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More Than Meets the Eye: The Covert Nature of Female Aggression in a Kindergarten Through Second Grade Population

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MORE THAN MEETS THE EYE: 
THE COVERT NATURE OF FEMALE AGGRESSION 
IN A KINDERGARTEN THROUGH SECOND GRADE POPULATION

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By
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MORE THAN MEETS THE EYE: THE COVERT NATURE OF FEMALE AGGRESSION IN A KINDERGARTEN THROUGH SECOND GRADE POPULATION

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The current study addressed the verification of the existence of relational aggression in boys and girls in a kindergarten through second grade population. There has been little, if any, empirical research conducted with children in kindergarten through second grade concerning their use of relational aggression. The current research was conducted with teachers’ reports of aggression styles displayed by their kindergarten through second grade students (N = 257). This research was conducted to compare the incidence of relational aggression in boys and girls and to compare the incidence of overt aggression in boys and girls. This research also examined whether the older children in this sample exhibited different styles of relational aggression than the younger children in this sample, as it was hypothesized that older children would engage in more covert relational styles of aggression and younger children would engage in more overt relational styles of aggression. Data were collected from teachers via modified and widely accepted teacher report forms: the Preschool Social Behavior Scale – Teacher Form (Crick, Casas, & Mosher, 1997) and the Child Social Behavior Scale – Teacher Form (Crick, 1996). Results confirmed 2 of 3 hypotheses. Teachers reported greater incidence of relational aggression among girls in a kindergarten through second grade age group. Teachers
reported greater incidences of overt aggression among boys in a kindergarten through second grade age group. This research failed to find any differences in the styles of relational aggression used among the older and younger children in this sample. Overall, the current findings support the position that children in a kindergarten through second grade population engage in relational aggression. It also supported the position that both females and males engage in aggressive behaviors; however, they use different styles to convey their aggression.
CHAPTER ONE

Introduction

There is a perception that males are more aggressive than females. Many think that males are more aggressive because past research has shown that males commit more aggressive acts (Lagerspetz & Bjorkqvist, 1994; Lagerspetz, Bjorkqvist, & Peltonen, 1988; Rys & Bear, 1997). As a result, individuals might assume that females are not aggressive. However, recent researchers have suggested that females are just as aggressive as males; they just use a different, more covert style of aggression that is not as obvious as more male-oriented, overt aggressive acts (Crick, Bigbee, & Howes, 1996; Crick et al., 1997; Crick & Grotpeter, 1995; Galen & Underwood, 1997; Lagerspetz et al., 1988). These recent findings have contradicted past research suggesting that males are more aggressive and have ignited interest in the concept of female aggression.

When people think of aggression, they may have a tendency to think of physical assault, some form of physical defiance, something that is committed through force, and perhaps most importantly an act that is overt and visible. Aggression is defined as “an unprovoked act of hostility” (The New International Webster’s Pocket Dictionary of the English Language, 2002, p. 17). This definition of aggression can encompass more aspects than just physical aggression and includes other subtle forms of aggression as well.
Relational, social, and indirect aggression are other forms of aggression, which can be more covert than physical/overt aggression. Relational aggression is defined as behaviors that harm others through damage (or the threat of damage) to relationships or feelings of acceptance, friendship, or group inclusion. These behaviors include acts such as giving someone the ‘silent treatment’ to punish him/her or get one’s own way, using social exclusion as a form of retaliation, or threatening to end a friendship unless the friend complies with a request. (Crick, Werner, et al., 1999, p. 77)

Separate from relational aggression, yet still somewhat similar, are social and indirect aggression. Galen and Underwood (1997) described social aggression as a tactic directed toward damaging another’s self-esteem, social status, or both, and may take direct forms such as verbal rejection, negative facial expressions or body movements, or more indirect forms such as slanderous rumors or social exclusion. (p. 589)

Although any style of aggression can be indirect, indirect aggression is another exemplar of relational and social aggression. Unlike relational and social aggression, with indirect aggression, the perpetrator can remain unidentified. Lagerspetz et al. (1988) stated that “one feature of indirect aggression is that the aggressor may remain unidentified, thereby avoiding both counterattack from the target and disapproval by others” (p. 404). The purpose of indirect aggression is to make it seem as if there was no intent to hurt another at all. The lack of apparent intent is possible by using others as a means to inflict harm on a targeted person (Simmons, 2002). An example of indirect aggression would be to write a slanderous comment about a person on a bathroom wall.
In this type of aggression, the victim does not know who the perpetrator is since it is an anonymous act.

Relational, social, and indirect aggression are all used as a vehicle to harm another person. However, unlike physical aggression, which is relatively obvious to an observer, relational forms of aggression are less likely to be noticed by an observer (Crick & Grotputer, 1995; Lagerspetz et al., 1988; Underwood, 2003). Females were found to use these types of aggression more often than males (Crick et al., 1996; Crick et al., 1997; Crick & Grotputer, 1995; Galen & Underwood, 1997; Lagerspetz et al., 1988), which could explain why many believed that males are more aggressive. However, it is not that males are more aggressive, it is the difference in how the sexes display their aggression that makes male aggression more noticeable. A possible explanation for the gender differences in the styles of aggression used could be society’s differing expectations and roles for males and females. Society is more accepting of males displaying aggressive tendencies because it is thought to be a more masculine trait. However, females are expected to be more reserved and proper in their behaviors, which could be a factor in why females have been found to aggress in more covert ways (Crick et al., 1996; Crick & Grotputer, 1995; Crick & Nelson, 2002, Lagerspetz et al., 1988).

Researchers have also found that a variety of aggressive acts are occurring at such young ages as preschool (Crick, Casas, & Ku, 1999; Crick et al., 1997; Crick, Casas, & Nelson, 2002; Dunn, Cutting, & Fisher, 2002; Galen & Underwood, 1997; Ladd, Price, & Hart, 1988; Theimer, Killen, & Stangor, 2001; Vaughn, et al., 2000). The aggression displayed by very young children has typically been found to be overt rather than covert due to undeveloped social skills and unsophisticated ways of expressing their anger.
(Crick, Werner, et al., 1999). However, even in preschool, girls were more likely to use relational types of behaviors such as telling another child they will not play with them if they do not give them a toy, whereas boys were found to use more physical means of aggression (Crick, Casas, et al., 2002). By the third grade, girls were found to use covert styles of aggression, and in fact, researchers have found girls view covert styles of aggression as relatively normative within their age group (Crick et al., 1996).

Crick, Casas, et al. (2002) found that girls were more relationally victimized than boys in preschool and middle childhood (third through sixth grade), yet few studies have examined the early elementary school age group (Kochenderfer-Ladd & Wardrop, 2001). This study gathered teacher’s assessments of aggression styles in a kindergarten through second grade population to assess gender differences in the style of aggression used. This researcher was interested in determining if children in kindergarten through second grade used relationally aggressive tactics in their social interactions. Although there are many forms of covert aggression, for the purpose of this study the focus was on the use of relational aggression. The purpose of the present study was to add information to the research regarding this age group to the studies that had previously been conducted on preschool through college age students. Another purpose of the present study was to determine whether children in kindergarten through second grade were capable of using relationally aggressive tactics and to examine the gender differences in the styles of aggressive tactics used in this age group through teacher report.

This study complements previous studies that have researched relational aggression; however, this study is one of the first ones to assess relational aggression in kindergarten through second grade using teacher reports. It was designed to investigate
whether relational aggression exists in a kindergarten through second grade population according to teacher report. As a means for assessing relational aggression in this age group, some items from the Preschool Social Behavior Scale – Teacher Form (PSBS-T) (Crick et al., 1997) and some items from the Child Social Behavior Scale – Teacher Form (Crick, 1996) were used to assess all children in participating classrooms. Participating teachers were asked to assess each of their students on the new Social Behavior Scale in order to evaluate the incidence of relationally aggressive acts and overtly aggressive acts between genders.
CHAPTER TWO

Review of Literature

What is female aggression?

