated significant relationships between relational aggression and age, relational aggression and socioeconomic status, relational aggression and ethnicity, relational aggression and age, socioeconomic status, and ethnicity. Margolin, (2001), Olweus (2001), and Salmivalli, Kaukiainen, and Voeten (2005) suggest programs designed to address relational aggression, including feelings of loneliness, depression, and self-worth that would be particularly helpful. They also suggest finding ways to encourage resources for high school students that may also assist in decreasing levels of psychological and interpersonal stress related to relational aggression.

Because of the connection between environmental factors and social and psychological functioning, interventions that do not attend to student’s social milieu may have limited effectiveness. Actively supportive, nondiscriminatory campus environments
are associated with greater satisfaction in school, better adjustment, and persistence through graduation (Salmivalli, Kaukiainen, & Voeten, 2005). This is particularly the case for middle school girls navigating their way through relationally aggressive relationships (Prinstein, Cheah, & Guyer, 2005).
APPENDIX A
VERBATIM INSTRUCTIONS TO PARTICIPANTS

Instructions for completing the Direct Indirect Aggression Scales [DIAS]:

This booklet contains sentences that tell how some boys and girls think or feel or act. Read each sentence carefully. You will have five answer choices. Answer the questions by circling the number, which seems to describe your behavior in the closest way.

0 = never, 1 = seldom, 2 = sometimes, 3 = quite often, 4 = very often

Circle 0 if the sentence Never describes you or how you feel.
Circle 1 if the sentence Seldom describes you or how you feel.
Circle 2 if the sentence Sometimes Often describes you or how you feel.
Circle 3 if the sentence Quite Often describes you or how you feel.
Circle 4 if the sentence Very Often describes you or how you feel.

Here is an example:

1. I like dogs. 0 1 3 4

2. I like doing homework. 0 2 3 4

If you wish to change an answer, mark an X through it and circle your new choice, like this:

2. I like doing homework. X 2 3 4

Give the best answer for each sentence, even if it is hard to make up your mind. There are no right or wrong answers. Please do your best, tell the truth, and answer every sentence. Before starting, please fill in the information in the box above these directions.
# APPENDIX B
## RELATIONAL AGGRESSION SURVEY - MIDDLE SCHOOL

Your First Name (Please Print)       Your Last Name (Please Print)        Grade Level (6-8)

**Directions**: Tell us how you act when you have problems with or get angry with another classmate. Answer the questions by circling the number that seems to tell about your behavior in the closest way.

0 = never, 1 = seldom, 2 = sometimes, 3 = quite often, 4 = very often

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hit the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Shut the other person out of the group of friends?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Yell at or argue with the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Become friends with another person as a kind of revenge?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>Kick the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>Ignore the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Insult the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>Gossip about the one I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>Trip the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>Tells bad or false stories about the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>Say I'm going to hurt the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>Plan secretly to bother the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>Shove the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>Say bad things behind the other person’s back?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15.</td>
<td>Call the other person names?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16.</td>
<td>Tell my friends &quot;Let's not be friends with him/her anymore!&quot;?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17.</td>
<td>Take things from the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18.</td>
<td>Tell the other person’s secrets to a third person?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19.</td>
<td>Tease the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20.</td>
<td>Write notes to friends where I criticize the person I'm angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21.</td>
<td>Push the person I'm angry with down to the ground?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22.</td>
<td>Criticize the person’s hair or clothing?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23.</td>
<td>Pull on the person I’m angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24.</td>
<td>Try to get my friends to dislike the person I’m angry with?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX C
CHILDREN’S SOCIAL BEHAVIOR SCALE- PEER REPORT ITEMS

Directions: Tell us how you act at school. Answer the questions by circling the number which seems to tell about your behavior in the closest way.

