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Examining Relational Aggression and Conflict Resolution Skills In Overtly Aggressive Non-Caucasian Females

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EXAMINING RELATIONAL AGGRESSION AND CONFLICT RESOLUTION

SKILLS IN OVERTLY AGGRESSIVE NON-CAUCASIAN FEMALES

A Dissertation

Submitted to Duquesne University

Duquesne University

In partial fulfillment of the requirements for

the degree of Doctor of Philosophy

By

Jessica Rae Scott

December 2012

DUQUESNE UNIVERSITY
SCHOOL OF EDUCATION
Department of Counseling, Psychology, and Special Education

Dissertation

Submitted in partial fulfillment of the requirements
for the degree
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School Psychology Doctoral Program

Presented by:

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B.A. Psychology, St. John's University
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August 22, 2012

EXAMINING RELATIONAL AGGRESSION AND CONFLICT RESOLUTION
SKILLS IN OVERTLY AGGRESSIVE NON-CAUCASIAN FEMALES

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ABSTRACT

EXAMINING RELATIONAL AGGRESSION AND CONFLICT RESOLUTION

SKILLS IN OVERTLY AGGRESSIVE NON-CAUCASIAN FEMALES

By

Jessica Rae Scott

December 2012

Dissertation supervised by Dr. Tammy L. Hughes

In this study, the researcher sought to examine the differences in relational and

social aggression for a non-Caucasian adolescent at-risk population across three different

groups. Specifically, the study seeks to determine if the Goodwill Girls Curriculum will

decrease covert bullying behaviors (i.e., relational and social aggression) in youth who

have been removed from their home school districts due to aggressive behaviors

including acts of bullying. A secondary aim of this study will be identify the effects of

the Goodwill Girls Curriculum on increasing conflict resolution skills within the sample.

The Goodwill Girls curriculum is designed to be implemented alongside a school-

wide prevention program. This paper will elaborate upon the history, development, and

recent research of relational aggression, social aggression and conflict resolution. A

pretest-posttest posttest only control group design independent samples and paired

samples design will be used to answer the first research question for Group A: O_1 x O_2 and Group B: O_3. As a result of Group C being different and adding a second post-test measure, a RMANOVA will be used to answer question one. Group C is utilizing a different method than Group A and B because this group is being measured across three different time points. In regard to the second research question, a pre/post/post test quasi-experimental repeated measures ANOVA design will be used within this study; Group C: O_1 x O_2 …O_3.

The results indicated the GWG curriculum did not significantly produce a decrease in relational aggression or social aggression. Yet, descriptive statistics demonstrated differences in the means showing some improvement. Lack of significance may have been due to the small sample size of this study. However, this research supported Crothers and colleagues (2009) research that relation aggression and social aggression is two separate constructs. Similar results were found with conflict participant's display of conflict resolution skills. The conclusions will expand the limited research in this area by describing the characteristics and needs of these at-risk non-Caucasian female adolescents.

DEDICATION

First and foremost this dissertation is dedicated to my Lord and Savior. Without Him none of this would be possible. This journey has tested my faith, straightened my path and allowed me to ONLY keep positive people in my corner that root for my success. I have grown a lot these last five years and have learned that no matter what comes my way… "No weapon that is formed against me shall prosper." – Isaiah 54:17.

I also dedicated this dissertation to my family. A special feeling of gratitude to my loving parents, Ray and Ella D. Scott whose words of encouragement and push for tenacity rung in my ears during any moment I just wanted to throw in the towel. A special thanks to my brothers, grandparents, aunts, uncles, and cousins who always pushed me to be better than what I thought was my best.

I dedicate this work and give special thanks to my church family and Pastor Darrell LaRue Armstrong, who has sent up countless prayers and love offerings to me through the years. This dissertation is only the first step in making you all proud during my career as a psychologist. I promise to always keep God first and stay steadfast in my walk.

I also dedicate this to all the children that I have worked with throughout my time in New Jersey, New York, and Pittsburgh. You are the reason why I wanted to pursue this career path and why I am so persistent to make it through. I pray that I will continue to serve as a model to you so you can realize you can do anything you set your mind to regardless of what comes your way including what ANYONE says or does to you!

Last, but most important I would like to thank and dedicate this work to my fiancé Daniel Joseph. I have never known a man to love and support me the way you do. I appreciate you for your encouraging words and patience. I also would like to say thank you for allowing me to work in an empty classroom on the weekends at your university to concentrate without distraction to get all of this work done. You always kept me stocked with Cherry Coke and Milano cookies when I needed them to keep the ball rolling (smile). I love you and cannot wait to take this next step with you in life this October.

ACKNOWLEDGEMENT

Though only my name appears on the cover of this dissertation, many people have contributed to this great step in my educational journey. I owe my gratitude to all those people who have made this dissertation possible and because of them my graduate experience has been one that I will cherish forever.

I would like to first acknowledge my advisor and chair of my dissertation Dr. Tammy L. Hughes for her knowledge, guidance, and understanding throughout my time here at Duquesne. When applying to graduate school I have heard many horror stories about minority students not fully being supported during their time in their graduate experience. I am blessed that I had an advisor that went out of her way to make me feel comfortable during my graduate experience. Her mentorship was paramount in providing me with a well rounded experience that was consistent with my long-term career goals. She has encouraged me to not only grow as a student and up incoming psychologist, she has also challenged me to step outside my box and do things many of my peers were not given the opportunity to do. For everything you have done for me, Dr. Hughes, I truly thank you.

I would also like to acknowledge Dr. Laura M. Crothers for her encouragement and assistance with countless edits to ensure that I reached my fullest potential with writing. I truly appreciate you being on my dissertation committee and teaching me about your life's work with bullying, relational and social aggression. I will never forget all that you and all the other amazing professors here at Duquesne have taught me through the years.

on board to begin my post-doc fellowship. I cannot wait to continue to learn under your guidance.

Lastly, I would like to acknowledge my "Elite Eight" that have assisted me and supported me along the way. Additionally, special thanks goes out to my cousin Stephanie Dawson and friend Stephanie Bauer whose humor and self-care techniques have truly relaxed me during my most stressful times. To all that I may have mistakenly omitted I truly appreciate everyone for all that you have done to make this possible.

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CHAPTER I

INTRODUCTION

In 2002, the National Association of School Psychologists reported that 160,000 children in the United States miss school every day for fear of being bullied. In addition, 86% of children between the ages of twelve and fifteen reported that they are teased or bullied at school. These findings suggest that bullying is more prevalent than sexual activity and tobacco, alcohol, or drug use, among the same age group (NASP, 2002). These data are a call to action for schools to understand and effectively intervene with children when bullying is present. Bullying that is left unaddressed can result in seriously negative outcomes as noted in several high profile media cases in which victims were killed or committed suicide.

Bullying has been prevalent within the last decade with Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) youth. For example, Lawrence Fobes was a fifteen-year-old gay student at E.O. Green Junior High School in Oxnard, California. He was shot twice by a fellow student that had bullied him for years (Setoodeh, 2008). This tragedy was known as the most prominent gay-bias crime of the 21st century (Setoodeh, 2008). Additionally, social and relational aggression has been linked to a number or suicides within recent years. For example, the parents of Rachel Ehmke made recent headlines reporting their 13-year-old teenager was a victim of relational aggression and cyberbullying for over a year in her school setting (Yucca, 2012). Ehmke was targeted by a group of girls within her middle school in southern Minnesota. The results of taunting amongst these girls became so bad that she took her life on April 29, 2012 (Yucca, 2012). Incidents such as these have begun to open the eyes of community

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leaders as well as school personnel to actively address various types of bullying in our schools today.

There is now a public outcry for school systems to systematically address bullying. The U.S. Department of Education reported in the Analysis of State Bullying Laws and policies that 46 states have anti-bullying laws and 41 of those states have created anti-bullying policies as models for schools (Stuart-Cassel, Bell, & Springer, 2011). On March 19, 2012, South Dakota became the forty-ninth state to pass an anti-bullying law. As of April 2012, the state of Montana is the only state that has no anti-bullying law (Bully Police USA, 2012). Unfortunately, some minority groups (e.g., LGBTQ, youth with disabilities, individuals from various religious backgrounds, and of diverse ethnicity and national/origin) have shown an increase in reports of being victimized (U.S. Department of Health & Human Services, 2012).

The term bully is often associated with strong, aggressive, mean youth who spend their time aggressing physically against younger or weaker students. However, researchers are showing that bullying occurs in a variety of forms (e.g., direct and indirect aggression) that is carried out by both male and female students (Ripley & O'Neil, 2009). Although a majority of the bullying literature has described the variety of aggressive behaviors evidenced by males, and previous researchers note that most females do not engage in physical aggression in a manner that is similar to their male counterparts, the past decade has brought new conceptualizations about what a bully is and how bullies behave. Researchers and clinicians now recognize both male and female students engage in direct and indirect aggression. More recently, researchers have been investigating data showing girls are in fact aggressive, but that their aggression tends to

be more indirect (James & Owen, 2005), covert, and is mediated by the strength and development of relationships with others (Archer & Coyne, 2005; Seals & Young, 2003). In contrast, boys characteristically engage in physical forms of aggression such as kicking, pushing, and punching.

The impact of racial and cultural variables in the expression and experience of bullying behaviors is less understood. That is, as researchers have sought to clarify gender differences in the expression of bullying acts, there has been less of a focus on how race may be related to bullying. Because African American youth are over represented in several at-risk categories including special education placement (Patton, 1998), emotional, academic, and behavioral problems and are subjected to more acts of bullying (Marini et al., 2006), there is a clear need to understand how at-risk minority students may benefit from interventions aimed at reducing bullying in schools (Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidret, 2001; Seals and Young, 2003; Siann, Callaghan, Glissov, Lockhart, & Rawson, 1994; Xie, Farmer, Cairns, 2003).

Bullying Described

Bullying is defined as a conscious, willful, and deliberate hostile activity intended to harm, induce fear through the threat of further aggression, and create terror (Coloroso, 2003). Bullying can involve behaviors such as name calling, put-downs, saying or writing inappropriate things about a person, deliberately excluding individuals from activities, not talking to a person, threatening a person with bodily harm, taking or damaging a person's things, hitting or kicking a person, making a person do things he/she does not want to do, taunting, teasing and coercion. Bullying can be physical, psychological, verbal or any combination of the three (Coy, 2001).

Direct aggression bullying includes both direct physical and direct verbal aggression. Indirect and covert aggression includes making faces, giving dirty gestures, or excluding someone from a group (Olweus, 1993); indirect aggression can be reliably differentiated into relational and social aggression (Crothers, Schreiber, Field, & Kolbert, 2009). Relational aggression, a type of covert bullying, focuses on using the power differential in a relationship for personal gain (Duncan, 2004; Crick, Bigbee, & Howes, 1996). For example, in relational aggression, a person may manipulate how others think of an individual so that the victim becomes compliant with the aggressors request. "If you do not do not do what I want, I will not be your friend" is a typical example of relational aggression. Again, the (often female) student uses the relationship to gain a wanted action. In contrast, social aggression is the use of the social context as the method for manipulating others. "If you do not do what I want, I will humiliate you and make sure no one speaks with you" describes social aggression. Although indirect and social behaviors may be present in both relational and social aggression, the manipulation differs in terms of context. Indeed, understanding the social context does seem to be a more well-developed manipulation strategy where the ability to influence the opinion of others is a skill that requires developed perspective taking skills (Field, Kolbert, Crothers & Hughes, 2009).

Relational Aggression

Relational aggression is covert aggression defined as "repeated behaviors which are concealed, secret, or clandestine, that inflict psychological/emotional harm through indirect/relational/social means where the target (victim) feels helpless and unable to retaliate" (Spears, Slee, Owens, & Johnson, 2009, p.189). Another definition states "the

experience of being directly or indirectly excluded or socially manipulated by individuals who intentionally use their relationship with the victim as the vehicle for harm" (Cullerton-Sen & Crick, 2005, p. 148). A third definition labels relational aggression as "involving behaviors such as threatening to withdraw friendship in order to get one's own way or using social exclusion as a form of retaliation" (Crick, et al., 1996, p.1003). The more overt signs of bullying are generally easy to see. These definitions share the same focus on the use of the relationship to manipulate others. Further, as noted above, the social context is now reliably measured as a separate construct (Crothers et al., 2009). The more discrete and conniving forms of bullying are tougher for teachers and parents to see and reprimand and these behaviors become more complex over the course of development (Cullerton-Sen & Crick, 2005).

Children and adolescents who engage in relational aggression tend to exhibit more internalizing behavioral difficulties (Crick, 1997). These children are described as more likely to blame peers for the poor social outcomes that they experience. The child who engages in relational aggression tends to not see situations as their own fault, but rather the fault of the peers involved in their situation. Engaging in relationally aggressive behaviors could potentially result in peer rejection and the potential inability to engage in successful reciprocal friendships (Crick & Grotpeter, 1995; Henington, Hughes, Cavell, & Thompson, 1998).

As with all types of bullying, relational aggression in many children tends to decline with increasing age. In some cases the decline is due to an increase in self-protection skills in the would-be victims (Hanish, 2000). In other cases, the decline may be associated with implementation of bullying intervention programs in schools (Olweus,

1993). However, the decline may be different for male and female students. Henington, Hughes, Cavell, and Thompson (1998) found that males in grades 1-6 exhibited fewer acts of relational aggression in higher grades, but females tended to increase their rates of relational aggression. During the ages of 8-11, females seem to rely heavily on relational aggression, whereas males tent to move away from the relational aggression. The authors report that females reported that they view relational aggression as one of the most normative aggressive behaviors for their peer group.

Social Aggression

Social aggression is a form of indirect aggression where the social context is used to manipulate the individual to meet the needs of the aggressor (Field et al., 2009). For example, social aggression may comprise of demeaning an individual's physical appearance, questioning someone's decisions, telling secrets to others, falsely accusing someone that they think they are better than others, or simply making up stories about another person. Furthermore, social aggression is typically directed toward damaging another's self-esteem and/or social status (Galen & Underwood, 1997). Additionally, behaviors of social aggression encompass rolling of the eyes, put downs, belittling another, spreading rumors, or socially excluding someone from a group or groups (Field et al., 2009). Even through the definition of social aggression sounds similar to that of relational aggression they are known as two separate constructs. The main difference with relational aggression is that it occurs as a result of a specific conflict between individuals who are in a relationship and may identify as friends; however, social aggression may occur in a larger social circle due to jealousy of peers, perceived

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competition for attention or boyfriends, to gain social status or power by lowering someone else's standing in a group, or for purposes of entertainment (Field et al., 2009).

Bully Victims

Bully-victims are individuals who have been bullied by others but who also engage in bullying behaviors themselves (Marini et al., 2006). Bully-victims tend to react with hostility toward minor and accidental provocations (Smokowsky & Kopasz, 2005). They often elicit negative reactions from other children and are not well accepted by their peers (Andreou, 2001).