In order to understand female aggression, a broader description of aggression must be employed. In general, aggression manifests itself either physically or non-physically. For example, it can be in the form of a physical attack (physical aggression) or it can be in the form of passive-aggressiveness, refusal, and manipulation, among other forms (nonphysical aggression). Both of these broad types of aggression can be either overt or covert. Overt aggression can be seen and the victim knows who the perpetrator is. Overt aggression can manifest itself by physical, verbal, or relational means, such as making mean faces, rolling one’s eyes, and engaging in verbal attacks. Covert aggression is aggression that is not seen, and the victim may or may not know who the perpetrator is. Rumor spreading is an example of covert aggression.

According to numerous researchers (Crick et al., 1996; Crick et al., 1997; Crick & Grotpeter, 1995; Crick, Casas, et al., 1999; Galen & Underwood, 1997; Lagerspetz et al., 1988), girls have been found to use more non-physical styles of aggression. Past research has defined three styles of nonphysical aggression that is typical of girls: relational aggression, social aggression, and indirect aggression (Crick & Grotpeter, 1995; Galen & Underwood, 1997; Lagerspetz et al., 1988). All of these styles can be either overt or covert, although researchers have found that girls typically engage in more covert styles.
of nonphysical aggression (Crick et al., 1996; Crick et al., 1997; Crick & Grotpeter, 1995; Crick, Casas, et al., 1999; Galen & Underwood, 1997; Lagerspetz et al., 1988). It is important to understand the styles of nonphysical aggression as well (i.e., relational, social, and indirect aggression), as they all share similar qualities and characteristics.

Traditionally, relational aggression has been defined as behaviors that are intended to harm one’s relationships with his/her peers and included gossip spreading with the intention of persuading others not to like another peer, excluding peers from a play group with the intention of destroying the victim’s relationships with others inside the group, or withdrawing from a friendship in order to get one’s way (Crick, 1996; Crick et al., 1996; Crick & Grotpeter, 1995). Relationally aggressive behaviors can be both overt and covert. These behaviors can be accomplished through overt verbal aggression when verbal insults are openly exchanged, but it can also be covert when verbal insults or rumors are spread behind the victim’s back with the intention of destroying relationships.

Another nonphysical form of aggression, that was found to be commonly used by females, was social aggression. Galen & Underwood (1997) coined the term ‘social aggression’ and defined it as a “class of behaviors . . . that serve the function . . . to hurt another person by doing harm to her self-concept or social standing” (p. 589). Social aggression is slightly different from relational aggression in that not only does it encompass behaviors that are intended to damage a relationship or ruin one’s social status but also can include nonverbal behaviors aimed at damaging one’s self-esteem, such as rolling one’s eyes, using a snide tone of voice, or making faces (Crick, Werner, et al., 1999; Galen & Underwood, 1997). Underwood (2003) described social aggression as a
Behavior directed toward harming another’s friendships, social status, or self-esteem, and may take direct forms such as social rejection and negative facial expressions or body movements, or indirect forms such as slanderous rumors, friendship manipulation, or social exclusion. (p. 5)

Indirect aggression was another style of nonphysical aggression with a covert nature that females have been found to use more than males (Lagerspetz et al., 1988). Indirect aggression is used as a nonconfrontational method of aggressing where the victim is not aware of the identity of the perpetrator, and this method does not involve direct manipulation of a relationship (Crick, Werner, et al., 1999). It included behaviors such as drawing sides between friends, starting rumors, and befriending someone else in revenge (Lagerspetz et al., 1988). Simmons (2002) stated indirect aggression is a “covert behavior in which the perpetrator makes it seem as though there has been no intent to hurt at all. One way this is possible is by using others as vehicles for inflicting pain on a targeted person, such as by spreading a rumor” (p.21).

*Gender differences in the styles of aggression used*

Researchers found that females were more prone to use covert forms of aggression (Crick et al., 1996; Crick, Casas, et al., 1999; Crick et al., 1997; Crick & Grotpetr, 1995; Galen & Underwood, 1997; Lagerspetz et al., 1988). More specifically, females were more likely to use relational, social, or indirect aggression than physical aggression. When girls were assessed with measures of relational aggression, they exhibited these aggressive behaviors at an equal frequency as do boys who were assessed on physical aggression measures (Crick & Grotpetr, 1995; Rys & Bear, 1997). Perhaps even more telling was research that found that relational aggression was considered
normative by female participants within their third through sixth grade peer groups (Crick et al., 1996).

Many study outcomes have shown that gender differences have existed in the style of aggression used. Crick and Grotpeter (1995) conducted a study that illustrated that girls were not less aggressive than boys, they just used different styles. They found that females were more likely to be nominated by their peers on questions that measured relational aggression, and males were more likely to be nominated by their peers in response to questions that measured overt aggression. Therefore, the researchers found that relational aggression was more characteristic of girls, whereas boys were found to be more overtly aggressive.

In another study, Crick et al. (1996) asked third through sixth grade children to describe what girls and boys did to other girls and boys when they were angry. Results showed that both boys and girls cited relational acts as more typical of girls, and both groups cited physical aggression as being more typical of boys.

Children do not display aggression to only those children they dislike, but rather, these behaviors have been found to exist within friendships as well. Crick and Nelson (2002) examined whether gender differences in relational and physical victimization occurred in dyadic friendships in children in the third through sixth grades. They found that girls had higher instances of relational victimization within their friendships with other girls, and boys had higher instances of physical victimization within their friendships with other boys.

Although Crick and Grotpeter (1995) have concluded that both genders act in aggressive ways, it is important to keep in mind that the percentage of children who
actually displayed aggressive behaviors, whether relational or physical, was small in comparison to the whole classroom population. In their study only about 16% of the boys in a sample of 491 third through sixth graders scored highly on measures of physical aggression, and only about 17% of girls in the same population scored highly on measures of relational aggression.

Developmental trends

When did children start showing aggression? Researchers have suggested that males and females have not always differed in the styles of aggression used. Hartup (1974) conducted one of the first studies of childhood aggression. He observed aggression in preschoolers, first, and second graders. He defined aggression as “intentional physical or verbal responses that are directed toward an object or another person and that have the capacity to damage or injure” (p. 339). He found that although boys were more aggressive overall, children younger than six years of age displayed more physical aggression than older children in the sample, regardless of gender. In addition, Hartup found that elementary school children were more likely to retaliate with a verbal insult than preschoolers, which suggested that older children developed more sophisticated ways of expressing their aggression.

Researchers found that young children started to exhibit forms of aggression as early as preschool, (Crick, Casas, et al., 1999; Crick et al., 1997; Crick, Casas, et al., 2002; Killen, Pisacane, Lee-Kim, Ardila-Rey, 2001; Ladd et al., 1988), although as children developed they exhibited aggressive acts in different ways. Crick et al. (1997) found that because of their limited communication and expressive abilities, preschoolers were incapable of using more covert forms of relational aggression. Rather, they usually
used more direct means to show aggression, such as verbally telling another child they would not play with them if they did not give them a toy, or putting their hands over their ears if they wanted to express to another child that they did not want to talk to them (Crick, Casas, et al., 2002). Even at this age, girls were more likely to use relational types of behaviors than boys (Crick et al., 1997). Crick, Casas, et al. (1999) examined the degree of both physical and relational victimization in preschool. The researchers found that girls were more relationally victimized than boys, and boys were more physically victimized than girls. Even though preschoolers may have aggressed in more overt ways, they still used relational tactics. Crick et al. (1997) found that preschoolers were usually not hindered by the presence of adults when they engaged in relationally aggressive types of behaviors, which made it easier to identify than when children became older and used more covert forms of aggressive behaviors.