0 = Never, 1 = Seldom, 2 = Sometimes, 3 = Quite Often, 4 = Very Often

1. I’m a good leader. 0 1 2 3 4
2. I do nice things for others. 0 1 2 3 4
3. I help others. 0 1 2 3 4
4. I cheer others up. 0 1 2 3 4
5. I’m happy at school. 0 1 2 3 4
6. I hit or push others. 0 1 2 3 4
7. I yell at or call others mean names. 0 1 2 3 4
8. I start fights. 0 1 2 3 4
9. When I’m mad, I get even by keeping the other person from being in my group of friends. 0 1 2 3 4
10. I tell friends I will stop liking them unless they do what I say. 0 1 2 3 4
11. When I’m mad at a person, I ignore them or stop talking to them. 0 1 2 3 4
12. I try to keep certain people from being in my group of friends during activity or recess time. 0 1 2 3 4
13. I play alone a lot. 0 1 2 3 4
14. I am sad at school. 0 1 2 3 4
15. I am lonely at school. 0 1 2 3 4
APPENDIX D
SAMPLE OF ASSENT FORM

Informed Assent

**Protocol Title:** Relational Aggression among Middle School Girls.

**Please read this consent document carefully before you decide to participate in this study.**

**Purpose of the research study:**
The purpose of this study is to examine the correlates that define relational aggression among middle school girls, the relationship among these factors, and the association between the factors of relational aggression and the type of relational aggression (e.g., verbal, physical, withdrawal) exhibited among middle school girls.

**What you will be asked to do in the study:**
This is a survey study, so you will be asked to answer questions about your behavior and friendships. It is very important that you answer each question honestly. The total time required is thirty minutes.

**Time required:**
30 minutes during a study skills class.

**Risks and Benefits:**
We do not anticipate that you will incur any risk directly by participating in this study. The benefit of participation is that you will have a better understanding of your social interaction with others.

**Compensation:**
You participation in this research investigation is voluntary and you will not receive any monetary compensation.

**Confidentiality:**
Your identity will be kept confidential to the extent provided by law. Your information will be assigned a code number. The list connecting your name to this number will be kept in a locked file in my faculty supervisor's office. When the study is completed and the data have been analyzed, the list will be destroyed. Your name will not be used in any report.

**Voluntary participation:**
Your participation in this study is completely voluntary. There is no penalty for not participating.

**Right to withdraw from the study:**
You have the right to withdraw from the study at anytime without consequence.

**Whom to contact if you have questions about the study:**
Aprille Dallape, Graduate Student, Department of Counselor Education, 1215 Norman Hall, Gainesville, FL 32611; ph 392-0731.

Edil Torres-Rivera, PhD, College of Education, 1215 Norman Hall, Gainesville, FL 32611; ph 392-0731.

**Whom to contact about your rights as a research participant in the study:**
UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; ph 392-0433.
**Agreement:**
I have read the procedure described above. I voluntarily agree to participate in the adapted CBT STOP Bullying small group sessions and/or individual sessions (if I am selected) and I have received a copy of this description.

Participant: _____________________________ Date: _______________

Principal Investigator: _____________________ Date: _______________
Dear Parent/Guardian,

I am a graduate student in the Department of Counselor Education at the University of Florida, conducting research on relational aggression of middle school girls under the supervision of Dr. Edil Torres-Rivera. Relational aggression may be more common in adolescent girls’ relationships and can include behaviors such as gossiping, spreading rumors, and excluding particular girls from the peer group. The purpose of this study is to examine the correlates that define relational aggression among middle school girls, the relationship among these factors, and the association between the factors of relational aggression and the type of relational aggression (e.g., verbal, physical, withdrawal) exhibited among middle school girls. The results of the study may help school counselors, teachers, and administrators better understand relational aggression in early adolescent girls and allow them to design instructional and intervention practices accordingly. These results may not directly help your child today, but your daughter may gain a better understanding of her relationship and social skills.

With your permission, I would like to ask your child to volunteer for this research. Participants will be asked to complete a survey that inquires about her friendships and interactions with peers. The survey will be administered during the study skills class so that no participant misses any academic courses.

Participants will not have to answer any question they do not wish to answer. The procedure for responding to the assessments will be presented by the principle researcher or trained counselor during the study skills class period. The thirty-minute questionnaire procedure will take place during the month of March. Although the participants will be asked to write their names on the questionnaires for matching purposes, their identity will be kept confidential to the extent provided by law. We will replace their names with code numbers. Results will only be reported in the form of group data. Participation or non-participation in this study will not affect the children's grades or placement in any programs.

You and your child have the right to withdraw consent for your child's participation at any time without consequence. There are no known risks, but your daughter may benefit from a better understanding of your social interaction with others. No compensation is offered for participation. Group results of this study will be available in August upon request. If you have any questions about this research protocol, please contact me at (352) 392-0731 or my faculty supervisor, Dr. Edil Torres-Rivera, at (352) 392-0731. Questions or concerns about your child's rights as research participant may be directed to the UFIRB office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Thank you,
Aprille Dallape
I have read the procedure described above. I voluntarily give my consent for my child, _________________, to participate in Aprille Dallape's survey study on relation aggression among middle school girls.
I have received a copy of this description.