Researchers find that bully-victims come from troubled homes, report low self-esteem and negative self-image (Smokowsky & Kopasz, 2005). Indeed, compared to bullies who are not also victims, this group views themselves as more troublesome, less intellectual, less physically attractive, more anxious, less popular, and unhappier (Mynard & Joseph, 1997; O'Moore & Kirkham, 2001). Further, the few studies comparing bully, victim and bully victim samples find that bully-victims are at a higher risk for psychiatric (e.g., depressive, anxious and psychosomatic) symptoms, eating disorders, and co-occurring mental health problems than either victim or bully only peers (Kaltiala-Heino, Rimpela & Rimpela, 2000).

Theory

Individuals who engage in bullying conduct as young children often carry over those behaviors into adulthood, ultimately using more aggressive means of punishing their own children. Furthermore, researchers show that children who have been physically, sexually, or emotionally abused are much more likely to bully their peers,

leading to the belief that both boys and girls follow similar paths to the development of their bullying persona (Shields & Cicchetti 2001).

Consistent with social learning theory, the cycle of bullying is not best described as intrinsic but rather its continued presence is because the bully throughout one's life has progressively learned it. In addition to the modeling behavior that the individual has been exposed to since early childhood, aggressive acts can also serve as a useful survival skill that is required in hostile or chaotic neighborhoods (Molnar, Cerda, Roberts and Buka 2008). As such, researchers suggest that bullies are equally in need of intervention service (Morrison & Sandowicz, 1995; Roberts & Coursol, 1996; Smokowski & Kopaz, 2005).

Non-Caucasian Populations

In 2011 the U.S. Department of Justice found that 54 percent of Asian-American teenagers, 38.4 percent of black students 34.3 percent of Hispanics and 31.3 percent of Caucasians reported being bullied in the classroom. Siann and colleagues (1994) found that ethnic minority students were significantly more likely to report, as a group, that they were bullied more than Caucasian students. More recently, Talbott and colleagues (2002) found that relational aggression typically followed after reports of experiencing physical aggression for African American students.

Researchers have explained higher rates of minority victimization as a function of the characteristics of the school. For example, Graham and Juvonen (2002) examined a school where African American students made up the majority of the student body. They found that African American students were more likely to engage in aggressive behaviors when compared to Caucasian and Hispanic students. In contrast, Seals and Young (2003)

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found no differences in bullying between African American and Caucasian students in a study where African American students were the majority in southern schools. Further, African American students reported being bullied significantly less frequently than other races (Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidret, 2001).

It is important to note that the Nansel et al., (2011) study found high rates of bullying from all racial backgrounds. Additionally, those who were bullied were less likely to be from the majority (Caucasian) population. As such, it appears that being a victim of bullying may not be best understood as a function of race but rather as a combination of race and being part of an at-risk population (Nansel et al., 2001).

At-risk Populations

Researchers propose that at-risk youth are at an increased risk for a host of negative outcomes including emotional and behavioral problems (Black & Krishnakumar, 1998), academic difficulties and school dropout (Witherspoon, Speight, & Thomas, 1997), and victimization by bullies (Marini, Dane, Bosacki, & YLC-CURA, 2006). Additionally, research has shown that diverse cultural groups have different ways of enhancing positive outcomes for their children (Nauert, 2008). Nauert (2008) reported that African-American family life often encompasses racial identity, spirituality, and a set of shared values that are crucial for children's resilience. In addition, the report offered a portrait of thriving or optimal functioning for African American youth which encompasses four themes; active engagement, flexibility, communalism, and critical-mindedness. Although race and ethnicity may not be direct risk factors, they should be considered risk markers that correlate with fundamental determinants of health, wellness and the successful development of African American youth.

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Given the above information, in order to meet the needs of minority and at-risk youth, schools need to have data to determine how to best address bullying for this group. Ideally, a program that focuses on decreasing physical, relational and social aggression is desired. Any intervention that has the potential to serve as a buffer to aide in preventing negative outcomes with African Americans who are also at-risk is critically important to evaluate.

Statement of the Problem and Hypothesis

Bullying is a serious problem that can dramatically affect the ability of students to progress academically and socially. In regards to female development, there continues to be a group of students who wield a power advantage over another student or group for their own manipulation or gain (Kolbert & Crothers, 2003). Currently, there is very little research regarding the cultural factors associated with race and at-risk population factors that contribute to the frequency of bullying (e.g., physical, relational and social aggression) in schools. Collectively, students come from diverse backgrounds, social economic statuses, environments, and family backgrounds that deal with aggressive (bullying) acts in different ways. With the increase in diversity within our schools, (e.g., 40% of the United States population proposed to comprise non-Hispanic Caucasians by year 2100), it is imperative for educators to increase their understanding on how to meet the needs of all students. Further, the usefulness of specific interventions needs to be examined. Even though there is preliminary support for effective interventions aimed at reducing bullying behavior (e.g., Crothers, Field, & Kolbert, 2005; Olweus, 1993) these findings do not specifically consider the needs of diverse students.

Good Will Girls Curriculum

One intervention that has shown promise is the Good Will Girls Curriculum (GWG; Crothers, et al., (2005). The GWG curriculum is designed to be implemented along-side a school-wide prevention program. The GWG is considered a secondary (e.g., used with at-risk youth) or tertiary (e.g., used with youth who require services due to behavioral patterns) intervention that can be adapted for use with minority populations (Field, Kolbert, Crothers, & Hughes, 2009). GWG is a structured curriculum that consists of ten sessions. It was designed for youth ages 10-15 (Crothers et al., 2005) and targets students who have been previously reprimanded for problematic behaviors (Field et al., 2009). The GWG curriculum is explicit in the purpose of each activity, systematic in linking instructional activities and learning and, cumulative in connecting previous learning to the new activities. Each lesson clarifies the objective and how it is related to physical, social and relational aggression (Crothers et al., 2005).

The GWG was piloted in the fall of 2007 with a total of 12 8th and 9th grade girls (11 Caucasian; 1 African America) in a rural junior/senior high school (7th-12th graders) in the northeast of the United States (Field et al., 2009). Initial results support use of the GWG for all of the girls in the group; the AA student responded similarly to the others (Field et al., 2009). In a second study, Field, Crothers, and Kolbert, (2006) consisted of twenty-eight 8th graders that participated in the GWG curriculum. Ninety-three percent of the participants were Caucasian while 7% reported being bi-racial. Results of this qualitative study were answered by way of eight research questions. The primary investigators followed Lincoln & Guba (1985) comparative method. Results from Field

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et al., (2006) looked for themes among the adolescent responses to the open ended prompts that were categorized into eight major categories:

1. How do adolescent females think and feel about anger and conflict?
2. How do adolescent females respond when they are angry with others?
3. What strategies do adolescent females use to handle conflict in their friendships?
4. Do adolescent females' responses to conflict differ depending upon the sex of the individual?
5. Does the approach to conflict depend upon the social status of the female with whom she has the conflict?
6. What do adolescent females perceive to be the expectations their friends have of them when their friends are angry with another person?
7. What do adolescent females perceive to be the expectations their parents and teachers?
8. What social conditions need to be in place for adolescent females to feel comfortable being assertive?

Participants indicated that past experiences with conflict and anger provoked fears about future friendships. The majority of the respondents sought out friends for support and help when upset with their peers. Participants also felt the need to want to tell their side of the story, but feared making the conflict bigger than it already was. Themes in their responses were not evident in which the female adolescents handled anger with males compared to females. Additionally, social status also had a lot to do with how the participants responded to the particular conflict and individuals desired emotional support and communicated to clarify their feelings. In the end, many of the participants viewed their parents, and teachers as individuals that expect them to handle conflict assertively.

Current Study

The aim of this study is to investigate the differences in relational and social aggression for a non-Caucasian adolescent at-risk population. The goal is to expand the limited research within this area by describing the characteristics and needs of this group. Specifically, the study seeks to determine if the Goodwill Girls Curriculum will decrease

covert bullying behaviors (i.e., relational and social aggression) in youth who have been removed from their home school districts due to aggressive behaviors including acts of bullying. A secondary aim of this study will be identify the effects of the Goodwill Girls Curriculum on increasing conflict resolution skills within the sample.

Research Question 1: Does GWG influence relational and social aggression in minority female adolescents who are placed in alternative education setting for treatment of aggression?

> **Hypothesis 1:** The Goodwill Girls curriculum will significantly decrease relational aggression in minority female adolescents placed in alternative education setting for treatment of aggression.

Research Question 2: Does the Goodwill Girls Curriculum influence the conflict resolution skills of minority female adolescents placed in an alternative education setting for treatment of aggression?

> **Hypothesis 2:** It is expected that females who participated in the Goodwill Girls curriculum will demonstrate a significant increase in conflict resolution skills.

CHAPTER II

LITERATURE REVIEW

Bullying has gained significant attention across many countries. Research has suggested that childhood aggression within the home and school settings can potentially serve as the beginning of a sequence of violent behaviors that can continue into adulthood as the bullies in the classroom become bullies in young adulthood and beyond (Curwen, McNichol, & Sharpe, 2011). Physical aggression and direct forms of bullying are a serious problem in the schools. Relational aggression is just as serious of an issue among students, particularly females, because the behaviors are indirect and often difficult to detect. It is much easier to witness a student bullying a peer physically by way of pushing and fighting than that of indirect methods such as rumor-spreading, gossip, and peer-exclusion. As a result, school personnel need to be increasingly aware of these indirect forms of relational aggression within the school environment.

The consequences of school bullying should be taken seriously within the educational setting across all ages and environments. Children and youth who are bullied are more likely than other children to experience loss of appetite, lower self-esteem, loneliness, anxiety, depression, suicidal thoughts, truancy, and a lack of school bonding Nansel et al., 2001). In 2002, the National Association of School Psychologists reported that 160,000 children in the United States miss school every day for fear of being bullied. In addition, 86 percent of children between the ages of twelve and fifteen reported that they get teased or bullied at school (NASP, 2002). These findings suggest that among the same age group, bullying is more prevalent than sexual activities and tobacco, alcohol, or drug use (NASP, 2002). As a result, it is imperative to understand how to effectively

intervene with children when looking at bullying. If left unaddressed, bullying can seriously affect the successful development of an adolescent.

A great deal of the current aggression literature has focused on male aggression. Previous research assumed that females typically did not engage in physical aggression like their male counterparts (Archer & Coyne, 2005; James & Owen, 2005; Seals & Young, 2003); however, in the 1980's, there was a shift in thinking headed by Dr. Dan Olweus. Within the past decade, there has been an increased interest in investigating the ways in which females engage in conflict with others. Currently, research on aggression in girls has shown that girls are in fact aggressive, but they demonstrate it in different forms (James & Owen, 2005). Overall, aggressive acts are displayed differently across genders. Males characteristically engage in many physical forms of aggression such as kicking, pushing, and punching individuals; while girls typically exhibit aggression through indirect, socially motivated means such as gossiping, spreading rumors, exclusion from a friendship group, isolation, alienation, and stealing friends or boyfriends (Crothers et al., 2005; Seals & Young, 2003).

Although males remain the most prominent and most studied group of bullies, times are changing. Recently, there has been a significant statistical and anecdotal increase in bullying and violence among young females. As society has experienced social, cultural and technological changes, the ways in which adolescent's exhibit anger and aggression have united. Nowadays, female adolescents are showing aggression in more covert methods. In particular, females have begun to display indirect aggression in the form of rumor spreading, social exclusion, and verbal violence by way of written material and technology.

Overall, the construct of aggression amongst adolescents can be acquired in a variety of ways. Collectively, parents, resources, and school environments have a direct effect on the overall development of the child. It is important for educators to be aware that students come from various backgrounds, social statuses, communities, and families that deal with aggressive acts in different ways. In turn, early attachments can potentially shape how individuals problem-solve and deal with issues of aggression. Bullying is a serious problem that can dramatically affect the ability of students to progress academically and socially. As a result, of the increased diversity within our school settings, it is imperative to further research concepts of bullying across diverse settings.

In previous years, the concept of bullying within society was viewed as short-lived and harmless acts without serious consequences for individuals that were involved (Storch & Ledley, 2005). Presently, research has demonstrated detrimental effects of bullying are associated with somatic illness (Hanish & Guerra, 2002). The intensity and prevalence of these harmful effects are more prevalent when bullying is more frequent and across time. Studies have investigated the effects of bullying on both the victim and the bully; outcomes of bullying have found an association between bullying and mental health problems such as increased levels of anxiety, depression, loneliness, self confidence, suicidal behavior and behavioral problems (Lien, Green, Welander-Vatn, & Bjertness, 2009). It is imperative to investigate somatic effects of bullying with adolescents. Wolke and colleagues (2001) found associations between bullying and symptoms such as headache, sleep disturbances, stomach pain, enuresis, dizziness, common cold, and musculoskeletal tenderness and pain. Overall, bullying during adolescence increases the risk for later mental health problems (Hanish & Guerra, 2002).

Nansel and colleagues (2001) conducted a study of 15,686 students in grades 6-10 about the prevalence of bullying behaviors within the school setting. Results revealed 29.9% of participants reported engaging in bullying behaviors either as a victim (10.6%), the one engaging in bullying behaviors (13.0%) or both (6.3%). Furthermore, the study found bullies, those being bullied, and individuals engaging in both behaviors all demonstrated poorer psychosocial adjustment than noninvolved participants. On the other hand, there were differences in the frequency of reporting those behaviors. For example, individuals that were bullied showed a poorer social and emotional adjustment, had difficulty with making and maintaining friendships and expressed a greater amount of loneliness. In contrast, individuals who bullied others were more likely to be involved in negative behaviors such as drinking alcohol and using tobacco. They also showed poorer school adjustment to the overall school climate and lower levels of academic achievement. However, it is important to mention that these individuals reported a greater ease of making friends. Finally, individuals who engaged in both behaviors demonstrated the highest risk of healthy social-emotional adjustment. These individuals demonstrated a combination of social isolation, lack of success in school, and involvement in problematic behaviors. Overall, the differences discovered within this study can serve as tools for formulating successful and effective interventions to target particular populations of students.

Historical Context of Relational Aggression and Bullying

In late 1969 and 1970's, researchers began to focus their attention on bullying as a psychological issue. The early works of Dr. Dan Olweus initiated the world's first systematic bullying research, and today, Dr. Olweus is considered the "pioneer" in

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bullying research. Results of his studies were published in a Swedish book in 1973 and findings later transitioned to the United States in 1978 under the title *Aggression in the Schools: Bullies and Whipping Boy*, which is considered a landmark as the first systematic study of the phenomenon of bullying. From 1983 to 1985, Olweus created the most researched and widely adopted bullying prevention program in the world called the *Olweus Bullying Prevention Program*. This program began a nationwide awareness about bullying. It was at this point that bullying was officially recognized as a worldwide problem.

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Theories

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There are several theories that attempt to explain the concept of aggression and bullying, including evolutionary psychology, the social learning theory, the General Aggression Model as well as environmental influences.