McNeilly-Choque, Hart, Robinson, Nelson, and Olsen (1996) were interested in studying preschoolers and their use of relational aggression, overt instrumental aggression, and their bullying behavior. They found that preschool girls were more verbally relationally aggressive than boys, whereas boys were found to be more instrumentally aggressive than girls. However, they found no relationship between gender and nonverbal relational aggression or bullying. The researchers suggested that preschoolers have not yet developed the necessary social skills and nonverbal communication skills that were needed to relationally aggress in a nonverbal fashion.

Lagerspetz and Bjorkqvist (1994) stated that in younger children direct styles of aggression were most common, but by adolescence the aggression shifted into more indirect styles, particularly in girls, because of better developed social skills. The
researchers studied a sample of children between the ages of eight through nineteen years. They asked each child what other boys/girls did when they were mad at someone. They found that at all ages, except the ages of eight and nine, the use of indirect aggression was more common in females. Within the ages of eight and nine, girls were not found to use indirect aggressive means more than boys. Lagerspetz and Bjorkqvist (1994) explained this finding by arguing that girls were not socially mature enough in this age group. The researchers’ findings supported the possibility that as children aged, they developed more social skills, and along with those skills, more covert and indirect means to respond aggressively.

Crick and her colleagues have conducted numerous studies with children between the ages of 9 through 12 in regard to their use of relational aggression. The results of this research had consistently suggested that girls displayed more acts of relational aggression, while boys displayed more acts of physical aggression (Crick, 1996; Crick & Bigbee, 1998; Crick et al., 1996). Crick and Grotpeter (1995) hypothesized in a sample of the same population that girls would attempt to harm their peers through relational aggression, specifically, attempting to harm another’s friendship or sense of security within that friendship. The researchers found that relational aggression was very distinct from overt aggression by the sixth grade and significantly related to gender. Crick et al. (1996) found that girls viewed relational aggression as relatively normal within their peer groups, but boys viewed physical aggression as more normative for both boys and girls in a third through sixth grade population.
Other researchers suggested that as children progressed through late adolescence and early adulthood, there were changes observed in the styles of aggression as well. For example, Galen and Underwood (1997) asked participants who ranged in age from 6-years-old to 16-years-old if they considered behaviors typical of social aggression as eliciting anger and dislike. These behaviors included staring, ignoring, or making snide comments. They found that the middle and high school participants considered those behaviors as indicating more dislike and anger than did the elementary school age children. The researchers suggested that by the time children reached middle and high school, these types of behaviors were relatively normative and commonplace as a means of eliciting dislike.

Others have discovered these behaviors continued even in college. Linder, Crick, and Collins (2002) assessed college students’ use of relational aggression in their relationships. Not surprisingly, men reported being victims of relational aggression from their female partners more than women did of their male partners.

In summary, developmentally speaking, females were shown to be more likely to exhibit relational aggression, regardless of whether it is overt or covert, than males. However, as females developed better social skills, their use of relational aggression became more covert.

Reasons for gender differences in the styles of aggression used

Researchers have discovered and hypothesized many reasons why males and females differ in their styles of aggression. Lagerspetz et al. (1988) cited societal gender roles as a possible explanation for the gender differences. The researchers argued that
societal pressure to conform to gender roles might be a factor as to why a difference in styles of aggression is seen. In other words, society may be more accepting of boys acting in aggressive ways than it is of girls. Lagerspetz et al. stated that, “if direct aggression is discouraged by society for females more than for males, females possibly will make greater use of indirect forms of aggression instead” (p. 404). Other researchers have also cited societal gender expectations to explain why there is a more definite shift toward using only relationally aggressive tactics by females by third grade (Crick et al., 1996; Crick & Grotpeter, 1995; Crick & Nelson, 2002).

Crick, Werner, et al. (1999) explained the increase in more covert and indirect means of aggression as children developed as a result of both social expectations and increases in cognitive development. They argued that as children matured they learned more sophisticated ways of dealing with social situations. In combination with social expectations to not behave in overtly aggressive ways, as children matured they learned to manipulate relationships to get what they wanted and used relationships as a way of expressing their aggression. The researchers stated that

. . . the increase in the salience of these social issues, in addition to the language and cognitive skills acquired during middle childhood (e.g. increases in memory and vocabulary, the ability to view one’s own thoughts, feelings, and behavior from another person’s perspective), contributes to the children’s ability to use the peer group as an effective means for hurting others. (p. 91)

Other researchers had found that by the mid-to later elementary grades, children started to develop and placed more importance on dyadic friendships. Dyadic
relationships were found to also breed circumstances where relational aggression was common (Cairns, Cairns, Neckerman, Ferguson, & Gariepy, 1989; Crick & Nelson, 2002; Galen & Underwood, 1997; Greener & Crick, 1999; Grotpeter & Crick, 1996; Lagerspetz et al., 1988). Grotpeter and Crick (1996) studied dyadic friendships in third through sixth grade students to determine if relational aggression was used within close intimate friendships. They specifically wanted to know if those who engaged in highly conflictual interactions with their peers would use relationally aggressive tactics within their close friendships or if they went to these friendships for support. They concluded that those who engaged in conflictual peer interactions had no differences in their dyadic friendships than other peers, except for the fact that their friendships were usually more intimate and exclusive. Based on these findings, the researchers believed that females attack friendships because it is valued among females (Grotpeter & Crick, 1996).

Crick and Grotpeter (1995) suggested that the purpose of using these styles of aggression was to harm the other peer’s feelings or sense of safety in their relationship. The researchers stated that girls might be more prone to use this style of aggression because it damaged close relationships with other girls. Past studies have shown that girls valued close, intimate friendships (Greener & Crick, 1999). Therefore, this style of aggression ruined something girls held as valuable.

Intimacy and exclusivity was usually valued by those who used relational aggression because it was another way to control the relationship and hurt the other person. Galen and Underwood (1997) found that girls tended to value intimacy in their friendships, whereas boys tended to value participating in the same activities. This
finding again supported a possibility of why girls might resort to relationally aggressive acts while boys may not.

If girls valued friendships, they would manipulate those relationships as a way to aggress, while boys would aggress in other ways that they find valuable and important to them. To support this hypothesis, Cairns et al. (1989) found that as girls approached early adolescence, there was a decrease in physical aggression themes, and an increase in social alienation themes. They also found that social exclusion within girls’ conflicts increased as they entered adolescence. Lagerspetz et al. (1988) found that in children aged ten and eleven years, girls were found to use more indirect aggressive styles than boys. Girls were also said to have anger that lasted longer than boys, were found to have more dyadic friendships than boys, and were found to consider their friendships of greater emotional significance than boys. More importantly, the researchers suggested that girls became more exclusive with their friendships, which could have resulted in more reason and opportunity to use relationally aggressive styles, since relationships with friends seemed to be very important to girls as they developed and became older. However, it is important to again note that only a small percentage of girls exhibited relational aggression, and that having intimacy and exclusivity within friendship did not always set up a situation in which relational aggression was employed (Crick & Grotpeter, 1995).