<table>
<thead>
<tr>
<th>Parent / Guardian</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Parent / Witness</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Date</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tr>
</tbody>
</table>
APPENDIX F
COVER LETTER TO ADMINISTRATORS

Department of Counselor Education
PO Box 117046
University of Florida
Gainesville, FL 32611

Dear Principal/ Director,

I am a graduate student in the Department of Counselor Education at the University of Florida, conducting research on relational aggression of middle school girls under the supervision of Dr. Edil Torres-Rivera. The purpose of this study is to examine the correlates that define relational aggression among middle school girls, the relationship among these factors, and the association between the factors of relational aggression and the type of relational aggression (e.g., verbal, physical, withdrawal) exhibited among middle school girls. The results of the study may help school counselors, teachers, and administrators better understand relational aggression and allow them to design instructional practices accordingly. These results may not directly help your students today, but they may gain a better understanding of their relationship and social skills.

With your permission, I would like to ask your middle school to volunteer for this research. Participants will be asked to complete a survey that inquires about their friendships and interactions with peers. The survey will be administered during the study skills class so that no participant misses any academic courses.

Participants will not have to answer any questions they do not wish to answer. The procedure for responding to the assessment tools will be presented by the principle researcher or a guidance counselor during the study skills class period. The thirty-minute questionnaire procedure will take place during the month of March. Although the participants will be asked to write their names on the questionnaires for matching purposes, their identity will be kept confidential to the extent provided by law. We will replace their names with code numbers. Results will only be reported in the form of group data.

You and your students have the right to withdraw consent for participation at any time without consequence. There are no known risks, but your students may benefit from gaining a better understanding of their relationship and social skills. No compensation is offered for participation. Group results of this study will be available in August upon request. If you have any questions about this research protocol, please contact me at (352) 392-0731 or my faculty supervisor, Dr. Edil Torres-Rivera, at (352) 392-0731. Questions or concerns about your students' rights as research participant may be directed to the UFIRB office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Thank you,
Aprille Dallape
I have read the procedure described above. I voluntarily give my consent for my school, ____________________, to participate in Aprille Dallape's survey study on relation aggression among middle school girls.

I have received a copy of this description.

_________________________________________              ___________
Principal / Director                                                                  Date

_________________________________________              ___________
Asst. Principal / Witness                                                         Date

_________________________________________              ____________
Principal Investigator                                                              Date
APPENDIX G
COVER LETTER TO TEACHERS

Department of Counselor Education
PO Box 117046
University of Florida
Gainesville, FL 32611

Dear Study Skills Teachers,

I am a graduate student in the Department of Counselor Education at the University of Florida, conducting research on relational aggression of middle school girls under the supervision of Dr. Edil Torres-Rivera. The purpose of this study is to examine the correlates that define relational aggression among middle school girls, the relationship among these factors, and the association between the factors of relational aggression and the type of relational aggression (e.g., verbal, physical, withdrawal) exhibited among middle school girls. The results of the study may help school counselors, teachers, and administrators better understand relational aggression and allow them to design instructional practices accordingly. These results may not directly help your students today, but your students may gain a better understanding of their relationship and social skills.

With your permission, I would like to ask your study skills class to volunteer for this research. Participants will be asked to complete a survey that inquires about their friendships and interactions with peers. The survey will be administered during the study skills class so that no participant misses any academic courses.

Participants will not have to answer any questions they do not wish to answer. The procedure for responding to the assessment tools will be presented by the principle researcher or a guidance counselor during the study skills class period. The thirty-minute questionnaire procedure will take place during the month of March. Although the participants will be asked to write their names on the questionnaires for matching purposes, their identity will be kept confidential to the extent provided by law. We will replace their names with code numbers. Results will only be reported in the form of group data. Participation or non-participation in this study will not affect the students' grades or placement in any programs.

You and your students have the right to withdraw consent for participation at any time without consequence. There are no known risks, but your students may benefit from a better understanding of their relationship and social skills. No compensation is offered for participation. Group results of this study will be available in August upon request. If you have any questions about this research protocol, please contact me at (352) 392-0731 or my faculty supervisor, Dr. Edil Torres-Rivera, at (352) 392-0731. Questions or concerns about your students' rights as research participant may be directed to the UFIRB office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Thank you,
Aprille Dallape
I have read the procedure described above. I voluntarily give my consent for my study skills class, ____________________, to participate in Aprille Dallape's survey study on relation aggression among middle school girls.