Evolutionary Perspective

Early concepts of evolutionary psychology explain that throughout evolutionary development, females are more apt to connect emotionally with others (Brizendine, 2006). For example, female infants are more likely to study human faces for emotions and respond to others based on emotional cues. In addition, female children are more likely to play with others collaboratively rather than competitively like their male counterparts (Brizendine, 2006). Ideas of intimate relationships and staying connected to others have served as the evolutionary purpose of safety as well as maintaining shelter, food, and having assistance with rearing children (Field et al., 2009). Furthermore, the act of talking about others, when viewed through the perspective of needing close connections with others, may serve the purpose of creating intimacy, friendship, and

connection with other females. On the other hand, awareness that relationships are important to other females creates a window of opportunity to attack females where it hurts the most. Emotional connections being values by others and one's reputation within a social circle may all become part of the arsenal when girls do battle with one another.

Another explanation for relational and social aggression from an evolutionary psychology perspective is that once adolescence is reached, females, assuming heterosexuality, often feel the impulse to compete with other females for male attention. Although it may not register consciously, the female brain may be wired to do what it takes to make herself appear more attractive than other females in hopes of capturing the best mate possible. This phenomenon serves the evolutionary purpose of assuring insemination by a quality male, thus helping to ensure the viability of an infant. Rising to the top of a social structure or group of eligible females from an evolutionary perspective may be accomplished through a female's physical appearance, fertility, exemplary nurturing skills, and/or her ability to strategically create a climate where other females are less desirable. This competition for a mate ultimately results in females battling one another in ways that harm another's reputation while protecting their own by using covert rather than overt bullying. Using covert behaviors is crucial in order to avoid being inconsistent with the stereotypical female gender role of being perceived as nurturing. Appearing kind and amiable while strategically cutting off or shunning a female from a group allows the individual to maneuver socially among the possible mates among her competition.

This may be observed when a new female is brought into a social circle. For example, if a female adolescent enters a high school as a new student, other females may

feel threatened by her as she may have the potential to disrupt the hierarchy of popularity and social power among her female classmates and compete for someone's boyfriend. This phenomenon is particularly true for females who may lack self-confidence, unfortunately an all too common occurrence during adolescence, or for those who find a core sense of their identity through whom they date. If the new female is deemed competitive by her appearance, social intelligence, capacity to make friends, or ability to garner attention from male classmates, she may become the target of social aggression in hopes of diminishing her social foothold or popularity among her peers. Her reputation may be challenged, and she may endure harsh treatment from other females.

The difficulty with this particular explanation for bullying is that the drive for behaving in this manner is largely unconscious. Adolescent females may not be able to explain why they dislike a new girl at school or why it seems appropriate to attack her socially. Furthermore, following a strict line of evolutionary reasoning, openly discussing the idea that an adolescent female has an innate impulse to compete with other females for the best possible mate who stands the greatest chance of impregnating for propagation of the species would seem ridiculous in our modern age. However, many girls or adolescent females may be willing to consciously entertain the idea that they compete with one another. One of the best strategies for appearing "great" is to make someone else appear "awful." Fortunately, talking about this sense of competition and openly reviewing the costs can assist young women in making alternative choices.

Social Learning Perspective

Current learning theory has been built upon early experiments that studied the way in which children learned aggressive behaviors by the observance of others

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(Renfrew, 1997). This research began with the Bobo doll studies conducted by Albert Bandura and his colleagues in the 1960s. Bandura (1961) is considered the landmark study relative to aggressive behaviors and observational learning. Within this study, children were placed in a situation in which they initially observed an adult interacting with a weighted inflatable plastic toy known as the Bobo doll. Children were exposed to several aggressive behaviors towards the toy. Later, the children participants within the study were given the opportunity to play with the Bobo doll and were quickly interrupted during their play. Following the irritation, they were again allowed to play with the toy and were observed to interact in a way that imitated the adult aggressive behavior. Results of this study found a parallel to a modeling process in which the behavior was learned by the children participants (Bandura, 1973). Bandura (1973) suggested that human cognitive abilities allow individuals to define events with either positive or negative occurrences by associating the episode with thought-related displays of emotion. For instance, if an individual attributes an anger provoking incident to accidental circumstances, one might not associate the event with the need to become aggressive.

Social learning theory suggests that aggression stems not just from frustration, but from many other factors as well (Renfrew, 1997). These aspects can best be described by three major influences – origins, instigators, and maintainers, which represent a broad perspective of what influences human thoughts and behaviors. Essentially, an aggressive individual is influenced by observational learning or modeling and is possibly reinforced for this behavior. However, the influences of memory and rehearsal are also important to the learned behavior and the acting out of the modeled aggression. Several other contributing factors influence an individual's ability to engage in the aggressive behavior.

For example, individual resources, family attitudes toward aggression, cultural and community beliefs about what is socially labeled as aggressive, and displays of aggression within the media can all be outcomes of how individuals model aggression.

Bandura (1973) suggested that the acquisition or learning of the aggressive behavior was separate from the acting out of the behavior. Individuals learn through experience and modeling to recognize threats and perceive enemies and situations in which aggression is likely to be reinforced. Emotional arousal, such as anger or frustration, can serve as an instigator, as well as verbal or physical assaults. However, aggression in these situations is more likely to occur if it is determined that it will be beneficial to an individual or pertinent to the particular situation. Overall, the cognitive influence on the social learning theory suggests that problem-solving skills are more likely to be deemed most appropriate and utilized by the individual (Renfrew, 1997).

In addition, the social learning theory suggests that aggression is impacted by three forms of reinforcement: direct external reinforcement, vicarious reinforcement, and self-reinforcement. First, direct external reinforcement is found by way of material gains, increased social status, inflicting pain and/or injury on others, and alleviation of aversive treatment (Bandura, 1973). Through aggression, individuals can forcibly obtain material support for their lifestyles. Improvements in lifestyle can also be obtained through increased social status. Second, when investigating vicarious reinforcement in relation to inflicting pain and/or injury on others, research suggests that aggression can be considered as satisfying an internal drive or increased self-esteem. Drive theories express the belief that inflicting pain on others reduces the tension and anxiety associated with the conflict (Bandura, 1973). Third, physical retribution can enhance one's self-evaluation

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depending on their overall acceptance of aggressive behaviors. If an individual refuses to fight back, they could potentially be seen as weak or a coward. In the end, the alleviation of an aversive treatment is best defined as defensive aggression. From a social learning perspective, these forms of aggression are reinforced as a method of eliminating the source of pain and anticipating consequences.

Within the social learning theory, reinforcement increases aggressive behavior when an individual observes that another's aggressive behavior was rewarded (Renfrew, 1997). This concept of maintaining aggression relates to the observational learning basis of the theory. With the existence of reinforcement paired with the absence of punishment, an individual is more likely to behave in a similar fashion; however, one must realize that the origins of aggression vary across individuals. As a result, the overall context of the aggression might not serve to maintain the observer's own aggression; even when there is an observed reward for aggressive acts.

Self-reinforcement completes the theory by addressing those internal factors that contribute to aggressive behaviors by increasing one's sense of self-worth and satisfaction (Renfrew, 1997). Modeling contributes to the way in which one evaluates an individual's own behavior. For example, an adolescent whose parents and social support value certain aggressive behaviors is more inclined to find those behaviors self-reinforcing. Furthermore, it is important to note the potential effects that can be rendered from similar processes dependent on self-mediation. Once an individual detaches from external input and begins to rationalize behavior that might otherwise be maladaptive, within the social learning theory, it is plausible to begin to see an increase in aggression (Renfrew, 1997).

Bandura's work on the social learning basis of aggression built upon the previous theories by incorporating a cognitive component to the overall understanding of learning and the way in which individuals self-regulate their own behaviors. Overall, Bandura's work, contributed to the current work on the General Aggression Model (Anderson & Bushman, 2002; Anderson & Carnagey, 2004).

Model of Aggressive Behaviors

In order to formulate the foundations of aggression, Anderson and Bushman (2002) created a sound model for the study of aggressive behaviors called the General Aggression Model (GAM). The GAM proposes that when certain causes or input are experienced, individual traits, values, beliefs, and biological factors; (environmental/situational cues), outcome (action/behavior) is affected by way of interactive routes (current affective state, cognitions, appraisal, and evaluation/judgment). The final outcome becomes apart of an individual's social schema that will be used when interacting with others in the future.

The GAM model was created from knowledge structures such as perception, interpretation, decision making, and action, all of which are derived from experience (Anderson & Bushman, 2002). The model suggested that these knowledge structures influence the automatic responses of certain cognitive and affective behaviors. Within this model three knowledge structures are identified. First, an individual's perceptual schema is incorporated to identify certain phenomena. The second knowledge structure is the person schemata, which incorporates an individual's beliefs about another individual or group of individuals. Lastly, the behavioral script informs the actions of individuals given a certain environment or situation.

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Within the GAM, knowledge structures impact affect in several ways. For instance, the influence of the knowledge structures informs the individual as to how this feeling should be experienced and processed, including judgments about adaptive versus maladaptive components, appropriateness, and subsequent behaviors. Furthermore, the knowledge structure can influence behavior through schemas that suggest certain behaviors become likely given certain circumstances.

The development of aggression begins with the learning, rehearsal, and reinforcement of aggression-related knowledge structures. Identified aggressive personality components directly affected by social learning include aggressive beliefs and attitudes, aggressive perceptual schemas, aggressive expectation schemas, and aggressive behavior scripts. The impact of the described knowledge structures and aggressive personality components may lead to an increase in an individual's aggression. Thus, the result of aggression and attachment interacts with past experiences and influences the future relationships.

Environmental Influences

The strength of the parent-child relationship is linked with a higher level of social competence, peer acceptance, and popularity (Coleman, 2003). Children with an insecure attachment in early childhood may experience peer rejections and negative emotions such as hostility, anger, aggression, withdrawal and lack of self-esteem. Literature on this construct dates back over twenty years when Main and Weston (1981) investigated influences and the security of parent-child relationships and its effect on children's peer relationships. In addition, literature shows that differences in a child's family experiences, personalities, skills, and ideas about themselves are related to the

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degree to which children are psychologically equipped to benefit from intimate relationships during the school years (Coleman, 2003).

When investigating the family structure and its effects on adolescent aggression, it is also important to note that factors outside of the family structure may also influence children toward aggression in order to achieve social goals (Fraser, 1996). For example, when a family does not have the basic needs for survival, food, shelter, clothing, and health care there are increased risks for stressors that may hinder positive parenting, problem-solving skills, and interactions. In one of every five American families, typical child development is hindered due to poverty (Fraser, 1996).

Research has also found that neighborhood factors may also serve as a mediator for predictors of aggressive behaviors (Molnar, Browne, Cerda, & Buka, 2005). For example, increased levels of neighborhood dysfunction result in fewer safe places for children to play which result in a greater probability for an adolescent to carry a weapon to defend themselves against direct forms of aggression (Molnar et al., 2005). In 2005, Molnar and colleagues conducted a longitudinal study on adolescent females across different environments. Results from the study found that violent victimization was associated with twice the likelihood of later acts of violence. They also found that victims of aggressive behaviors who resided in safer, wealthier neighborhoods were four times more likely than non-victim girls to later engage in violence; however, this relationship was not demonstrated within less affluent and violent neighborhoods (Molnar et al., 2005). The findings from this study demonstrate that if safety within communities and home environments improve, it may reduce levels of aggression.

School environments also have a huge potential impact how relational aggression and conflict resolution behaviors are is present within society. Investigation of this concept may offer promise for future efforts in prevention and education regarding this form of negative behavior. Schools are known to be critical environments for the development and maintenance of peer relationships; therefore studying relational aggression in the school setting is crucial.

In recent years, the idea of prosocial behavior has been examined in terms of attachment (Verschueren and Marcoen, 1999). Research by Verschueren and Marcoen (1999) has shown that children who have secure attachments demonstrate more prosocial behaviors that often results in approval from peers and higher self-esteem. Furthermore, teachers reported that students adapted more successfully to change, school stressors, and spoke more highly of themselves during role playing opportunities within the study. Thus, school personnel, teachers, parents and the community need to cooperatively work together to help children build strong relationships.

Definitions of Aggression

Even though definitions of aggression differ across research studies, researchers have defined aggression as a negative behavior intended to cause discomfort and/or pain to other individuals (Crick & Grotpeter, 1995). Bullying is defined as a conscious, willful, and deliberately hostile activity intended to harm, induce fear through the threat of further aggression, and create terror (Coloroso, 2003). When investigating the concept of bullying, there is typically an *imbalance of power* between the perpetrator and the victim; in this case the victim has difficulty defending themselves (Olweus, 1991). For example, the bully can be older, bigger, stronger, more verbally adept, higher up on the

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social ladder, or of the opposite sex (Coloroso, 2003). In general, there is intent *to harm,* where the bully means to inflict emotional and/or physical pain, expects the action to hurt, and takes pleasure in witnessing the hurt. In addition, Coloroso (2003) further stated that when dealing with bullies, there is typically a *threat of further aggression,* where both the bully and the bullied know that the bullying can and probably will occur again. Lastly, Coloroso (2003) the researcher described bullies in general creation of terror. This concept is used when bullying is systematically used to intimidate and maintain dominance over another individual (Coloroso, 2003). Previous research also shows that the victim displays little to no retaliation to the individuals who are responsible for the bullying (Mouttapa, Valente, Gallher, Rohrbach, & Unger, 2004). However, when looking at aggression, it is also important to investigate groups or individuals of equal social status that engage in aggressive attacks and vengeance against another.

Types of Aggression

Overt Aggression

Collectively, overt forms of aggression can be displayed through verbal and physical forms. Overt aggression, consist of harmful acts that can affect the development and function of others. Crick & Nelson (2002) describe physical displays of aggression as the most noted types of harmful acts among peer groups. Physical aggression is typically defined as an act performed by a person who intends to physically harm another person (Estrem, 2005). Previous research has mainly focused on physical aggression; however, within recent years there has been a shift in thinking reporting that verbal aggression can be just as harmful as physical aggression (Xie et al., 2003). Verbal

aggression is defined of hostile actions where damage of an individual is obtain by use of words. For instance, verbal aggression can consist of insults, intimidation, threats, arguing, and name calling (Xie et al., 2003).

Roecker-Phelps (2001) investigated children's responses for coping with overt aggression in children by way of the *Social Experience Questionnaire* (SEQ; Crick & Grotpeter, 1996). Results of the study showed that boys (6-8 grades) reported a higher frequency of overt forms of aggression. However, findings within this study are greatly criticized as a result of the validity of the SEQ questionnaire. Even though Crick & Grotpeter (1996) reported that the SEQ measured overt victimization, the verbal aggression construct had to be dropped because it loaded on both overt and relational victimization scales. As a result of the verbal aggression construct being dropped, the SEQ only measured physical forms of aggression. Collectively, overt aggression cannot be placed in a category of its own within aggression literature. As a result, indirect aggression can also be determined by way of both verbal and physical forms.