Effects of victimization

The detrimental effects relational aggression has on relationships and the victim had been studied extensively. Increased light has been shed on relational aggression due to its bullying characteristics. Relational aggression, social
aggression, and indirect aggression were shown to cause as much harm to the victim as physical aggression (Buhs & Ladd, 2001; Crick, 1996; Crick, Casas, et al., 1999; Crick et al., 1997; Crick & Nelson, 2002; Crick, Werner, et al., 1999; Kochenderfer-Ladd & Wardrop, 2001; Ladd, 1990; Ladd & Burgess, 1999). The consequences of being victimized were extensive. Many researchers found evidence supporting the theory that being the victim of peers’ physical and relational aggression caused social maladjustment and social-psychological harm (Crick, 1996; Crick & Bigbee, 1998; Crick, Casas, et al., 1999; Crick et al., 1997; Crick & Grotpeeter, 1995; Crick & Nelson, 2002; Hunter & Boyle, 2002; Kochenderfer-Ladd & Wardrop, 2001). For example, children who were victimized by their peers were found to have higher levels of loneliness (Kochenderfer-Ladd & Wardrop, 2001). Crick and Nelson (2002) found that children who experienced relational peer victimization also had higher instances of friend relational aggression. The researchers suggested that this end result could be because children were not taking the initiative to stop the aggression, but were accepting it. Linder et al. (2002) found that if a child’s relationship was characterized by use of relational aggression within that relationship, it affected the quality of their friendships and relationships. Involvement in unhealthy relationships, like ones characterized by the use of relational aggression, impacted the way in which children conducted their own future relationships (Linder et al, 2002).

Researchers found that a stigma surrounded victims, and the stigma alone caused social and psychological maladjustment. Crick, Casas, et al. (1999) found
that relationally victimized children were less accepted by their peers than those who were physically victimized. They also had more internalizing problems such as being anxious, fearful, and depressed. The researchers found that in third through sixth grades, younger children experienced more internalizing emotional problems. In addition, teachers rated relationally victimized children as having less positive peer relations. Crick and Bigbee (1998) found similar results. The researchers found victims of relational aggression possessed higher instances of low self-esteem, problematic friendships, and emotional distress.

Hunter and Boyle (2002) found support for the theory that the covert style of relational aggression was one possible reason why being a victim of this type of aggression caused internalizing problems, such as depression and anxiety. They hypothesized that physical aggression was instant and over with relatively fast, but relational aggression was less easy to control or monitor. Therefore, this covert style of aggression would continue for days and the victim did not need to be physically present to experience the damaging effects of the victimization. They hypothesized that victims of indirect and verbal aggression would have lowered perceived control of a bullying situation because dealing with an unseen bully would cause one to feel a lack of control in the situation causing internalizing problems. They discovered that girls reported having no feelings of control when being bullied, whereas boys reported feeling more in control of a bullying situation. The researchers explained that the finding was due to girls’ use of more covert styles of aggression, while also being the victims of more covert styles of aggression more than boys. Therefore, girls felt less in control of a situation because they
could not physically control it, which caused them to experience stress and internalizing problems (Hunter & Boyle, 2002).

There is an argument that these types of behaviors have occurred everyday for years as a type of rite of passage and, therefore, some have argued the behaviors were not harmful. Crick et al. (1996) tested whether children in a third through sixth grade population viewed relationally aggressive acts as representing anger and an intent to harm. The results confirmed that girls viewed relational aggression as an expression of anger and an intent to harm more than did the boys sampled. The researchers argued this result could be because girls were more likely to use and be recipients of these styles of behaviors, so they viewed it as more as intent to harm than males. Showing or expressing anger and intending to do harm are normally found to be thought of as characteristics of aggression. Therefore, the researchers argued that girls viewed these behaviors as aggressive.

Theimer et al. (2001) found that even preschoolers were aware of the harmfulness of using exclusion in the peer context. The researchers conducted a study with preschoolers and evaluated whether they believed exclusion from a play situation based on gender was appropriate or if they saw it as hurtful. Sixty percent to 70% of the children found exclusion to be wrong. Killen et al. (2001) found similar results as 87% of the preschool participants judged exclusion from play to be wrong. The researchers suggested that even at very young ages, children recognized behaviors considered to be socially and relationally aggressive as wrong and hurtful.

Not only has victimization caused psychological harm and social maladjustment, it had also been found to have a detrimental effect on schoolwork and participation. Buhs
and Ladd (1999) studied kindergarten students and hypothesized that peer rejection would cause classroom participation to decline because rejected children would be threatened by increased ridicule. They found that classroom participation, as well as achievement and emotional adjustment, declined in rejected and victimized students. They further explained this finding by suggesting that rejected children avoided classroom activities that involved any abusive peers, which led to a decreased interest in the schoolwork (Buhs & Ladd, 2001). Ladd (1990) also found that students who had friends enjoyed school more, had better school performance, and had better adjustment when transitioning into older grades. On the other hand, rejected children had more school avoidance, lowered school performance, and disliked school more (Ladd, 1990).

*How to assess relational and social aggression*

Multiple methods have been found to be effective when assessing relational aggression. Common methods included peer reports, self-reports, teacher reports, and direct observations. For the purpose of this study, only a few of the methods are discussed due to the nature of this research.

*Peer and self-reports.* A common peer report method was to have students nominate up to three classmates on a particular measure (Ladd & Kochenderfer-Ladd, 2000; McNeilly-Choque et al., 1996; Rys & Bear, 1997). Self-reports are another popular method used in assessing relational and social aggression (Buhs & Ladd, 2001; Crick & Nelson, 2002; Kochenderfer-Ladd & Wardrop, 2001). This method required students to rate themselves on different aspects of aggression.

Both peer and self-reports were criticized as being unreliable measures for use at all age levels with children. For instance, Ladd and Kochenderfer-Ladd (2002) stated that
little was known about the reliability and validity of peer reports in young children. They stated, “...young peers have high levels of exposure to children’s behavior, but may lack the requisite cognitive skills to distinguish and remember certain types of interactions” (p. 76). The researchers conducted a study with the purpose of examining the psychometric properties of peer and self-reports of victimization. They found that concordance between peer and self-reports was minimal in kindergarteners and first graders (Ladd & Kochenderfer-Ladd, 2002). The researchers suggested that peer and self-reports were not in agreement in the amount and type of victimization that was occurring within this age group. They then stated that

Perhaps, during early childhood, peers are not reliable informants about their classmates’ victimization experiences because they lack the skills needed to monitor, encode, and recall the identities of victims or the schemas needed to understand the concept of victim. (p. 84)

Ladd and Profilet (1996) also stated that although young children might have the most exposure to aggressive acts, young children might not have the “...necessary cognitive and perceptual skills needed to recognize and distinguish [between different forms of aggression]” (p. 1009). In other words, the researchers argued that young children might not think that a covert style of aggression, such as exclusion, was aggressive because it did not present itself in a stereotypical way. The researchers argued that preschoolers would view more overt styles of aggression, like name calling or hitting, as more aggressive due to the fact they were not yet able to distinguish between different forms of aggression like older children and adults could. Ladd and Profilet (1996) further
stated that peer reports were problematic for use in young children because, depending on how the test measures were presented, young children’s perceptions of their peers influenced the memories they had of their past actions. For instance, if they liked a peer, they would not remember past instances of aggression that the peer exhibited because they remembered an overall picture rather than individual instances (Ladd & Profilet, 1996).

Like peer reports, self-reports also had problems. McNeilly-Choque et al. (1996) conducted a study to determine what measurement techniques (peer reports, self-reports, teacher reports, or observations) were the best way to measure relational and overt aggression in preschoolers. The researchers found that teachers and observers were better than peer and self-reports to make distinctions between styles of relational and overt aggression at this age. The suggestion is that young children could not distinguish between the styles of the aggression at this age. The researchers also found that peer reports alone were not able to make gender-based findings for relational aggression. This finding was consistent with the Crick et al. (1997) study where gender differences were not found using peer assessments of preschoolers alone.

Teacher reports. Empirical support has been found for teacher reports in measuring relational aggression, particularly in the younger age group. Ladd and Profilet (1996) stated that teachers were more sophisticated judges of behavior compared to young children. They developed a teacher rating scale used for measuring aggression, withdrawal, and prosocial behavior. The researchers advocated for a teacher rating scale because they felt that young children were not adequate judges of recognizing different
forms of aggression, whereas adults were more sensitive to the many methods of aggression used by children.