I have received a copy of this description.

Teacher

Date

Teaching Asst. / Witness

Date

Principal Investigator

Date
APPENDIX H
SAMPLE OF STANDARDIZED SURVEY ADMINISTRATION PROTOCOL

The protocol consists of a script that will be used to introduce the survey and the survey administrator, explain confidentiality, and address any questions that participants may have. The researcher/investigator will thank participants for taking part in the survey and review the consent form with them. In an effort to explain confidentiality, the researcher/investigator will say that everything the participants write on the survey or tell the survey administrator will stay in the room, unless they say they want to hurt themselves or others, kill themselves or others, or that someone is hurting them. At this time, the researcher/investigator will ask participants if they have any questions or comments about the survey and the expectations for participation.
**APPENDIX I**
**COMPARISON SCHOOLS**

*Comparison School A:*

<table>
<thead>
<tr>
<th>Grades Offered</th>
<th>Grades KG - 12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students &amp; Faculty</strong></td>
<td></td>
</tr>
<tr>
<td>Total Students</td>
<td>1168 students</td>
</tr>
<tr>
<td>% Male / % Female</td>
<td>52% / 48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students by Grade</th>
<th>This School</th>
<th>(State) School Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 6 - 114 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 7 - 114 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 8 - 115 students</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher : Student Ratio</th>
<th>1:16</th>
<th>1:16</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Students by Ethnicity</th>
<th>This School</th>
<th>(State) School Average</th>
<th>(FL) School Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>% American Indian</td>
<td>1%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>% Asian</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>% Hispanic</td>
<td>12%</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>% Black</td>
<td>25%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>% White</td>
<td>61%</td>
<td>48%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Student Information</th>
<th>This School</th>
<th>(State) School Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Eligible for Free Lunch</td>
<td>10%</td>
<td>42%</td>
</tr>
<tr>
<td>% Eligible for Reduced Lunch</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>% Migrant Students Enrolled</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
**Comparison School B:**

### Students

<table>
<thead>
<tr>
<th></th>
<th>This School</th>
<th>(State) School Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Students</td>
<td>921 students</td>
<td></td>
</tr>
<tr>
<td>% Male / % Female</td>
<td>45% / 55%</td>
<td></td>
</tr>
<tr>
<td>Students by Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 6 - 289 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 7 - 324 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 8 - 307 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher : Student Ratio</td>
<td>1:17</td>
<td>1:17</td>
</tr>
</tbody>
</table>

### Students by Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>This School</th>
<th>(State) School Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>% American Indian</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>% Asian</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>2%</td>
<td>24%</td>
</tr>
<tr>
<td>% Black</td>
<td>57%</td>
<td>24%</td>
</tr>
<tr>
<td>% White</td>
<td>31%</td>
<td>50%</td>
</tr>
<tr>
<td>% Unknown</td>
<td>1%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### Additional Student Information

<table>
<thead>
<tr>
<th></th>
<th>This School</th>
<th>(State) School Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Eligible for Free Lunch</td>
<td>49%</td>
<td>44%</td>
</tr>
<tr>
<td>% Eligible for Reduced Lunch</td>
<td>6%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Note: Data has been gathered from several government and commercial data sources. School data reflects years 2002-04 statistics (most recent years available). Demographic data reflects year 2000 statistics.
REFERENCES


BIOGRAPHICAL SKETCH

Aprille Dallape was born in 1977, in Sarasota, Florida. The oldest of two daughters, she grew up mostly in Bradenton, Florida, graduating from Manatee High School in 1995. She earned her B.S. in psychology, with a minor in education, and her M.Ed./Ed.S. in mental health counseling from the University of Florida (UF) in 1999 and 2002, respectively.

Upon graduating in August 2002 with her M.Ed./Ed.S. in mental health counseling, Aprille accepted a position as a counselor with a nonprofit youth runaway shelter. Then, Aprille pursued her interests related to adolescent substance abuse treatment and accepted a supervisory position in Sarasota. As her passion for youth and family mental health, substance abuse, and school-related treatment issues developed, Aprille returned to the University of Florida to further her education. At the completion of her Ph.D. program, Aprille is looking forward to employment with the United States Navy as an education advisor.