Indirect Aggression

Buss (1961) was the first to use the term *indirect aggression*. This covert form of aggression can be verbal (by way of spreading rumors) or physical (destroying an individual's property). It is defined as attempts to cause psychological (in rare cases even physical) harm to the target person by social manipulation, often (but not always) attacking the target in circuitous ways through a third person in order to conceal the aggressive intent, or otherwise pretending that the attack was not aggressive at all (Bjorkqvist, 2001). Owens and colleagues (2000) investigated the effects of indirect aggression with 10th grade girls and their teachers in South Australia. Interviews were

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used to assess the way the girls felt about and dealt with indirect aggression. Results from the study showed that the majority of girls were unsure of how to deal with indirect aggression. As a result, it is imperative for school personnel to be aware of these subtle forms of aggression and intervene appropriately.

Social Aggression

Cairns (1989) described social aggression as the manipulation of group acceptance through alienation, ostracism, or character defamation. This is typically directed toward damaging another's self-esteem and/or social status (Galen & Underwood, 1997). Galen & Underwood (1997) investigated the extent to which children view behaviors of social aggression as hurtful and frequent among same-sex peers. The goal was to develop a method to observe socially aggressive behaviors among girls. The researchers mainly focused on girls because previous research (Cairns, 1989) found that social aggression is more common among same-sex female dyads. The study was broken down into two sections. First the researchers administered a questionnaire for 4th, 7th, and 10th grade boys and girls to evaluate how they perceived physical and social aggression. Even though the focus was on girls, Galen and Underwood (1997) included boys because they wanted to look at gender and developmental differences in children's perceptions of physical and social aggression. It was hypothesized was that girls would view social and physical aggression as equally hurtful, and boys would view physical aggression as more hurtful than social aggression. The researchers believed girls would report that social aggression happens more frequently when compared to their male peers. Results from the first part of the study supported the hypothesis that negative facial expressions were a function of social aggression. It was also confirmed that

regardless of gender, the 4th and 10th graders viewed physical aggression more hurtful than social aggression; however, 7th graders viewed both social and physical aggression as equally hurtful.

The second part of the study was broken down into two phases. First, researchers used an adolescent actor to provoke two adolescent friends while playing a board game. The goal of this phase was to directly observe behaviors that are seen as socially aggressive (i.e. name calling, facial expressions, social exclusion). The last phase of the second part consisted of viewing videotaped segments of socially aggressive play session interactions with a third sample of elementary, middle, and high school males and females. The hypothesis was that girls would view more socially aggressive behaviors as negative and express more anger than boys by displaying a higher level of dislike for the victim. It was also hypothesized that older adolescent females would have a stronger dislike for the victim than younger participants.

Results from the first phase of the second part of the study showed that number of girls participated in a negative interaction with the female stranger. As a result, socially aggressive behaviors such as ignoring, social exclusion, and negative facial expressions were observed. Outcomes from the other phase of the second study found the girls view the samples of social aggression more negatively than boys. In addition, the older the participants displayed more dislike towards the victim than younger children. Overall, the findings from this study have formulated that social aggression may take direct forms as verbal rejection, negative facial expression, body movements; however, it can also take a more indirect form such as social exclusions and spreading rumors (Galen &

Underwood, 1997). Typically social aggression occurs in group settings and can be shown in both overt and covert forms.

Relational Aggression

The idea of relational aggression stemmed from Crick (1995), who defined it as behaviors that harm others through exploitation to peer relationships. Relational aggression is very different from more direct forms of aggression because it is seen as a more subtle way of attacking an individual's peers. Types of relational aggression include, but are not limited to, exclusion from a play group, spreading rumors, and gossiping about another individual. This type of aggression is more common among girls as a result of the need for close attachments and intimate relationships (Crick et al., 1999).

Consistent with previous literature, the development of positive peer attachments and relations is likely to serve as a buffer against relational aggression (Michiels, Grietens, Onghena & Kuppens, 2008). These forms of aggression from peers are probable to cause harm by way of social isolation, victimization, and segregation. Unlike direct aggression, relational aggression is not easily separated from the same sort of actions carried out through direct form of aggression. As a result, it is imperative to formulate understand what relational aggression is and how to appropriately assess it in order to successfully intervene.

Björkqvist and colleagues (2001) found that relationally aggressive girls are disliked more than their same aged peers, demonstrate adjustment problems, and demonstrate an increased level of loneliness and hopelessness. A study by Crick (1996) also formulated that relationally aggressive females have difficulty with the formulation

and longevity of social and interpersonal relationships. As a result of the covert form of female bullies, it may be very difficult to target the aggressors (Brinson, 2005). A review of research within the school settings found bullies tend to victimize students who are the same age as themselves since they mix less often with younger or older students (Merrell et. al., 2006). Bullies are therefore generally peers of the victim, of the same age, and in the same grade or class. In general, they victimize students with whom they spend time and know well.

The definitions of social and relational aggression reflected in the YASB are shown as different with the intention of the perpetrator, whereas the definition of these constructs in some of the previous models instead emphasize the form of behavior. Within the YASB the definitions of relational and social aggression include both the use of overt and covert aggression. When one is seen as a relationally aggressive perpetrator they seek to influence a person with a person or person in which they share a dyadic relationship. In contrast, the intention of the socially aggressive perpetrator is to harm the target's social standing.

Determining the differences between the constructs of relational and social aggression may have potential implications regarding the intentions of the perpetrators. For example, perpetrators of relational aggression may lack the interpersonal maturity to manage conflict in close relationships and thus resort to relational aggression to achieve influence within the relationship, whereas perpetrators of social aggression may possess such interpersonal maturity, they may be more motivated by a need for dominance and thus use social aggression to inflate their own social standing in comparison to that of their victim.

Aggression and Development

Aggression varies throughout childhood and adolescence as a result of biological, psychological, cognitive and social development (Karriker-Jaffe, Foshee, Ennett & Suchindran, 2008). For example, an increase in physical aggression during adolescence corresponds with biological and hormonal changes. When looking at boys, the overall idea of masculinity and direct physical dominance typically occurs at the start of puberty. However, when investigating more indirect forms of aggression during adolescence, psychological, cognitive, and social transformations serve as the root of individual aggressive acts (Karriker-Jaffe et al., 2008). For instance, during the beginning of adolescence, peer relationships begin to change and approval from others in positions of authority become increasingly important.

In contrast, development of aggression in early childhood is influenced by early environmental experiences including family of origin, attachment relationships, and parental behavior modeling styles. Additionally, temperamental differences also account for developmental variation. Although differences in rearing environments make a substantial contribution to variation, an infant begins life with a particular temperamental style, which profoundly influences the way others treat the child and the way he or she reacts to the unexpected. In the end, one must realize both temperament and environmental factors are clearly salient to development of aggression in young children.

Numerous studies have been conducted on more direct forms of aggression throughout development. Farrell and colleagues (2005) found physical aggression and violence increases during early adolescence, peaks late in adolescence, and then declines into young adulthood. In contrast, there has been limited research on the development of

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social and relational aggression throughout adolescence. "Most research on social aggression has been cross-sectional, and no studies have described developmental trajectories of social aggression during adolescence" (Karriker et al., 2008, p.1228). Overall, research has formulated an overall hypothesis that both direct and indirect forms of aggression follow a "curvilinear trajectory" that peaks at different stages of development (Farrell & Sullivan, 2004). For example, Karriker-Jaffe et al., (2008) investigated data from a longitudinal school-based student survey data set on the Context of Adolescent Substance Use. The researchers used results from five sets of in-school surveys with adolescents between the sixth and eighth grades; survey data was collected every six months. Two scales were used within the study; first, the physical aggression scale (Farrell et al., 2000) was used to measure how many times in the past three months the participant had been in a fight where someone has hit another peer, threatened to hurt a teacher, and/or threatened someone with a weapon. Second, the social aggression scale (Farrell et al., 2000) measures how many times within the past three months the participant was excluded from a play group, spread rumors about someone, and/or started a fight with other people. Both scales were in a likert format ranging from 0 (none), 1 (1-2 times), 2 (3-5 times), 3 (6-9 times), or 4 (10 or more times). Each participant's scales were summed to create a total score for both physical and social aggression. Results showed the peak age of physical aggression was around 13-14 years of age (seventh and eighth grades) in two samples of students from both rural and urban areas. However, when investigating their second hypothesis, relational aggression began 12 months later than physical aggression (Karriker-Jaffe et al., 2008).

Gender Differences in Aggression

A great deal of the aggression literature deals with topics of male aggression. Previous research assumed that females typically do not engage in physical aggression like their male counterparts. In the late 1980's, there was a shift in thinking which was headed by Olweus. Within the past decade, there has been an increased interest in investigating the ways in which females engage in conflict with others. Currently, research on aggression in girls has shown that girls are in fact aggressive, but demonstrate it in different forms (James & Owen, 2005). Females demonstrate aggression towards one another in more covert, indirect ways, which are motivated by the strength and development of relationships with others (Archer & Coyne, 2005). Boys characteristically engage in many physical forms of aggression such as kicking, pushing, and punching individuals; while girls typically exhibit aggression through indirect and socially motivated means (Seals & Young, 2003). It is hypothesized that aggression literature focuses on males because men are characterized as more aggressive than females and demonstrate a higher rate of male convictions for violent behaviors (Smith & Waterman, 2006). However, it is imperative to recognize that women are in fact aggressive but demonstrate aggressive acts in different ways.

Exploring aggression from a social psychological perspective, gender differences are evident. Ideas of social role theory are based on the premonition that men and women behave differently in social situations and take different roles, due to the expectations that society has placed upon them (Eagly, 1997). Social role theory implies that males are conditioned to behave more aggressively and subsequently develop more acceptance of the same behaviors (Eagly, 1997). Female roles are based

on relationships and reciprocal behaviors. The assumption is that females are, therefore, less aggressive. Archer (1996), however, disputes social role theory as it relates to aggression. He found that aggression with females is largely contributed to relationships with others.

In another study investigating male and female differences on aggression, Viemero (1996) studied childhood predictors of criminal behavior and found gender differences in predictors of physical aggression in adolescence. For males, the best predictor was previous aggression, whereas in females it was watching violence on television. In addition, arrest related factors in early adulthood also were different for males and females. Male arrests were typically predicted by previous aggression and exposure to violence on television; whereas female arrests were also predicted by exposure to violence on television and environmental factors such as female adolescent aggressive behavior, parental aggression, punishment, and previous thoughts and ideas of rejection. Additionally, more current research by Reed, Goldstein, Morris & Keyes (2008) investigated the effects of maternal behaviors on their child's early adult hostility and aggression. Findings of the study reported that lack of maternal support for their daughters was significantly related to increased physical aggression and fights within the family. Overall, research suggests that aspects of the parent-child relationship may influence children's relationships with others.

Female Aggression

Historically aggression research has focused mainly on males. Previous research assumed that because females typically do not engage in physical aggression like their male counterparts. Currently, research on aggression in girls has shown that girls are in

fact aggressive, but display it in different ways (Karriker-Jaffe et al., 2008). Seals & Young (2003) found that girls demonstrate aggression through covert socially motivated means. Early research on the construct of aggression described these behaviors as relational aggression. Characteristics of relational aggression include gossiping, spreading rumors, ignoring, staring, giving nasty looks, exclusion from a friendship group, isolation, alienation, writing hurtful letters, and stealing friends or boyfriends (Crothers et al., 2005). They can involve an individual's manipulation of another child in order to damage or be in command of that person's social status with their peers. A unique aspect of relational aggression is that it can be so covert that from the outside individuals may not even deem it as aggressive. For instance, a bully can operate in this way without ever interacting with a victim. This can be by way of social attack through a third party in order to conceal the aggressor's intent or by way of a social clique using verbal and psychological tactics groups to injure others feelings of social acceptance.

Changing schools from elementary to middle school leads to new friends, more challenging school work, less socialization time at school, and more competition for resources (Crick & Grotpeter, 1995). As a result, an adolescent female's priorities begin to change from wanting to spend the majority of their time with other girls to being interested in the opposite sex (Duncan, 2004). These factors are also mirrored with an individual's physical development, need for fitting in, and acquiring social status. In addition, communication plays a major factor within peer relationships and development. During this period of development, adolescent females develop intimate sharing relationships with other same-sex peers about life events and problems (Field et al., 2009). However, the sharing of particular information can lead to the spread of gossip

and rumors that can destroy the relationship. Negative reactions, jealousy, and envy

towards others are considered natural occurrences throughout female adolescent years

(Ponsford, 2007). As a result, it is typical for the majority of adolescent girls to be

participants as both aggressors and victims of relational aggression during their

developmental years (Ponsford, 2007).

Another emergent feature of female relationships as individuals move forward

developmentally is the importance of being seen as popular to their peers. As a result,

female adolescents attempt to achieve this on their own or by association with other girls

who are already considered social admired (Duncan, 2004). Participants within the

Ducan (2004) study deemed popular girls as hasty, aggressive and involved in rumors

and fights with other peers and social groups. Findings from this study show disparity to

the earlier socialization of younger girls to get along and cooperate during their early

childhood. When children grow older, there is an increasing need to compete on the

premise of gaining attention of the opposite sex, academic development, and sports.

Collectively, the competitive atmosphere within the school setting can contribute to the

overall function of bullying.

In a study done by Owens and colleagues (2000), the effects of indirect

aggression were studied among high school girls and their teachers in South Australia.

All participants were interviewed to measure females' ideas on methods of dealing with

and reacting to various scenarios of indirect aggression. Results demonstrated that the

majority of female participants were uncertain how to handle indirect forms of aggression

efficiently. The majority of the participants retaliated, spoke one on one with the

aggressor, or used the telephone to work through the issue. The purpose of this study was

to look qualitatively at the quantitative research already done by Galen & Underwood (1997). Based on the results from this study, interventions dealing with indirect aggression are important.

Female Aggressors

Female adolescents primarily use relationally aggressive strategies as a means to achieve power or retaliate against others (Karriker-Jaffe et al., 2008). Using covert forms of negative verbal and nonverbal communication expressed through indirect means, an adolescent female aggressor can manipulate the victim by way of attacking the individual's personal relationships (Underwood, 2003). Within the school settings, school personnel may overlook these altercations without realizing that they are typically much more complex than they appear, with the aim of social exclusion (Merrell Buchanan, & Tran, 2006). In addition, when investigating covert forms of bullying, it is imperative to closely look at non-verbal communication (i.e. rolling eyes, giggling ignoring, and dirty looks) amongst peers. Several methods of non-verbal communication can send messages of superiority and disregard for others that can be just as powerful as verbal altercations amongst peers. (Kolbert et al., 2009). Overall, it is important to note most bullying behaviors occur within school rather than on the way to and from school (Olweus, 1991).

Characteristics of the Victim

A consistent profile of bullying victims has emerged from the literature. Victims tend to be physically smaller, more sensitive, unhappy, cautious, anxious, quiet, and withdrawn than other children (Byrne, 1993; Hoover, Oliver, & Hazier, 1992). Most victims of bullying can be termed "passive" or "submissive" (Olweus, 1991). In contrast,

there is some evidence within research that teenage girls who consider themselves attractive are more likely to be victims of bullying (Leenaars, Dane & Marini, 2008). Results from Leenaars et al. (2008) demonstrated popular attractive girl's experienced 35% higher rate of being victims of bullies than their peers. An explanation of this was due to their peers perceiving them as competition among other girls within the school for the attention of the opposite sex.