Crick (1996) used both teacher and peer reports to assess victimization, future adjustment, and stability in third-through sixth-grade students. She borrowed the same peer report measures she used in a previous study (Crick & Grotpeter, 1995) but also created a teacher rating measure of children’s behavior called the Children’s Social Behavior Scale – Teacher Form (CSBS-T). The CBST-T measured relational aggression, overt aggression, prosocial behavior, and acceptance by peers. The CBST – T yielded Cronbach’s alphas of .94 for both the relational and overt aggression subscales and Cronbach’s alpha of .93 for the prosocial behavior subscale. The Cronbach’s alphas suggested the scale reliably measured relational and overt aggression. Analyses examining the correlation between the peer measure and the teacher measure yielded $r = .57, p < .001$ for boys and $r = .63, p < .001$ for girls. For the subscale of overt aggression, analyses of the relationship between teacher and peer reports yielded $r = .69, p < .001$ for boys, and $r = .74, p < .001$ for girls. (Crick, 1996). Crick stated that based on these findings, teacher assessments of relational aggression may serve as a substitute for peer assessments. She stated,

In past research, investigators have relied on peer informants to assess relational aggression. Other informants have not been employed because relationally aggressive behaviors have been considered too subtle and too dependent on insider knowledge about the peer group for those outside the group to reliably assess. However, the association between peer and teacher reports of relational aggression reported here are encouraging, and
they indicate that teacher assessments of relational aggression may serve as a valid substitute for peer assessments when peer informants are unavailable. (p. 2325)

Crick, Werner, et al. (1999) also stated

Similar to the peer nomination instrument, teachers’ reports of relational and physical aggression have been shown to be internally consistent, and factor analyses have yielded separate factors for the two forms of aggression for both preschool and grade school samples.

Therefore, there was support for using teacher reports in young age groups, particularly when obtaining information from the children was difficult due to the inability to read or recognize aggressive qualities within themselves.

Crick et al. (1997) developed a reliable, age-appropriate teacher report instrument to assess relational aggression in preschoolers. This method was important because peer nomination methods could not be easily implemented in young age groups where they could not read the questions. The researchers argued that peer or self-reports in young children were not necessary in this age group because due to their age they were less likely to be inhibited by an adult presence. Therefore, teachers would have an adequate idea of the behaviors that occurred within the peer context, whereas in older grades teachers were not the most reliable source (Crick et al., 1997). The researchers developed the Preschool Social Behavior Scale – Teacher Form (PSBS-T) that assessed relational aggression, overt aggression, prosocial behavior, and depressed affect. They also developed a peer-nomination measure (Preschool Social Behavior Scale – Peer Form; PSBS-P) that assessed relational aggression, overt aggression, and prosocial behaviors.
The teacher form was found to be highly reliable with four factors yielding Cronbach’s alphas of .96, .94, .88, and .87, respectively.

McNeilly-Choque et al. (1996) listed many advantages to using teacher reports in their study conducted for the purpose of examining the different measurement techniques of overt and relational aggression of preschoolers. They stated that teachers saw behaviors in many situations and contexts and were able to provide unbiased or objective information. They also stated that teachers were able to distinguish between behaviors, whereas preschoolers were not capable of distinguishing between styles of overt aggression, such as physical bullying and name-calling. The researchers argued that since some relational aggression is covert and not as easily recognizable as more overt aggressive acts such as pushing or shoving, teachers were better judges of providing information as to whether relationally aggressive-type behaviors occurred at this age (McNeilly-Choque et al., 1996). In their study, which evaluated different measurement techniques, they used the Preschool Social Behavior Scale – Teacher Form (PSBS-T) (Crick et al., 1997), observations, and peer nominations. Results showed that teacher and peer assessments had better cross-informant consistency for boys, whereas teacher reports and observations had better cross-informant consistency for girls. The researchers contended that since teacher reports were common in both genders, they were the preferable measurement technique for assessing relational aggression in preschool (McNeilly-Choque et al., 1996).

Rys and Bear (1997) used the CSBS-T (Crick, 1996) to determine if relational aggression existed in third and sixth graders. They analyzed the correlations between the teacher and peer reports and found that the teacher report correlated .52 for the relational
aggression subscale, .66 for the overt aggression subscale, and .49 for the prosocial behavior subscale when compared to the subscales of a peer report. They found that these correlations were higher than the average correlation of around .42 that have been previously found in past studies (Crick & Grotpeter, 1995). This finding lented support that the CSBS-T was an adequate measure to assess the constructs of relational and overt aggression.

Ladd and Mars (1986) examined the reliability and validity of preschoolers’ perceptions of their peer’s aggressive behavior, along with their assessments of their peer’s prosocial and nonsocial behaviors against teachers’ ratings and observations of the same constructs. The researchers found that peer and teacher ratings highly correlated for aggressive behavior; however, the teacher reports were found to be superior to peer reports for other behaviors. The researchers suggested that teachers are reliable informants for assessing aggression and other behaviors within their preschool population. Coie and Dodge (1988) also found that teachers were best able to distinguish between types of behaviors when comparing peer ratings, observations, and teacher ratings in first- and third-grade boys. The researchers found that teachers were better able to distinguish between styles of aggression than were the students. The students were more likely to recognize only physical aggression as being aggressive. This finding again supported using teacher ratings over peer ratings or observations when attempting to distinguish between types of aggression.

Ladd and Kochenderfer-Ladd (2002) conducted a study on children in second-through fourth-grade as a means to examine the psychometric properties of teacher, self,
peer, and parent reports. They used a teacher report measure that assessed physical, direct verbal, indirect verbal, and a general measure of victimization. The researchers found that the measure yielded acceptable alphas, with all four alphas being between .79 and .90. They also found that the stability estimates were higher in the younger grades than for the older grades. The researchers suggested that teachers might be better indicators of victimization in younger children than the young children were themselves. Ladd and Kochenderfer-Ladd (2002) argued that in the younger grades of their population teachers were better identifiers of victimization, stating that, “Teachers may be especially prone to identify victims who are aggressive or withdrawn in their interactions with peers” (p. 21). They further stated that

Subjective appraisals (self-reports) are more prone to distortions arising from intrapersonal factors (e.g., social desirability, over- or underestimation of the frequency or severity of events) than external observers’ assessments . . . relative to peer or teacher reports, children’s estimates may be inflated by subjectivity biases (e.g., exaggeration of frequency, severity). (p. 24)

Overall, researchers found support for using teacher report methods to assess relational aggression in young age groups for many reasons. Such reasons included difficulty with young age groups being able to recognize the differences between overt and covert aggression within themselves and their peers (Ladd & Kochenderfer-Ladd, 2002; Ladd & Profilet, 1996; McNeilly-Choque et al., 1996), and difficulty assessing young age groups when they cannot read rating scales (Crick, 1996; Crick et al., 1997).
Purpose

Studies on relational aggression have been conducted with preschoolers and later elementary grades through adulthood. Few studies have been done that focus on the early elementary grades, particularly kindergarten through second grade, and those studies that have been done have focused on the effects and causes of peer exclusion and peer victimization, rather than assessing the styles of aggression being used (Gazelle & Ladd, 2003; Hart, Ladd, & Burleson, 1990; Kochenderfer-Ladd & Wardrop, 2001; Ladd, 1990; Schwartz, Dodge, Pettit, & Bates, 2000). Early elementary is an important age to study because children are just entering school and are introduced to new peers. For many children, this is the time in which they experience a social setting on a regular basis. For the purpose of this study, we focused on teacher reports of relational aggression in a kindergarten through second-grade population because no studies have addressed the use of relational aggression in this age group.

This study investigated the prevalence of relational aggression among boys and girls in a kindergarten through second-grade population using teacher reports. There was no scale that assessed relational aggression in the kindergarten through second-grade age group, so relational aggression was assessed using selected items from the Preschool Social Behavior Scale – Teacher Form (PSBS-T) (Crick et al., 1997). Items measuring relational aggression were also taken from the Child Social Behavior Scale – Teacher Form (CSBS-T)(Crick, 1996) and were used. This scale was developed for use with children in third through sixth grades.

The purpose of this study was to investigate the incidence and styles of aggression used in a kindergarten through second-grade population by examining the following
hypotheses. Hypothesis I predicted teachers would report a greater incidence of relational aggression in girls and would report less incidence of relational aggression in boys. Hypothesis II predicted teachers would report a greater incidence of overt aggression in boys and would report less incidence of overt aggression in girls. Hypothesis III predicted teachers would report a greater incidence in covert styles of relational aggression among the older population sampled as opposed to more overt styles of relational aggression in the younger population sampled.
CHAPTER THREE

Method

Participants

Four kindergarten teachers, four first-grade teachers, and four second-grade teachers were asked to rate each of their students on selected questions from the PSBS-T (Crick et al., 1997) and on selected questions from CSBS-T (Crick, 1996) to assess their use of relational and overt aggression. Three teachers per grade were from southern Kentucky, and one teacher per grade was from southern Indiana. Consent was obtained from school principals to ask their teachers to participate. A total of 257 children were assessed by their teachers: 132 females and 125 males. Identifying information was obtained for their sex, age, and grade only.

Materials

The teacher form of the Preschool Social Behavior Scale (PSBS-T) (Crick et al., 1997) and the Children’s Social Behavior Scale (CSBS-T) (Crick, 1996) were modified to include selected questions that assessed relational and overt aggression. Only the questions that assessed relational and overt aggression were used. The relational aggression factor on the PSBS-T unmodified scale accounted for 50% of the variation, and the overt aggression factor accounted for 10% of the variation. Crick et al. (1997) reported the relational aggression factor on the unmodified PSBS-T scale had a Cronbach’s alpha of .96, and the overt aggression scale had a Cronbach’s alpha of .94. Although the test-retest reliability of this scale was not known, Peter Ralston (personal
communication, February 26, 2004) stated, “Generally speaking there is a high level of stability for each of the subscales. Correlations with our most recent projects range from approximately .6 to .8 about 5 months later.” Items that measured only relational aggression were also taken from the Child Social Behavior Scale – Teacher Form (CSBS-T) (Crick, 1996). This scale was developed for use in children in third through sixth grades. This unmodified scale yielded a Cronbach’s alpha equal to .94 for relational aggression. The Social Behavior Scale was the resulting scale used for this research.

Questions that measured relational aggression were taken from both the PSBS-T and the CSBS-T because the scales differed in the type of relational aggression measured (See Appendix A). The PSBS-T measured more direct/overt styles of relational aggression, or more obvious styles of relational aggression, and the CSBS-T measured more covert styles of relational aggression. Although the PSBS-T had very similar items as the CSBS-T, the PSBS-T had more general examples and illustrations of behaviors than the CSBS-T. For example, one factor of the PSBS-T stated, “Tries to get others to dislike a peer,” whereas the CSBS-T factor that is equivalent to that question stated, “This child tries to get others to dislike certain peers by telling lies about the peer to others.” Both scales assessed the same domain with very similar questions, but the PSBS-T used questions that assessed more direct verbal relational aggression as opposed to indirect verbal relational aggression on the CSBS-T. Further examples included the PSBS-T asking, “Tells a peer that he or she won’t play with that peer or be that peer’s friend unless he or she does what this child asks,” versus, “This child threatens to stop being a peer’s friend in order to hurt the peer or to get what she or he wants from the peer,” which was on the CSBS-T. The PSBS-T asks, “Tells others not to play with or be a
peer’s friend, tells a peer that they won’t be invited to their birthday party unless he or she does what the child wants, verbally threatens to keep a peer out of the play group if the peer doesn’t do what the child asks,” in comparison to the CSBS-T, which asked, “When this child is mad at a peer, she or he gets even by excluding the peer from his or her clique or peer group, this child spreads rumors or gossips about some peers, this child tries to get others to dislike certain peers by telling lies about the peers to others.”

Both scales were utilized to determine if a difference existed in the style of relational aggression used among children of varying ages. Past research stated that younger children had limited communication and expressive abilities and, therefore, were unable to use more covert styles of aggression, although they still used more direct forms of aggression in relational ways (Crick et al., 1997; Crick, Casas, et al., 2002). The modified scale, the Social Behavior Scale, consisted of 20 items (see Appendix B). The first three items requested demographic information, and the other 17 items requested information regarding their social behaviors. These questions were scored on a 5-point scale where A = never or almost never true of this child and E = always or almost always true of this child.

Procedure

Permission from the principal of each participating school was obtained. Participating teachers were given the Social Behavior Scale and an appropriate number of scantron forms in order to rate each student in their class on the scale. The data were collected near the end of the year to ensure that the teacher was familiar with the students and to allow enough time for behaviors to become evident. No names or any identifying information about any child was used; gender, age, and grade were the only
demographics obtained. Teachers were given approximately two weeks to complete the scale for each student in their classroom. They were also asked to complete an informed consent document stating they would not share any information about the study with their students and would destroy all remaining forms not used (see Appendix C).

Data Analysis

The hypothesis that teachers would report more incidence of relational aggression among girls was evaluated using an independent-measures t-test. The hypothesis that teachers would report more incidence of overt aggression among boys was evaluated using an independent-measures t-test. Correlations were performed to determine if a relationship existed between the style of relational aggression used and age. A factor analysis was also conducted to determine how many factors were recognized in the modified scale.
CHAPTER FOUR
Results and Discussion

Results

Four sets of analyses were conducted, including the evaluation of teacher reports of relational aggression among girls, the evaluation of teacher reports of overt aggression among boys, and the evaluation of styles of relational aggression used with each age group. A factor analysis was conducted to determine how many factors were recognized within the modified scale (covert/relational aggression, overt/relational aggression, and overt aggression), as a means to assess if differences between the styles of relational aggression used were evidenced among older and younger girls sampled.

Psychometric Properties of the Revised Teacher Form

Since the PSBS-T (Crick et al., 1997) and the CSBS-T (Crick, 1996) were modified to fit this study, the new scale’s psychometric properties were first evaluated. A factor analysis (principal axis factoring with Oblimin with Kaiser normalization rotation) was conducted to determine the number of factors recognized based on teacher’s responses to the instrument. This analysis yielded two hypothesized factors (see Table 1). The first factor (eigenvalue = 11.1), Relational Aggression, accounted for 65% of the variation; the second factor (eigenvalue = 2.2), Overt Aggression, accounted for 13% of the variation. Relational aggression was not further divided into different types of relational aggression (i.e., overt relational and covert relational) as only two factors were accounted for in this study (i.e., relational and overt aggression). Twenty-two percent of
the variation was left unaccounted for in this study. This variation could be a culmination of many other factors that may be insignificant. Aggression is very complex, and the unaccounted variation could represent many of those complex factors. However, the significant concepts of aggression were accounted for in this scale.
Table 1