Olweus (1991) explained another type of victim that is called provocative; characteristics of this type of victim embody a collection of both anxious and aggressive behaviors. When being teased or bullied, these individuals tend to overreact which, in turn, provokes their peers to victimize them more. Overall, being a victim of bullying can be a detrimental cycle that can lead into serious consequences for the victim. Children and youth who are bullied are more likely than other children to be depressed, lonely, anxious, have low self-esteem, experience headaches, stomachaches, fatigue, be absent and dislike school, and think about suicide. These damaging outcomes of being bullied can, in turn, make victims vulnerable to even more victimization (Olweus, 1991).

Aggression and Minorities

Little is known about the use of indirect forms of aggression among minority populations within the United States. Current studies focus mainly on race differences in regards to aggression without providing a specific theory as to why race influences bullying activities. Overall, there is a societal assumption that characteristics that differ from some social norms, (such as the way an individual looks, physical ability, or ethnicity) increases tension between groups which in turn, increases bullying behaviors. However, research regarding bullying and minorities demonstrates diverse findings.

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Contrary to societal beliefs, Siann and colleagues (1994) found that ethnic minority students were significantly more likely to report that as a group they were bullied more than Caucasian students, even though results of the study found no racial differences of bullying activities. On the other hand, a study of adolescent African American students reported being bullied significantly less frequently than other races (Nansel, et al., 2001).

One of the earliest studies that linked minorities and relational aggression was by Osterman and colleagues (1994). This study consisted of eight year old African American children in the state of Chicago. Results of this study found that African-American boys and girls demonstrated a similar level of indirect aggression on peer ratings. The scores from these participants showed an overall higher form of aggression compared to other ethnic groups. In a more recent study, Xia and colleagues (2003) investigated the development and social function of social, relational, physical and verbal aggression of African American children within the inner city. Results of this study found that girls used more social and relational forms of aggression, whereas boys used more physical forms. However, an interesting finding was that the fourth grade girls were just as likely to engage in physical aggression as boys.

Minority research, in regards to bullying, focuses on the racial makeup of the school structure and student characteristics as an explanation for race differences in bullying. As stated before, the definition of bullying is a conscious, willful, and deliberate hostile activity intended to harm, induce fear through the threat of further aggression, and create terror to maintain control (Colorosa, 2003). Participants within Graham and Juvonen's (2002) research study attended a school where African American students were the majority. Results from this study showed that African American

students were more likely to engage in aggressive behaviors when compared to Caucasian and Hispanic students. On the other hand, Seals and Young (2003) found no differences in bullying between African American and Caucasian students in a study where African American students were the majority in southern school.

When investigating the differences in relational and social aggression amongst Caucasian and Non-Caucasian youth, Clinton and colleagues (In press) compared scores on the YASB utilizing European American and Puerto Rican female university students. Results demonstrated the Hispanic Puerto Rican sample reported being more social aggressive ($M = 20.05$) than the European-American ($M = 21.43$) sample. On the other hand, the Euorpean-American participants ($M = 17.50$) identified as being more relationally aggressive in their relationships than the Hispanic females ($M = 19.32$). These differences within these results demonstrate the importance of future investigation of the dyadic relationship and cultural differences with aggression.

Bauer and colleagues (2007) investigated the effectiveness of the Olweus Bullying Prevention Program in public middle schools. Participants were chosen from 10 different public middle schools; seven schools were a part of the intervention and three served as the control group. Results of the study showed that relational victimization decreased by 28% and physical victimization decreased by 37% among Caucasian students. However, there were no known program effects for minority students. In addition, student participants in intervention schools were more likely to perceive that other students actively intervened in bullying.

In the end, research on race influences on bullying behavior fails to be consistent. Although some studies (Graham & Juvonen, 2002; Osterman et al., 1994) found African

Americans showed an overall higher form of aggression compared to other ethnic groups, other studies (Seals & Young, 2003) found no differences in bullying between African American and Caucasian students. This may be due to the way race is used as a single variable without understanding the underlining constructs and environmental variables that can affect the development of the adolescent and their formulation of relationships. Future research should investigate more concrete ideas of how race influences aggressive behaviors.

Aggression and delinquent behavior

As a result of the present study proposing to investigate relational aggression with female minority youth with delinquent behavior it is pertinent to review the literature regarding aggression and delinquent behavior. As mentioned before, within research, physical aggression is a precursor to future delinquent behavior. As a result, one can hypothesize that relational aggression may also be a predictor of juvenile delinquent behaviors due to its stability over time and role or peers. Moreover, female minorities display both physical and relational forms of aggression. Children with an early onset of antisocial disruptive behaviors are likely to show a maladaptive developmental course with problems that continue or worsen as they become more trenched in a youngster's behavioral repertoire over time (Zahn-Waxler et al., 2005). Topics discussed in this section include the stability of relational aggression, precursors to relational aggression, peers contribution to antisocial behaviors and communication behaviors of juvenile delinquent females.

The stability of relational aggression has been explored in the psychological literature. Zahn-Waxler and colleagues (2005) demonstrated that children's early social

behavior, including relational aggression, and reputations established with classmates tends to stay with children into early adolescence even after they have switched schools and classrooms. Moderate three-year stability in physical aggression, relational aggression, and prosocial behavior was found.

Zahn-Waxler and colleagues (2005) examined children's representations of conflict and distress situations at seven years as developmental precursors to relational aggression, overt aggression, and psychiatric symptoms into early adolescence at four time points. The original sample of children consisted of 82 and at time four, 54 children remained. The *Children's Peer Relations Scale* (CPRS; Crick & Grotopeter, 1995) was used to assess both relational and overt aggression, while a psychiatric interview called the Diagnostic interview Schedule for Children (DISC; Reich, Welner & Herjanic, 1991) was administered to the youth and the youth's mother. Overall, youth reports of relational aggression were associated with disruptive symptoms. Females who demonstrated infrequent prosocial concerns and heightened sadness were the most likely to demonstrate relational aggression in adolescence. Also, when hostile, antisocial themes were prominent in the play of young girls, by adolescence they also displayed more relational aggression, overt, aggression, and disruptive symptoms (Zahn-Waxler et al., 2005).

Aggression Interventions

The Olweus Bullying Prevention Program is a three-tiered school-based program designed to prevent or reduce bullying in elementary, middle, and junior high schools. The targeted age for the intervention is for individual's six to fifteen years of age. The goal of the program is to organize the school environment to reduce the amount of

occurrences and rewards for bullying. The collaboration of school personnel is important

for implementing the program because they are responsible for introducing and

implementing the program. Typically, a school planning committee is involved in order

to successfully implement school, classroom, and individual interventions. The main

goal of the program is to create a safe and positive school environment for students to

learn and develop.

Previous research studies have found the Olweus Bullying Prevention Program to

be effective. The first evaluation of the program took place in the mid 1980s and

involved approximately 2,500 children from 4th to 7th grades in Bergen, Norway

(Olweus, 1991). The research design used age-based cohorts. In order to effectively

maintain the goal continuous assessment was conducted that included school conference

days, more consistent and active supervision during lunch and recess, formulating a

bullying prevention group, scheduling parent-teacher conferences, establishing clear

classroom rules, and organizing classroom meetings about bulling (Olweus, 1991).

Results from the study showed a 50% overall reduction of self reported bullying and

victimization, as well as reductions in self-reported vandalism, fighting, theft, alcohol

use, and truancy. There were also improvements in the social climate of the classroom,

such as greater organization and a more positive setting conducive to learning. Overall,

students reported an increased level of satisfaction with school and a more organized

school climate. In addition, classroom teachers reported a decrease of bullying and

victimization within the classroom (Olweus, 1991).

More recently, Black and Jackson (2007) evaluated the Olweus Bullying

Prevention Program across a period of four years. Participants within this study were

from a total of six elementary and middle schools within an urban setting. After the bullying intervention program was introduced within the schools, bullying during lunch and recess in both elementary and middle schools decreased by 45% over a four year period. Although there are school-wide interventions successful in physical and verbal forms of bullying children there are fewer investigative of prevention programs designed to decrease relational aggression.

Relational Aggression Interventions

The Goodwill Girls Curriculum is examined as an example of a tertiary intervention in the book *Understanding Girl Bullying and What to do About It: Strategies to Help Heal the Divide.* (Field et al., 2009). Before the write up of the curriculum it is recommended to understand, what girl bullying is, why it occurs, and how school counselors, teachers, and administrators can recognize and reduce girl bullying in their schools (Field et al., 2009). Found within the last chapter for the book the Goodwill Girls curriculum is broken down into ten sessions that are catered to individuals 10-15 years of age (Crothers et al., 2005). Each lesson has a separate objective that relates to relational aggression, an individual's approach to conflict, social skill development and perspective taking (Crothers et al., 2005). The curriculum is unique because it is based off of psychological theory and solution focused approaches in order to work with a student that has been previously reprimanded for problematic behaviors (Field et al., 2009).

There was a pilot conducted on the curriculum in the fall of 2007 with a total of 12 8th and 9th grade girls (11 Caucasian; 1 African America) in a rural junior/senior high school (7th-12th graders) in the northeast of the United States (Field et al., 2009). The curriculum was co-facilitated by a school counselor and a researcher from a local

university. Implementation of the curriculum was utilized in order to formulate the final construction of the curriculum as well as to add facilitator notes to each session to help future facilitators with implementation (Field et al., 2009).

In addition, the Goodwill Girls curriculum was piloted by the researchers during an annual "Girls Night Out" program at a rural junior high school in the Mid-Atlantic United States. After parental consent was received, a total of, 28 girls that were in the 8th grade participated. Ninety-three percent of the participants were Caucasian while 7% reported being bi-racial; the average age of participants were 13.5 years of age. Before the pilot began the participants within the study were asked to complete a demographic questionnaire, grade, ethnicity, amount of time in the district, amount of friendships, and the strength of peer relationships. In addition, participants were asked to respond on the *Young Adult Social Behaviors Scale* (YASB; Crothers, Schreiber, Field, & Kolbert, 2009) and 16-open ended prompts on relationships. Within the YASB participants reported about their relationally-aggressive, socially aggressive, and prosocial behaviors. The total time of completion took approximately 20 minutes. Once students completed the packet, the primary investigators began a workshop using three lessons of the *Goodwill Girls* curriculum.

Measurement Limitations

A variety of different forms of measure have been used to assess relational aggression. Such measures include observations, nominations, and self-report rating scales (from youth, peers, and teachers). McEvoy et al., (2003) formulated that the most popular form of assessment in literature that looks at relational and physical aggression uses teacher ratings and peer nominations. In any study there are a number of limitations

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exist regarding current assessments of relational aggression. For example, literature does not always provide consistency amongst raters (i.e. teachers and peers) of aggression.

McEvoy and colleagues (2003) investigated three methods for assessing relational and physical aggression. The primary investigators looked at a teacher rating scale, a peer nomination measure, and use of direct observation. Results formulated that teachers, peers, and observers were found to agree more often about displays of physical aggression than displays of relational aggression. In addition, when looking at gender all three groups agreed more often about female's display of relational aggression and males display of physical aggression. The teachers also had issues with agreeing on the particular students that displayed the most relational aggression. These findings demonstrated an agreement between teacher rankings and peer nominations and between teacher rankings and observer scores of physical aggression of males. The overall findings within this study suggest that physical aggression in more identifiable and ideas differ between teachers and peers of what relational aggression is.

Furthermore, a limitation of rating scales and peer nominations is that teachers and peers may not always agree on what relational aggressive behaviors look like. There are a number of extraneous variables that can potentially lead to these results. One idea is that teachers may not always observed their students displaying forms of relational aggression to their peers as a result of their varied roles within the classroom. In the end, the inconsistency of these measures should be considered when making a determination of whether children are using relational aggression or not. Despite these differing findings, these measures appear to be the paramount method to measure relational aggression until more in depth instruments are created.

Crothers and colleagues (2007) look at another method of measurement of relational aggression used in the literature, a self-questionnaire. When utilizing a self-report questionnaire provides firsthand look at the aggressor, their environment, and particular opportunities for up to date evaluation of a child's overall psychological well-being (Crothers et al., 2007). A limitation of self-report questionnaire is that children may limit their actual behavior in hopes to been seen as more favorable to others (Pellegrini & Bartini, 2000) or they do not view any victimization occurring.

Research Findings and Conclusions

As a result of relational aggression being seen as a relatively new subject area among researchers, there is not a large amount of research within the field. Ostroy & Crick (2006) stated that the focus on relational aggression has been expanding over the past fifteen years. This is due to the fact that when looking at studies that deal with aggressive behaviors, there is typically a greater focus on studying direct physical forms of violence and aggression with adolescents than the covert indirect displays of relational aggression. Many of the research articles on relational aggression provide theories regarding what it is, the causes, and prevention methods; however, few of these theories have been empirically tested for effectiveness. As a result, it is recommended that future research is needed to gather data from studies dealing with interventions (Young, Boye, & Nelson, 2006).

More current research is moving from defining relational aggression and how it is caused, to particular interventions educators can use with students (Merrell et al., 2006; Yoon, Barton, & Taiarol, 2004; Young, Boye, & Nelson, 2006). These articles are defined based on prior research and analyzed to show that relational aggression is

harmful, and that there needs to be something done at the school level. All three articles define relational aggression as "behaviors that harm others through damage (or the threat of damage) to relationships or feelings of acceptance, friendship or group inclusion" (Crick et al., 1999, p. 77). Definitions of indirect and social aggression are also included in the background discussions. Overall, there is a consensus amongst research that educational materials need to be available to adults as well as adolescents regarding relationally aggressive behavior.

Yoon et al. (2004) reported there is a need for discussion regarding prevention and intervention problem-solving programs within the school setting. Merrell and colleagues (2006) found that administrators, teachers, and other staff should be educated and trained in dealing with relational aggression, and intervention techniques should be careful not to focus only relational aggression, but rather to promote positive social behaviors and attitudes among students. It is also important to note that providing a summary about what is known about relational aggression is difficult because disparate findings have been reported, different constructs have been used within research, and the developmental differences are evident (Yoon et al., 2004). As a result, there are many avenues left to be discovered when researching relational aggression.

CHAPTER III

METHOD

The purpose of the current research study is to investigate the differences in relational and social aggression in a sample of non-Caucasian youth being treated for aggressive behaviors. This study expands the limited research describing relational aggression in minority youth and specifically addresses a subset of non-Caucasian youth who are being treated for aggressive behaviors. Additionally, this study measures the effects of providing an intervention designed to decrease relational and social aggression in youth. The Goodwill Girls (GWG) curriculum was selected as the intervention that has empirical support showing a decrease in relational and social aggression in youth. Below is a description of how participants were recruited. Procedures used for administering measures and collecting the data are outlined. Psychometric properties of the instruments are provided. Lastly, data analyses and methodology are discussed.

Participants

Recruitment of Participant

As a result of the current study is an analysis of a pre-existing database, the current study will not recruit participants. Participants are youth who have received the Goodwill Girls Curriculum (GWG) in their home school district as part of their educational experiences. All female youth exhibit overt and relationally aggressive behaviors.

All students are of Non-Caucasian status and have also required out of district placement from their school for treatment of their aggressive behaviors. Specifically, those students' data were provided in de-identified form to the primary investigator for the current study's analyses.

Participant Characteristics

The current study obtained its sample from a pre-existing database from three school districts across the United States—including Pennsylvania and New Jersey. The districts in this study treat at-risk adolescents for a variety of behavioral problems including bullying and aggression. Districts implement the GWG curriculum as part of their standard educational practice. Because the GWG curriculum includes training materials, the curriculum lessons, and pre/post measures, counselors in local schools can administer pre/post measures, deliver the instruction/intervention and use the data to determine if the curriculum was useful to the children they serve. That is, because schools are required to demonstrate that the interventions they use are effective for their population of children, they routinely collect pre/post intervention data.

Data was used if participants were female, non-Caucasian, and receiving treatment for aggression. Individuals were excluded if they were male, identify as Caucasian, Asian, or were not evidencing a need for treatment of aggressive behaviors. Female students were between the age range of eleven to eighteen years of age and self identified as Non-Caucasian. For this study, data was provided by two sites that implemented the curriculum as part of their standard educational practice and one district (Group B) that gathered initial data (that will be used for the post comparisons) but did not implement the curriculum. The control sample was also of non-Caucasian status and has been placed in an alternative educational setting for the treatment of aggressive acts. That is, because no intervention was provided it can serve as either pre or post data because no change is expected without intervention (Brown, 2007). Additionally, this control group was used to control for the natural effects of maturation.

Intervention

The effects of the Goodwill Girls curriculum on relational and social aggression and conflict resolution are compared in this study. The goal of the curriculum is to provide educators with a structured group intervention that provides opportunities for students to learn constructive approaches to conflict which include being able to identify and examine relational aggression responses in our self and others (Crothers, Field, & Kolbert, 2005). A secondary goal of the curriculum was for students to learn the skills and behaviors necessary to efficiently work within social groups. Also, students learn the specifics of relational aggression, why and when it is used and how individuals can utilize alternative skills (Field, Kolbert, Crothers, & Hughes, 2009). This psychoeducational curriculum was delivered in a small group format to allow teaching and experiential practice. Additionally, the GWG curriculum was designed teach individuals how to develop healthy relationship skills as well as how to appropriately resolve conflict when they occur (Field et al., 2009).

The GWG curriculum was delivered in four stages: introduction, transition, working, and termination presented in sequence. Throughout the ten sessions participants were presented with opportunities to reshape thoughts and behaviors by formulating new ways of understanding their expectations about relationships and peer interactions. The GWG curriculum provides students with worksheets, role-play activities, and hypothetical scenarios in order to maximize learning (e.g., learn basic skills, model positive peer relationships and by utilizing vignettes). The curriculum is unique because it is based on psychological theory and solution focused approaches in

order to work with a student that has been previously reprimanded for problematic behaviors (Field et al., 2009).

Measures

Information from participants includes demographic information, and self-report rating that routinely accompany the GWG. The two measures are the *Young Adult Social Behavior Scale* (*YASB*; Crothers et al., 2009) and the *Conflict Resolution Scale* (*CRS;* Smith, Daunic, Miller, & Robinson, 2002).

The instrument that was used to assess relational aggression is the *YASB* (Crothers et al., 2009)*.* The *YASB* was developed for the purpose of a measurement of self-reported healthy and maladaptive behaviors that are utilized in friendships and relationships. This 14 item scale is designed to measure relational aggression as defined by Xie, Swift, Cairns, and Cairns (2002) where social and direct relational aggression is considered along with social skill development. The YASB has been shown to be appropriate for use with secondary school students (Crothers et al., 2008). A Sample of YASB items include the following: "When I am angry with someone, that person is often the last to know; when I am frustrated with my partner/colleague/friend, I give that person the silent treatment; and I intentionally exclude friends from activities to make a point with them" (Crothers et al., 2008, p. 21.)

Even though previous research has found that self-report measures can be seen as vulnerable to individuals' tendencies to underestimate negative qualities about themselves, there have been subsequent research (Archer & Coyne, 2005), that has used self-report measures with adolescents as an alternative to peer nomination. As a result,

alternate methods of measuring relational aggression can assist researchers in making more distinct assessments of aggression (Rowe, Swenson, & Waller, 2004).

Within the YASB, socially aggressive behaviors include gossiping, social exclusion, isolation, or alienation, writing notes or talking about someone, and stealing friends or romantic partners. Xie, Farmer, and Cairns (2002) describe direct relationally-aggressive behaviors, as the use of confrontational strategies to achieve interpersonal damage, including not talking to or hanging around with someone, deliberately ignoring someone, threatening to withdraw emotional support or friendship, and excluding someone from a group by informing them they are not welcome. Before the use of this instrument, items of the YASB were assessed for readability and relevance by several young adolescents, to ensure that the instrument would be appropriate for use with secondary school students.

Confirmatory factor analysis supports that the YASB measures three internally consistent constructs: direct relationally-aggressive behaviors, *socially*-aggressive behaviors, and interpersonally-mature behaviors (Crothers et al., 2008). Statistical analysis was completed with EQS 6.1 Multivariate Software, treating the data as ordered categorical and using a polychromic correlation matrix with robust standard errors (Lee, Poon, & Bentler, 1995). Results indicate that the model had a Satorra-Bentler Corrected Chi-Square value of 110.79 with 71 degrees of freedom, and RMSEA of .029 (CI = .018-.039), CFI of .97 and TFI (NNFI) of .96, which indicate a good fit of the data to the theorized model according to traditionally accepted cutoff values of Hu and Bentler (1999) and more recent cutoff values suggested by Sivo, Fan, Witta, and Willse (2006).

The CRS (Smith et al., 2002) is divided into two parts. The first part measures the level of conflict in schools and is comprised of several subscales: aggression, levels of disciplinary interventions, conflict-resolution styles, outside influences, need for help in solving problems, effects of poor communication on conflicts, and group aggression. Internal reliability on this subscale is reported as .45 for outside influences to group aggression. The second part of the *CRS* measures efficacy in conflictual and non conflictual situations, which was adapted from a scale created by Wheeler and Ladd in 1982. The internal reliability for this section was .91 (conflict subscale) and .90 (non-conflict subscale). The format of the instrument is a 5-point Likert scale, in which subsections have from 2-13 questions. Sample items contained in each subscale include, "When I am mad I threaten people," "I have trouble letting people know what I want," "I could use someone to help settle arguments" (friend, teacher, parent, or counselor) and "I get into arguments because of rumors."

Research Design

A pretest-posttest posttest only control group design was used to answer the first research question. A figure of the experimental design for Group A and Group B is presented in Figure 1 below.

Figure 1

Graph of pretest posttest only research design

Group A	O_1	x	O_2
Group B	....		O_3
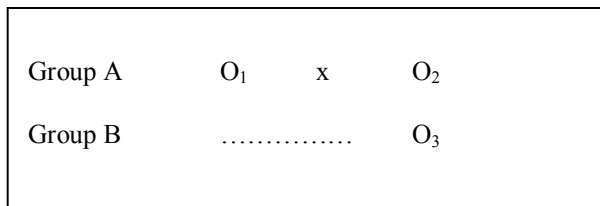
Quasi-experimental designs are common because it is not always possible to randomly assign students (i.e., to being of minority status or requiring treatment for aggression; Mertler & Vannatta, 2005). The independent variable in the study is the Goodwill Girls curriculum. The dependent variable in the study is the self-reported use of relational aggression and social aggression. See Table 1 for the steps in the experiment for Site one.

Table 1

Steps to the Experiment for Site One

	1st measurement of the dependent variable	Exposure to the Treatment (independent variable)	2nd measurement of the dependent variable
Group A	Pre-test during 1st session of the curriculum	Treatment during the 10 week curriculum.	Posttest during last session of the curriculum
		GWG Curriculum	
	Participant's measure on the dependent variable by way of the YASB		Participant's measure on the dependent variable by way of the YASB
Group B	---	---	Posttest
			Participant's measure on the dependent variable by way of the YASB

Note: Group A n = 6, Group B n = 8. YASB = Young Adult Social Behaviors Scale.

To answer the research questions an independent samples t-test was run to ascertain whether the pretest scores for the experimental group (Group A) differed from Group B. In addition, a paired samples t-test was run to determine whether there was a

significant change from pretest and posttest for Group A. As a result of Group C being different and adding a second post-test measure, a RMANOVA was used to answer question one. Group C is utilizing a different method than Group A and B because this group is being measured across three different time points. A pretest/posttest/posttest quasi-experimental repeated measures ANOVA design was used within this study for research question two. A figure of the experimental design for Group C is presented in Figure 2 below.

Figure 2

Graph of pretest/posttest/posttest research design
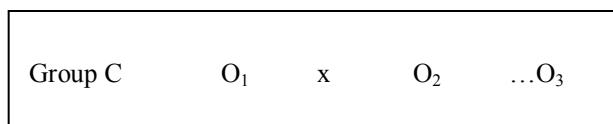
| Group C | O_1 | x | O_2 | $\dots O_3$ |

The independent variable in the study is the Goodwill Girls curriculum. The dependent variable in the study is the self-reported use of relational aggression, social aggression, and conflict resolution. See Table 2 for steps in the experiment for Site two.

Table 2

Steps to the Experiment for Site Two

	1st measurement of the dependent variable	Exposure to the Treatment (independent variable)	2nd measurement of the dependent variable	3rd measurement of the dependent variable
Group C	Pre-test during 1st session of the curriculum	Treatment during the 10 week curriculum. GWG Curriculum	Posttest during last session of the curriculum	Posttest 2 weeks after the last session of the curriculum
	Participant's measure on the dependent variable by way of the YASB and CRS.		Participant's measure on the dependent variable by way of the YASB and CRS.	Participant's measure on the dependent variable by way of the YASB and CRS.

Note: Group C n = 8.   YASB = Young Adult Social Behaviors Scale; CRS = Conflict Resolution Scale.

Relationally-aggressive behaviors include friendship withholding, exclusion from a group, rumor spreading, ignoring friends, sabotaging relationships or threatening to end friendships if requests are not met. The purpose of relationally-aggressive behavior is to harm peers in an indirect manner. Furthermore, the purpose of social aggression is to harm another individual through the social manipulation of peer relations through overt, covert, or nonverbal aggressive behaviors (Brendgen, Dionne, Girard, Boivin, Vitaro, & Perusse, 2005). Socially-aggressive behaviors include gossiping, social exclusion, isolation, or alienation, writing notes or talking about someone, and stealing friends or boyfriends (Crothers, Field, & Kolbert, 2005). Overt aggression is the perpetration of harmful acts upon another person, including physical or verbal aggression, or the destruction of another person's property.

Internal & External Validity

Within this study, it will be difficult to formulate internal validity as a result of the use of intact group's limited randomization. However, given the structure of the 10 sessions that are delivered sequentially, there is more certainty that the intervention is delivered as prescribed. The design requires a nonrandomized sample; this reality limits traditional definitions of external validity. However, the proposed sample of students does represent the type of student found in alternative education settings. Further, because there are so few data available in the literature this study will serve as a starting point for identifying and understanding relational aggression with a non-Caucasian at-risk sample and how that sample may respond to an intervention (e.g., GWG). Additionally, results may help to clarify the required modifications needed to deliver GWG to a diverse population.

Threats to validity of the study exist. Experimenter effects are possible by the way the researcher presents the study information. In addition, the questionnaire to the females may differ between the various groups. This may result in the participants' responses being influenced based on the researcher's expectations for each group. An additional threat to internal validity is how the treatment is replicated, since the survey will be presented to the girls at different times and various locations, which may influence results. External validity is the extent to which the results can be generalized to the greater population at large. Since a convenience sample will be utilized, the results of this research may not be applicable to other populations of adolescent females; therefore threats to external validity exist. In addition, the study's small sample size is a major threat to validity. Lastly, participants may falsify their responses in order to appear non-relationally, socially, or overtly aggressive which can also serve as a threat to external validity.

Procedures

A de-identified data set with the instruments described above (e.g., demographic data, YASB and CRS) was provided to the author. Data provided by the district clarified if students participated in the GWG curriculum or not. The educational setting indicated if the GWG was presented as prescribed as well as if any modifications were needed for this population. Specific student names will never be provided, even in examples.

Data Analysis

Only de-identified data was provided to the primary researcher. Descriptive data is reported in terms of aggregated means, standard deviations, and missing data analyses. As a result of the control group data set being so large and the experimental groups being

small, the primary researcher conducted random selection of girls matching in demographics to the experimental group. As a result of a matched pairs result in lower standard errors, it is therefore more powerful than independent samples comparisons. This allowed the researcher to utilize smaller samples in running the analysis. The data sets were from two separate demographic areas to control for the adolescents obtaining two unique forms of treatment outside of being exposed to the curriculum.

For Site One a pre/posttest independent samples *t*-test design was used with Group A (experimental group) and Group B (control group) to confirm that Group A is at the same starting point of Group B. In addition, a paired samples *t*-test was used with Group A to determine if the curriculum influenced participant's amount of relational and social aggression. The pre-test scores were used to determine if there were differences in relational and social aggression after the participants received the Goodwill Girls curriculum. Later, the treatment group's posttest was then compared to the control groups post-test. This second independent samples *t*-test was used to see if there was a change in relational and social aggression with Group A that received the treatment compared to Group B that received no treatment. In addition to the small sample size the primary investigator looked at the differences in means across groups in order to access change. A probability level of .05 or greater will be used to see if the null hypothesis should be accepted or rejected. Effect size calculation will be used to determine the strength of the change after youth receive the Goodwill Girls curriculum.

In regard to Site two, relational aggression and conflict resolution skills were studied to see if the sample of girls retained the information over time. Group C is utilizing a different method than Group A and B because this group is being measured

across three different time points. When investigating Group C, the primary investigator used a repeated measures ANOVA, pre/post/post study across time. Results were formulated across time by way of giving the participants a second post-tests after the treatment and initial post-test. In addition to the RM ANOVA, the primary investigator looked at the differences in means across the three different time points. A probability level of .05 or greater was used to see if the null hypothesis should be accepted or rejected. Effect size calculation was used to determine the strength of the change after youth received the Goodwill Girls curriculum.

Research Questions & Hypotheses

The Goodwill Girls curriculum was designed to work with girls who have been reprimanded for aggressive acts. That is, theoretically, the programming should improve outcomes for groups, like the current sample, that require treatment for aggression outside of the school district in an alternative educational setting. As such, the aim of this study is to investigate the differences in relational and social aggression for a non-Caucasian adolescent at-risk population. The goal is to expand the limited research within this area by describing the characteristics and needs of this group. Specifically, the study seeks to determine if the Goodwill Girls Curriculum will decrease covert bullying behaviors (i.e., relational and social aggression) in youth who have been removed from their home school districts due to aggressive behaviors. A secondary aim of this study will be identify the effects of the Goodwill Girls Curriculum on increasing conflict resolution skills within the sample.

Research Question 1: Does GWG influence relational and social aggression in minority female adolescents who are placed in alternative education setting for treatment of aggression?