*Factor Loadings on the Social Behavior Scale*

<table>
<thead>
<tr>
<th>Items&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Relational Aggression (Factor One)</th>
<th>Overt Aggression (Factor Two)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 4</td>
<td>.870</td>
<td>.041</td>
</tr>
<tr>
<td>Item 5</td>
<td>.161</td>
<td>.718</td>
</tr>
<tr>
<td>Item 6</td>
<td>.091</td>
<td>.813</td>
</tr>
<tr>
<td>Item 7</td>
<td>.926</td>
<td>.110</td>
</tr>
<tr>
<td>Item 8</td>
<td>.896</td>
<td>-.062</td>
</tr>
<tr>
<td>Item 9</td>
<td>.906</td>
<td>.027</td>
</tr>
<tr>
<td>Item 10</td>
<td>.177</td>
<td>.729</td>
</tr>
<tr>
<td>Item 11</td>
<td>-.033</td>
<td>.745</td>
</tr>
<tr>
<td>Item 12</td>
<td>.921</td>
<td>-.020</td>
</tr>
<tr>
<td>Item 13</td>
<td>-.026</td>
<td>.842</td>
</tr>
<tr>
<td>Item 14</td>
<td>.926</td>
<td>-.011</td>
</tr>
<tr>
<td>Item 15</td>
<td>.938</td>
<td>-.002</td>
</tr>
<tr>
<td>Item 16</td>
<td>.709</td>
<td>.075</td>
</tr>
<tr>
<td>Item 17</td>
<td>-.119</td>
<td>.938</td>
</tr>
<tr>
<td>Item 18</td>
<td>.918</td>
<td>.014</td>
</tr>
<tr>
<td>Item 19</td>
<td>.871</td>
<td>.076</td>
</tr>
<tr>
<td>Item 20</td>
<td>.744</td>
<td>.152</td>
</tr>
</tbody>
</table>


<sup>a</sup>Items 1 – 3 were demographics (i.e., sex, age, and grade of student).
Hypothesis I and II

Hypothesis I and II stated that teachers would report higher incidences of relational aggression among girls and higher incidences of overt aggression among boys, which was substantiated. These results are illustrated in Table 2. Based on teacher reports, boys were found to engage in overt aggression more than girls, \( t(255) = 3.3, p < .05 \). Based on teacher reports, girls were found to engage in relational aggression more than boys, \( t(255) = 3.0, p < .05 \).

Table 2

<table>
<thead>
<tr>
<th>Relational Aggression</th>
<th>Overt Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female(^a)</td>
</tr>
<tr>
<td></td>
<td>Female(^a)</td>
</tr>
<tr>
<td>( M ) = 22.34</td>
<td>( M ) = 18.40</td>
</tr>
<tr>
<td>( SD ) = 11.16</td>
<td>( SD ) = 9.82</td>
</tr>
<tr>
<td>( SE^c ) = .971</td>
<td>( SE^c ) = .882</td>
</tr>
</tbody>
</table>

\(^a\)\( n = 132. \(^b\)\( n = 124. \(^c\)Standard Error of Mean.

Hypothesis III

Hypothesis III was evaluated by computing correlation coefficients for age, grade, and style of aggression. Analyses of the association between relational aggression and age in years yielded nonsignificant correlations, \( r = .017, p > .01 \). Based on these findings, it appeared that age was not a factor in the use of relational aggression. Results found that the association between age and overt aggression yielded a nonsignificant correlation, \( r = .016, p > .01 \), which suggested that age was not a factor in the use of overt aggression. The association between grade and relational aggression yielded a nonsignificant correlation, \( r = .000, p > .01 \), and the association between grade and overt
aggression yielded a nonsignificant correlation, \( r = .024, p > .01 \). Based on these results, it appeared that there was no correlation between grade level (kindergarten through second grade) and the style of aggression used. A significant correlation between relational and overt aggression was found, \( r = .614, p > .05 \). It appeared that those who engaged in overt aggression also engaged in more relational styles of aggression.

Discussion

According to current teacher report, boys engaged in more overt aggression and girls engaged in more relational aggression when evaluating kindergarten through second-grade students. Perhaps, most importantly, the present research suggests that relational aggression is used in a kindergarten through second-grade population. Although the present study involved teacher reports of a kindergarten through second-grade population, and no previous studies have examined this population with this method, the present data are congruent with much past research (Crick & Grotputer, 1995; Crick et al., 1996; Killen et al., 2001; Theimer et al., 2001). These findings further supported the hypothesis that girls do engage in aggressive acts, albeit they use different styles.

The Social Behavior Scale designed for this study yielded only two factors, relational and overt aggression, in spite of adding two types of relational aggression items on the scale (overt-relational and covert-relational). This finding left 22% of the variance unaccounted for and not factoring into the two main factors. The unaccounted variance represented a multitude of other factors and is yet another example of the complex nature of aggression.
It appears that neither age nor grade seemed to have an effect on the styles of relational aggression used. In other words, older children were not found to engage more in activities that were considered more covert-relational, and younger children were not found to engage in more activities that were considered overt-relational. However, it is important to note that this study examined only a kindergarten through second-grade age group. It may not be a broad enough range to fully see differences emerge in the styles of aggression used within this age range. Additionally, teachers may not have been in a position to observe more covert types of aggression being used. It is possible that covert types of aggression are being used within this age group, but the teacher report method did not pick up on these styles of aggression due to their more covert style. A peer report measure may be more warranted in order to assess this age groups’ use of more covert relational aggression.

Also of importance was the use of teacher reports in this study. This study closed the gap as regards studying the age group of kindergarten through second grade; however, it is imperative to keep in mind this study relied only on teacher reports. Although it would not be beneficial to test the reliability or test-retest of the scale used in the present study since they were adapted from past scales that have been well researched (Crick et al., 1997; Crick 1996), a possibility for future research would be to create another teacher report scale that explored differences in the subtypes of relational and overt aggression identified with this particular age group.

Although numerous researchers (Crick, 1996; Crick, Casas, et al., 1997; Crick, Werner, et al., 1999; Crick & Grot Peter, 1995; Ladd & Profi let, 1996; McNeilly-Chocque et al., 1996) have argued the validity of teacher reports, particularly when studying a
young age group, other methods of obtaining data would be beneficial. A possible avenue of future research would be to create a self-report scale that would be user-friendly for this young age group. Factors to consider would be to create a scale that employed pictures, or a scale that did not require reading, since many children cannot read at the kindergarten age level. Furthermore, the scale would have to be understandable, meaning the concepts of relational aggression would have to be very simplistic. Peer reports are another avenue to explore with this age group for future research. Direct interviews would also be beneficial as a means to obtain appropriate information.

Another important variable to consider in this study was the population used in this research. This study used populations from southern Kentucky and southern Indiana. Neither community was selected on a random basis but was selected on convenience and location. Although race was not a demographic obtained in this study, both communities may not be good representatives of more metropolitan populations. It may be difficult to generalize these findings to other populations based on these two relatively non-diverse communities. Furthermore, the students were not randomly selected, but were selected based on teacher’s interest to participate. Therefore, the results of this study can only be generalized to other schools with a population similar to that used in this study. It would also be imperative to conduct this research with other populations in order to obtain information regarding different cultures and ethnicities use of these types of aggression.

In conclusion, the results of this study bridged the gap between preschool age children’s use of relational aggression and of those in third grade and above. The results of the present study revealed that according to teacher report, relational aggression is occurring in children in kindergarten through second grade, and it suggested that it is
occurring more frequently in girls while boys are engaging in more overt forms of aggression. The results of this study provided insight into the formations of relational aggression and added a little bit to the puzzle concerning when this style of aggression begins to occur.
CHAPTER FIVE

Summary

This study focused on examining boys’ and girls’ aggression styles in a kindergarten through second-grade population using teacher reports of aggression. The following hypotheses were examined: teachers would report higher incidence of relational aggression in girls, teachers would report higher incidence of overt aggression in boys, and teachers would report more incidence of covert relational aggression in older children and more incidence of overt relational aggression in younger children.