Hypothesis 1: It is expected that females who participated in the Goodwill Girls curriculum will demonstrate a significant decrease in relational aggression in minority female adolescents placed in alternative education setting for treatment of aggression compared to the control group that received no treatment.

Research Question 1 Statistical Analysis: For Site One (Group A and Group B), an independent samples t-test was conducted to see if the control group and experimental group are during its pre-intervention stage are similar. Next, a paired samples t-test was used in order to assess the participant from Group A's change from the pretest to the posttest. The dependent variable in this study will be the Goodwill Girls curriculum that was integrated during a ten week period. The independent variable will be the YASB Questions 1-14 and the demographics questionnaire. In addition, the experimental groups post-test will be compared to the control groups post-test to assess differences in displays of relational aggression after the experimental group received the GWG intervention. In regard to Site two (Group C), a repeated measures pre/post/posttest across time will be used to assess the participants change from pretest to posttest one and posttest two. The assumptions of normality, homogeneity of variance and independent observations were tested and an alpha level of .05 will be used to determined statistical significance.

Research Question 2: Does the Goodwill Girls Curriculum influence the conflict resolution skills of minority female adolescents placed in an alternative education setting for treatment of aggression?

Hypothesis 2: It is expected that females who participated in the Goodwill Girls curriculum will demonstrate a significant increase in conflict resolution skills.

Research Question 2 Statistical Analysis: For Site two (Group C) a repeated measures ANOVA across time was conducted in order to assess the participants' change from the pretest to the posttest immediately after the curriculum and two weeks after the initial posttest was administered. The dependent variable in this study will be the Goodwill Girls curriculum that was integrated during a ten week period. The independent variable will be the Conflict Resolution Scale (part 1 and 2). The assumptions of normality, homogeneity of variance and independent observations was tested and an alpha level of .05 will be used to determined statistical significance.

Summary

Overall, the current study investigates whether implementing a curriculum with overtly aggressive adolescent females decreases the use of relational aggression while increasing conflict resolution skills. The variables that were examined are the self reported social, relational, overt aggression, and conflict resolution skills. Study participants are members of a pre-existing data set of overtly aggressive non-Caucasian females. Threats to the validity of the study included experimenter effects, small sample size, and the overall idea of results being generalized.

CHAPTER IV

RESULTS

The purpose of this study was to investigate relational aggression, social

aggression and conflict resolution skills in overtly aggressive, Non-Caucasian females.

Relational aggression and social aggression were measured using a 14-item self-report

measure called the *Young Adult Social Behavior Scale* (*YASB*; Crothers et al., 2008).

The format of the instrument is a 5-point Likert scale. Previous confirmatory factor

analysis results support that the YASB measures three internally consistent constructs:

direct relationally-aggressive behaviors, socially-aggressive behaviors, and

interpersonally-mature behaviors (Crothers et al., 2008). For the purposes of this study,

only the relational and social aggression scales of the YASB were investigated. Conflict

Resolution skills were measured by way of the *Conflict Resolution Scale* (*CRS*; Smith, et

al., 2002). The CRS is divided into two parts. The first part measures the level of

conflict in schools and is comprised of several subscales: aggression, levels of

disciplinary interventions, conflict-resolution styles, outside influences, need for help in

solving problems, effects of poor communication on conflicts, and group aggression.

The second part of the *CRS* measures efficacy in conflictual and non conflictual

situations, which was adapted from a scale created by Wheeler and Ladd in 1982. The

format of the instrument is a 5-point Likert scale, in which subsections have from 2-13

questions. The YASB scoring information and factor loadings of each question can be

found in Figure 3 below. In addition, the YASB instrument can be found in Appendix B,

the CRS Part 1 can be found in Appendix C and CRS Part 2 can be found in Appendix D.

Figure 3

Factorial Breakdown of Questions in the YASB

Standardized Results are Presented With Square Multiple Correlations in Italics
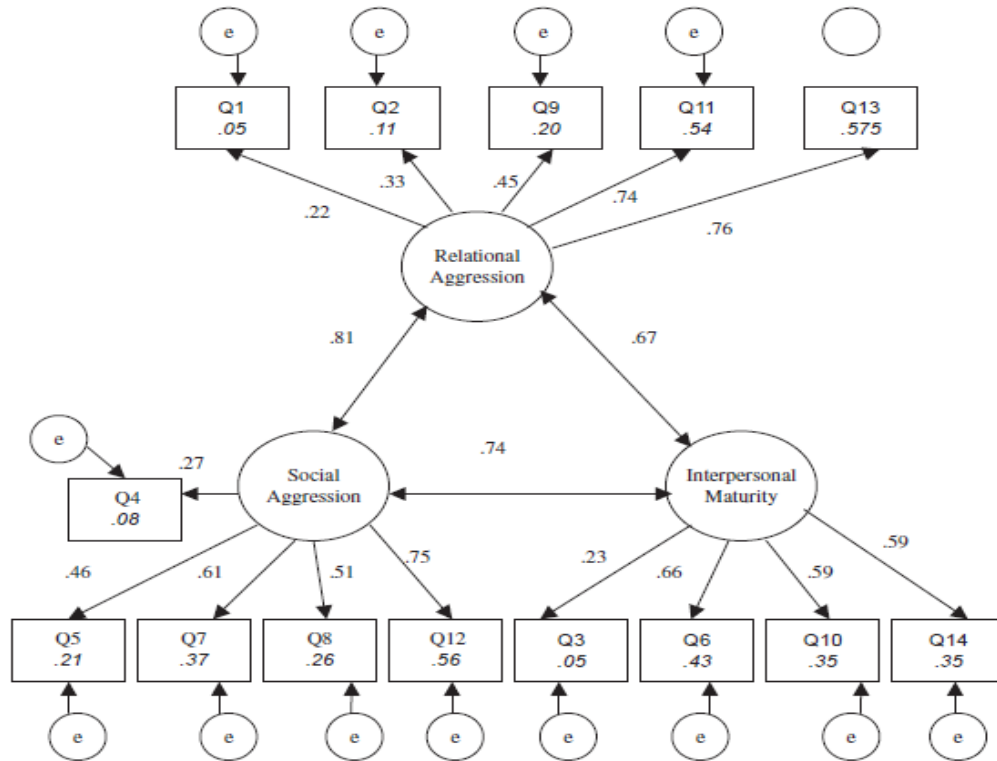
Note: Chi-square = 96.39, *df* = 71, CFI = .98. TLI = .97. RMSEA = .023 (.009, .034). Reprinted from "Development and measurement through confirmatory factor analysis of the Young Adult Social Behavior Scale (YASB): An assessment of relational aggression in adolescence and young adulthood." by Crothers, L. M**.**, Schreiber, J. B., Field, J. E., & Kolbert, J. B. 2009. *Journal of Psychoeducational Assessment.*

In the current study, participants were broken down into two sites (three total groups): Group A (experimental), Group B (control), and Group C. Comparisons were made with Group A at the beginning and end of the 10-week Goodwill Girls curriculum using a pre-test and post-test. Later, Group A was compared to Group B–the subjects who did not participate in the curriculum and received only a post-test . In regards to Group C, comparisons were made at the beginning and end of the Goodwill Girls curriculum by way of pre-test and post-test measures; however, group C is unique

because a second post-test was administered to assess whether participants within this group retained the skills learned over time.

In this chapter, the results section is organized as follows. Descriptive statistics are presented for all variables in this study, including predictors and dependent variables. Descriptive data are reported in terms of aggregated means and standard deviations. Following the descriptive statistics, the assumptions for each statistical test are then examined in order to assess the appropriateness of running the main analyses for each research question. Lastly, the findings of the results are presented, beginning with descriptive information about the participants, proceeding to a logical presentation of the results, testing each hypothesis, followed by an evaluation of the findings, and a summary of the chapter. It is important to note that all information for relational aggression and social aggression for Site One is presented first, proceeded by research findings from Site Two.

Descriptive Statistics

The primary researcher split the data sets that are from two separate demographic areas to control for the adolescents obtaining two unique forms of treatment outside of being exposed to the curriculum. The group statistics for the relational and social aggression for the two sites are summarized in Tables 3 below.

Table 3

Means and Standard Deviations for Relational Aggression and Social Aggression

	Relational Aggression			Social Aggression		
Participant Group	Measure 1 M (SD)	Measure 2 M (SD)	Measure 3 M (SD)	Measure 1 M (SD)	Measure 2 M (SD)	Measure 3 M (SD)
Site 1						
Group A	18.67 (3.55)	22.00 (2.28)	---	21.33 (1.75)	22.00 (2.45)	---
Group B	---	17.44 (4.03)	---	---	19.33 (2.69)	---
Site 2						
Group C	19.50 (3.11)	17.50 (3.96)	19.50 (2.78)	20.75 (2.92)	18.88 (3.60)	19.88 (5.25)

Note: Site 1, Group A n = 6; Group B n = 9; Site 2, Group C n = 8; M = mean and SD = standard deviation.

Additionally, the Conflict Resolution Scale (CRS) parts 1 and 2 were given to experimental Group C as a second measure. Descriptive Statistics for CRS Part 1 and Part 2 for Group C are detailed below in Table 4.

Table 4

Means and Standard Deviations for CRS Part 1 and Part 2

Component	Measure 1 M (SD)	Measure 2 M (SD)	Measure 3 M (SD)
Part 1			
Aggression	2.52 (1.02)	2.92 (.93)	2.73 (1.10)
Discipline	1.50 (.76)	2.83 (1.22)	1.92 (.96)
Conflict Resolution	2.33 (.62)	2.42 (.71)	2.23 (.75)
Influences	2.31 (1.33)	2.50 (1.28)	2.69 (1.46)
Help	2.44 (.92)	2.90 (1.24)	2.40 (.67)
Communication	2.69 (1.22)	2.69 (1.07)	2.31 (1.19)
Group Aggression	3.19 (1.96)	3.38 (1.22)	3.50 (1.34)
Part 2			
Total	4.11 (.81)	4.14 (1.22)	4.49 (.74)

Note: Group C, n = 8; M = mean and SD = standard deviation.

Missing Data

Data was collected from 26 students from three groups in the northeastern area of the United States. Cases with any missing data from either the pretest or post-test were removed from the data set using list-wise deletion, which resulted in the deletion of three

cases (10.34%). The reasons for missing data were not specified in the data set provided to the researcher of the current study. Although several different alternatives exist to deal with missing data (i.e. maximum likelihood, mean substitution), list-wise deletion was determined to be an appropriate method. Of the missing cases in Group A, 3 were missing the entire post-test measure that was given at the end of the Goodwill Girls 10 week curriculum. A review of the data found that the sample was comparable to the original sample's characteristics. The final sample size, which was used for the analyses within this study, was 23. This sample was identical to the original sample provided to the current study's researcher which was 100% female and 100% non-Caucasian.

Additional Data Analyses

As a result of the small sample size for experimental groups from both sites (Group A, n = 6; Group B, n = 8) and low power found in the research study individual participant response change was assessed for the experimental groups. Although results were not statistically significant individual change was investigated with each participant. When looking at individual participant means no set pattern was formulated to assess the curriculum's influence on relational aggression, social aggression, and conflict resolution skills amongst participants. For example, Site One (Group A) relational aggression and social aggression mean scores increased or maintained the same for all participants, with the exception of participant 2. In regard to Site Two (Group C) there was a more mixed range of mean scores amongst participants across time. For example, a number of participants mean scores decreased after implementation of the curriculum during the posttest. However, after time elapsed participants increase levels aggression and conflict

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resolution skills. Experimental group participant mean scores for YASB and CRS Part 1

and Part 2 are detailed in Table 5 and 6 below.

Table 5

Experimental Group Total Scores From Each Participant: YASB

| | Relational Aggression | | | Social Aggression | | |
| | Measure 1 | Measure 2 | Measure 2 | Measure 1 | Measure 2 | Measure 3 |
Participant	Mean	Mean	Mean	Mean	Mean	Mean
Group A						
1	13.00	19.00	---	20.00	21.00	---
2	23.00	21.00	---	24.00	19.00	---
6	16.00	24.00	---	21.00	25.00	---
7	20.00	24.00	---	20.00	25.00	---
9	20.00	24.00	---	23.00	21.00	---
Group C						
1	21.00	15.00	17.00	21.00	21.00	11.00
2	24.00	23.00	23.00	21.00	21.00	24.00
3	16.00	18.00	22.00	21.00	21.00	25.00
4	21.00	21.00	19.00	21.00	14.00	17.00
5	20.00	10.00	16.00	25.00	18.00	14.00
8	20.00	16.00	23.00	23.00	23.00	23.00
9	20.00	18.00	18.00	15.00	20.00	24.00
10	14.00	19.00	18.00	15.00	13.00	21.00

Note: Group A, n = 6; Group C, n = 8; M = mean.

Table 6

Experimental Group Participant Scores for CRS Part 1 and Part 2

	Aggression			Discipline			Conflict resolution			Influences		
Measure	1 Mean	2 Mean	3 Mean	1 Mean	2 Mean	3 Mean	1 Mean	2 Mean	3 Mean	1 Mean	2 Mean	3 Mean
Participant												
1	1.50	3.33	3.33	1.00	3.33	3.67	2.00	3.00	3.11	5.00	3.00	4.00
2	1.00	2.00	1.33	1.00	2.00	1.00	1.50	2.00	2.17	1.00	2.00	1.00
3	3.33	3.50	3.33	3.00	3.67	2.67	3.33	3.33	2.17	3.00	1.50	2.50
4	3.00	2.83	2.00	1.00	2.67	1.00	3.00	2.00	2.00	3.00	1.50	1.50
5	3.00	4.00	4.00	1.00	5.00	2.00	2.50	3.33	2.83	2.00	5.00	3.5
8	1.50	1.83	1.33	1.33	1.00	1.00	1.83	1.67	1.00	1.00	1.00	1.00
9	3.67	4.00	4.00	2.3	3.00	2.33	2.50	1.67	3.00	2.00	3.00	2.00
10	3.17	1.83	2.50	1.33	2.00	1.67	2.00	2.33	1.50	1.50	3.00	3.00

Experimental Group Participant Scores for CRS Part 1 and Part 2 (continued)

	Help			Communication			Group Aggression			CRS Part 2		
Measure	1 Mean	2 Mean	3 Mean	1 Mean	2 Mean	3 Mean	1 Mean	2 Mean	3 Mean	1 Mean	2 Mean	3 Mean
Participant												
1	4.25	3.75	3.00	5.00	2.50	2.50	1.50	2.50	4.00	3.55	3.55	2.86
2	1.75	2.00	1.75	1.50	3.00	2.00	1.00	5.00	2.00	4.09	1.41	4.64
3	3.00	3.00	3.50	3.50	3.00	2.50	5.00	4.00	4.50	4.05	4.14	4.23
4	2.50	2.50	2.00	2.00	2.00	2.00	5.00	3.50	5.00	2.50	4.23	5.00
5	1.50	1.50	3.00	2.50	5.00	5.00	1.00	3.00	3.50	5.00	5.00	5.00
8	1.50	1.50	2.00	1.50	2.00	1.00	5.00	2.00	2.00	4.27	5.00	5.00
9	2.25	4.00	1.75	2.00	2.50	1.50	5.00	5.00	5.00	5.00	5.00	4.18
10	2.75	2.00	2.25	3.50	1.50	2.00	2.00	2.00	2.00	4.45	4.77	5.00

Participant Characteristics

Of the total 23 total participants in the final sample, there were 6 students in Group A, 9 students in Group B, and 8 students in Group C. The students from Group A and Group C completed the pre-test and post-test measure before and after receiving the *Goodwill Girls* curriculum, and the students in Group B were not given the curriculum and received only the post-test measure. In terms of grade level, 13(56.5%) students reported that they were in middle school and 10 (43.5%) reported that they were in high school. The original data set provided to the researcher for the control group did not contain information regarding the participants' age or specific school year. As a result, Group A and Group C's data were recoded to match that of Group B. Additionally, racial classifications for Group B (control) were only identified as "Caucasian" and "Non-Caucasian." No detailed racial information was provided for the control group. See Table 7 for a detailed description of the racial classifications of the sample. Only participants that self-identified as Non-Caucasian were included within this study. The participants had parental consent, student assent, and regular attendance for the intervention sessions in order to be included in the study.