A total of 257 kindergarten through second-grade children (132 girls and 125 boys) were rated by their classroom teachers on a scale of overt and relational aggression. All participants were from either southern Kentucky or southern Indiana. The scale used, the Social Behavior Scale, was modified from past scales that assessed overt and relational aggression in preschoolers and third through sixth grade students (i.e., the PSBS-T and the CSBS-T) (Crick, 1996; Crick et al., 1997). The Social Behavior Scale consisted of 20 items, the first three of which obtained the child’s sex, age, and grade. The remaining 17 questions assessed the children’s behaviors and were scored on a 5-point scale where A = never or almost never true of this child and E = always or almost always true of this child. Each teacher was to record each student’s behavior in his or her classroom as regards to the questions on the Social Behavior Scale.

Hypotheses I and II were supported, with teachers reporting greater incidence of relational aggression among girls and greater incidence of overt aggression.
among boys. No differences between the style of relational aggression used was found, which suggested that at the age studied no differences existed in the styles of aggression used.

The results found in Hypotheses I and II support previous researchers that also found differences in the styles of aggression used depending on gender. However, previous researchers have also found differences in the styles of relational aggression used depending on age. More specifically, researchers have found that preschoolers are less hindered by adult presences and engage in more overt/relational aggression, while older children engage in more covert/relational aggression. This research failed to find differences in the styles of relational aggression used depending on age or grade.

These results may not be generalizable to other populations, as only a relatively non-diverse sample was used. Although the race of each child rated on the Social Behavior Scale was not obtained, the geographic area in general offers little diversity. Future research may need to be conducted on more diverse populations in order to assess whether differences in styles of aggression occur in more metropolitan areas or among various ethnic cultures.

Also important to keep in mind is the fact that this study relied only on teachers’ reports of aggression. This approach could be a reason why no differences were seen among the younger and older girls studied as teachers did not differentiate between the different styles of relational aggression. However, future research may want to develop a reliable scale that could be used with this relatively young age group in order to get peer and self-reports. Such a scale would need to be developed within a format in which reading was not a requirement.
References


Ladd, G. W., & Kochender-Ladd, B. (2002). Identifying victims of peer aggression from early to middle childhood: Analysis of cross-informant data for concordance, estimation of relational adjustment, prevalence of victimization, and
characteristics of identified victims [Electronic version]. *Psychological Adjustment, 4*, 74-96.


Appendixes
Appendix A

Factor Loadings on the PSBS-T (Crick et al., 1997) and the CSBS-T (Crick, 1996)
## Factor Loadings

*Preschool Social Behavior Scale – Teacher Form (Crick et al., 1997)*

<table>
<thead>
<tr>
<th>Items</th>
<th>Relational Aggression</th>
<th>Overt Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tells a peer that he or she won’t play with that peer or be that peer’s friend unless he or she does what this child asks</td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>Tells others not to play with or be a peer’s friend</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>When is mad at a peer, this child keeps that peer from being in the play group</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Tells a peer that they won’t be invited to their birthday party unless he or she does what the child wants</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Tries to get others to dislike a peer</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>Verbally threatens to keep a peer out of the play group if the peer doesn’t do what the child asks</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Kicks or hits others</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Verbally threatens to hit or beat up other children</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Ruins other peer’s things when he or she is upset</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Pushes or shoves other children</td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>Hurts other children by pinching them</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Verbally threatens to physically harm a peer in order to get what they want</td>
<td>.81</td>
<td></td>
</tr>
</tbody>
</table>

*Child Social Behavior Scale – Teacher Form (Crick, 1996)*

<table>
<thead>
<tr>
<th>Items</th>
<th>Relational Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>When mad at a peer, this child ignores the peer or stops talking to the peer</td>
<td>.83</td>
</tr>
<tr>
<td>This child threatens to stop being a peer’s friend in order to hurt the peer or get what she or he wants from the peer</td>
<td>.69</td>
</tr>
<tr>
<td>When this child is mad at a peer, she or he gets even by excluding the peer from his or her clique or peer group</td>
<td>.83</td>
</tr>
<tr>
<td>This child spreads rumors or gossips about some peers</td>
<td>.76</td>
</tr>
<tr>
<td>This child tries to get others to dislike a peer by telling lies about the peer to others</td>
<td>.63</td>
</tr>
</tbody>
</table>
Appendix B

Social Behavior Scale – Teacher Form
Social Behavior Scale  Teacher Form

1. Sex of child:  
   A = Female  
   B = Male

2. Age of child:  
   A = 5 years  
   B = 6 years  
   C = 7 years  
   D = 8 years

3. Grade of child:  
   A = kindergarten  
   B = 1st grade  
   C = 2nd grade

RATE THE FOLLOWING ITEMS ON THE FOLLOWING SCALE:

A= this is never true of this child  
B= this is seldom true of this child  
C= this is sometimes true of this child  
D= this is often true of this child  
E= this is almost always true of this child

4. When mad at a peer, this child keeps that peer from being in the play group
5. This child verbally threatens to physically harm a peer in order to get what they want
6. This child pushes or shoves other children
7. When mad at a peer, this child ignores the peer or stops talking to the peer
8. This child tells a peer that they won’t be invited to their birthday party unless he or she does what the child wants
9. This child threatens to stop being a peer’s friend in order to hurt the peer or get what she or he wants from the peer
10. This child ruins other peer’s things when he or she is upset
11. This child hurts other children by pinching them
12. This child tries to get others to dislike a peer
13. This child verbally threatens to hit or beat up other children
14. This child tells a peer that he or she won’t play with that peer or be that peer’s friend unless he or she does what this child asks
15. When mad at a peer, this child gets even by excluding the peer from his or her clique or peer group
16. This child spreads rumors or gossips about some peers
17. This child kicks or hits others
18. This child tells others not to play with or be a peer’s friend
19. This child verbally threatens to keep a peer out of the play group if the peer doesn’t do what the child asks
20. This child tries to get others to dislike a peer by telling lies about the peer to others

Appendix C

Teacher Consent Document
TEACHER CONSENT DOCUMENT

Project Title: Social Relationships in Young Children

Investigator: Allison Hubble, graduate student, Dept. of Psychology, Western Kentucky University, (812) 760-8935
Chair: Dr. Bill Pfahl, graduate professor, Dept. of Psychology, Western Kentucky University, (270) 745-4419

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your signed consent in order for you to participate in this project. If you decide to participate in the project, please sign on the bottom of this form in the presence of the person who explained the project to you.

1. Nature and Purpose of the Project: The purpose of this project is to understand the difference in social interactions among genders in kindergarten to second grade children.

2. Explanation of Procedures: You are asked to rate each student in your classroom on a 12-item, 5-point scale that measures social interactions. Each scale will take approximately 5-10 minutes to fill out for each student. For example, a teacher with 20 students will need approximately 100 – 200 minutes to complete the entire class. You are asked to destroy any forms that you do not complete in full.

3. Discomfort and Risks: There are no risks for either you or your students.


5. Confidentiality: All of your student’s information will be strictly confidential. Your student’s information will be marked by a number only. No individual names or identifying information of the students will be necessary. All of the information will be securely stored and kept in files in the Psychology Department behind two locked doors. After a period of three years, the information will be destroyed. When the information is reported, it will only be reported in terms of gender, grade, and age. Individual students will in no way be singled out during any part of the project or in reporting of the results.

6. Refusal/Withdrawal: Your participation is completely voluntary. You may refuse to answer any questions at any time. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty. Please destroy any forms you do not complete in full and do not return to the investigator. For instance, if a student withdraws from the study, destroy their form.

You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.
Signature of Participant                                Date

Witness                                                 Date

For any questions about your rights as a human subject, please contact
Dr. Phillip E. Myers, Human Protections Administrator, (270) 745-4652