Table 7

Descriptive Statistics

Race	N	Percentage
African American	9	39.1%
Latino	1	4.3%
Native American	1	4.3%
Biracial	2	8.7%
Multiracial	1	4.3%
Unknown (group C)	9	39.1%
Total	23	100%

Statistical Assumptions

For Site 1 an independent samples *t*-test was used to compare the mean scores of Group A and Group B. Theoretically, the *t*-test can be used even if the sample sizes are very small, as long as the variables are normally distributed within each group and the variation of scores in the two groups is not reliably different. There are three assumptions for the independent samples t-test: normality, equal variance (homogeneity), and group independence. The normality assumption was evaluated by looking at the distribution of the data. Based on the data being normally distributed, the normality assumption was not violated. The equality of variances assumption was tested using Levene's test for equality of variances. If Levene's test is greater than .05, the two variances are approximately equal and the assumption is not violated. Results from Levene's test indicate the second assumption was met ($p = .735$). Finally, when utilizing an independent samples *t*-test, it is imperative the two groups are independent of one another. This assumption was met, as only the participants from Group A were given the Goodwill Girls curriculum.

Next, a paired samples *t*-test was used to evaluate the influence of the GWG curriculum on experimental Group A's level of relational and social aggression by comparing the means of their pretest and posttest scores. For the paired samples *t*-test, it is assumed that the observations are independent of each other, the dependent variable is measured on an interval scale, and the differences are normally distributed in the population. None of the assumptions were violated.

Finally, for Site 2, a repeated measures analysis of variance (RMANOVA) was conducted to evaluate the influence of the GWG curriculum on Group C's level of

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relational aggression, social aggression, and conflict resolution skills using their pretest, posttest, and second posttest scores. When utilizing an ANOVA, it is important to investigate three major assumptions: normality, independence, and homogeneity of variance (Shannon & Davenport, 2001). Specifically for the repeated measures ANOVA, there is an additional assumption of sphericity or homogeneity of covariance. First, each sample is assumed to be drawn from a normally distributed population. Second, each person's score is assumed independent of all other scores, and each treatment level is independent of the others. Third, the variances from each population are assumed equal. Finally, it is assumed the levels of the within subject variables are equally related to each other. Effect size was used to determine the strength of the effect of any changes detected in after the participants received the curriculum. All RM ANOVA assumptions were met.

Data Analysis

Research Question 1

The first research question investigates if the Goodwill Girls curriculum influences relational and social aggression in minority female adolescents who are placed in alternative education setting for treatment of aggression, and if the curriculum has an influence on these variables over time. To answer this question, the analyses were completed in one initial step for both sites then multiple separate steps for each variable.

Site One: Relational Aggression and Social Aggression

For Site 1, it was hypothesized that the GWG curriculum would significantly decrease the relational and social aggression levels of minority adolescent females in Group A as measured by a pretest before participating in the GWG curriculum and posttest after completing the curriculum. The first step was to evaluate the relationship

between experimental group A and the control group to determine if there was a significant difference between the group means for relational aggression. Independent samples *t*-test results indicate that there was no significant difference between the relational aggression means for group A and the control group, suggesting that the experimental group started from a similar level of relational aggression as the control group who received no treatment. Independent samples *t*-test for relational aggression; t(13) = -.60, *p* =.59, and social aggression t(13) = -1.60, *p* = .13. Results of the independent samples *t*-test comparison of control group (group B) to experimental group (Group A) are summarized in Table 8 below.

Table 8

Independent Samples t-test: Group A pretest to Group B posttest

Type of Aggression	*df*	t	*p* value
Relational	13	-.60	.59
Social	13	-.1.60	.13

Note: *p < .05.

Second, a paired sample *t*-test was used to compare experimental Group A's pre-test relational aggression scores to their corresponding post-test scores to determine if there were differences in relational aggression after receiving the Goodwill Girls curriculum. Based on those results, there was no significant difference between Group A's pretest and post-test scores after completing the curriculum although the *p*-value was approaching significance t(5) = -2.19, *p* = .08. At the *p* < .05 level of significance the results are not significant. However, with such a small sample size and the resulting of low power, a p-value = <.01 suggest that makes it difficult to find a significance if there is one. The relational aggression mean for the experimental Group A pretest was 18.67, and the posttest mean after completing the curriculum was 22.00, a difference of -3.33.

Results demonstrated that Group A decreased the amount of relational aggression after implementation of the curriculum. See Table 9 for a summary of the paired samples *t*-test results.

Table 9

Paired Samples t-test – Group A: Relational Aggression

Source	df	t	p value
Pair 1: Group A pretest & Group A posttest	5	-2.19	.08

*Note: *p < .05.*

The third step in evaluating the influence of the GWG curriculum on relational aggression in minority female adolescents was to compare the post-test relational aggression scores of Group A to the relational aggression scores of the control group. The lack of significance from the independent samples *t*-test in step 1 allows the groups means to be compared. Results from an independent samples t-test indicate there is a significant difference between the control group's relational aggression scores without treatment and Group A's post-test scores after completing the curriculum t(13) = -2.49, *p* = .03. A review of the means suggests that Group A's relational aggression scores were significantly higher than the control group's relational aggression after completing the curriculum. The mean for the control group was 17.44, while the relational aggression mean for Group A after completing the curriculum was 22.00, a difference of -4.56. A detailed summary of the independent sample's *t*-test results are presented in Table 10.

Table 10

Independent Samples t-test: Group A post-test to control Group B post-test – RA

Type of Aggression	Mean Difference	df	t	p value
Relational	-.91	13	-2.49	.03*

*Note: *p < .05. RA = Relational Aggression*

Additionally, there are two steps to answer the first research question in terms of social aggression that is similar to the steps utilized for relational aggression for Site 1. First, a paired sample t-test was used to compare experimental group A's pre-test social aggression scores to their corresponding post-test scores to determine if there were differences in social aggression after receiving the Goodwill Girls curriculum. Based on those results, there was no significant difference between Group A's pretest and post-test scores after completing the curriculum, t(5) = -.439, p =.679. The social aggression mean for the experimental Group A pretest was 21.33, and the posttest mean after completing the curriculum was 22.00, a difference of -.67. See Table 11 for a summary of the paired samples *t*-test results.

Table 11

Paired Samples t-test – Group A: Social Aggression

Source	t	*df*	p value
Pair 1: Group A pretest & Group A post-test	-.439	5	.679

Note: *p < .05.

The second step in evaluating the influence of the GWG curriculum on social aggression in minority female adolescents was to compare the posttest social aggression scores of Group A to the social aggression scores of the control group. The lack of significance from the independent samples t-test in the initial step before looking at relational aggression (see Table 6) allows the groups means to be compared. Results from an independent samples *t*-test indicate there is no significant difference between the control group's social aggression scores without treatment and Group A's post-test scores after completing the curriculum t(13) = -1.95, p = .074. However, with such a small sample and the resulting low power makes it difficult to find a significant difference if there is one. A review of the means suggests that Group A's social aggression scores

were significantly lower than the control group's social aggression after completing the curriculum. The mean for the control group was 19.33, while the social aggression mean for Group A after completing the curriculum was 22.00, a difference of -2.67. A detailed summary of the independent sample's *t*-test results are presented in Table 12.

Table 12

Independent Samples t-test: Group A post-test to control Group B post-test

Type of Aggression	Mean Difference	df	t	p value
Social	-.53	13	-1.95	.074

*Note: *p < .05.*

Site Two: Relational Aggression and Social Aggression

In regards to Site Two, it was hypothesized that the GWG curriculum would significantly decrease the relational and social aggression levels of minority adolescent females in Group C as measured by three time points, a pre-test before participating in the GWG curriculum, a posttest after completing the curriculum and a posttest two weeks after the first posttest was given. In regards to the second posttest it was also hypothesized participants will maintain the level of relational and social aggression learned within the curriculum as measured by second post-test scores from Group C two weeks after the curriculum was implemented. The steps in evaluating the first research question in terms of relational aggression was to measure if the curriculum influences relational aggression over time using the pretest, posttest, and second post-test (two weeks after the curriculum) scores from Group C using a RMANOVA. Mauchly's test of Sphericity indicated that the assumption of sphericity was not violated ($W = .838$, $p = .588$).

The repeated measures ANOVA results for relational aggression indicate there was no significant difference between participants' self-reported use of relational

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aggression before and after completion of the GWG curriculum, $F(1,7) = 1.455$, $p = .267$, and there was no significant difference in the relational aggression scores over time, $F(2,14) = 1.341$, $p = .293$. Therefore, the null hypothesis failed to be rejected and there are no differences in pretest and post-test scores on the relational aggression construct over time. It is important to note that the observed power ($1-\beta = .242$) was very low within this study which is likely due to the small sample size. Ideally, a power level of .80 is recommended in research studies (Cohen, 1988). As a result of the low power within this study it makes it difficult to find a significant difference it there is one. In addition to noting power, relational aggression means were investigated. Interestingly, after the implementation of the curriculum, the overall mean increased (though not significantly) from 19.50 to 17.50, and then returned to the original starting point of 19.50 two weeks after completing the curriculum. It is important to note, when utilizing the YASB when the means increase the group is demonstrating less relationally and socially aggressive behaviors.

To answer the first research question in terms of social aggression for Site One is similar to the steps utilized for relational aggression. The final step in evaluating the first research question in terms of social aggression was to measure if the curriculum influences relational aggression over time using the pretest, posttest, and second post-test (two weeks after the curriculum) scores from Group C using a repeated measures ANOVA. Mauchly's test of Sphericity indicated that the assumption of sphericity was not violated ($W = .724$, $p = .379$).

A repeated measures ANOVA results indicate there was no significant difference between participants' self-reported use of social aggression before and after completion

of the GWG curriculum, $F(1,7) = .126$, $p = .733$, and there was no significant difference in the social aggression scores over time, $F(2,14)$, .426, $p = .661$. Therefore, the null hypothesis failed to be rejected and there are no differences in pretest and post-test scores on the social aggression construct over time. It is important to note that the observed power $(1-\beta = .106)$ was very low within this study which is likely due to the small sample size. As stated above, a power level of .80 is recommended in research studies (Cohen, 1988). In addition to noting power, relational aggression means were investigated. Interestingly, after the implementation of the curriculum, the overall mean increased (though not significantly) from 20.75 to 18.88, and then 19.88 two weeks two weeks after completing the curriculum. It is important to note, when utilizing the YASB when the means increase the group is demonstrating less relationally and socially aggressive behaviors. The results of repeated measures ANOVA pertaining to relational aggression and social aggression are summarized in Table 13.

Table 13

Repeated Measures ANOVA for Relational Aggression and Social Aggression: Group C

Source	df	F	p value	Partial Eta Squared	Power
Relational Aggression	2	1.341	.293	.161	.242
Social Aggression	2	.426	.661	.057	.106
Total	8				

*Note: *Computed using alpha = .05*

Research Question 2

The second research question investigates if the Goodwill Girls curriculum influences conflict resolution skills in minority female adolescents who are placed in alternative education setting for treatment of aggression, and if the curriculum has an influence on these variables over time. It was hypothesized that the GWG curriculum would significantly increase conflict resolution skills of minority adolescent females in

Group C as measured by a pre-test before participating in the GWG curriculum and post-test after completing the curriculum. It was also hypothesized participants will maintain the level of conflict resolution skills learned within the curriculum as measured by second post-test scores from Group C two weeks after the curriculum was implemented. To answer this question, the analyses were completed by two total steps for CRS Part 1 and CRS Part 2.

The first step in evaluating the second research question in terms of conflict resolution skills was to measure if the curriculum influences conflict resolution skills over time using the pretest, posttest, and second post-test (two weeks after the curriculum) scores from Group C using a repeated measures ANOVA for CRS Part 1 and CRS Part 2. In regard to CRS Part 1 it there are seven total variables within this measure. Levene's test of homogeneity and Box's statistics were not calculated because no between group comparisons were made. Assumptions were not violated for the subscales for CRS Part 1.

When looking at CRS Part 2 Levene's test of homogeneity and Box's test were not calculated because no between group comparisons were made. Mauchly's test of Sphericity for CRS Part 2 indicated that the assumption of sphericity was not violated (W = .940, p =.830). Multivariate test results indicate there was no significant difference between participants' self-reported conflict resolution skills before and after completion of the GWG curriculum, $F(1,7) = 1.062$, $p = .337$, and there was no significant difference in the conflict resolution scores over time, $F(2,14) = .505$, $p = .614$. Therefore, the null hypothesis failed to be rejected and there are no differences in pretest and post-test scores on the relational aggression construct over time. It is important to note that the observed

power (1-β= .117) was very low within this study which is likely due to the small sample size. Interestingly, after the implementation of the curriculum, the overall mean for CRS Part 2 increased (though not significantly) from 4.11 to 4.14, and then even higher to 4.49 two weeks after completing the curriculum. The results of repeated measures ANOVA pertaining to conflict resolution skills are summarized in Table 14 and 15 below.

Table 14

Repeated Measures ANOVA for CRS Part 1

Subscale	df	F	p value	Partial Eta Squared	Power
Aggression	2	.979	.400	.123	.186
Discipline	2	5.743	.015*	.451	.780
Conflict Resolution	2	.221	.804	.031	.078
Outside Influences	2	.255	.778	.035	.083
Help	2	.942	.413	.119	.181
Communication	2	.423	.663	.057	.105
Group Aggression	2	.121	.887	.017	.065
Total	8				

*Note: *Computed using alpha = .05*

Table 15

Repeated Measures ANOVA for CRS Part 2

Source	df	F	p value	Partial Eta Squared	Power
CRS Part 2	2	.505	.614	.67	.117
Total	8				

*Note: *Computed using alpha = .05*

CHAPTER V

DISCUSSION

In this section, the results of the statistical analyses presented in chapter four of the current study are more fully described. Specifically, findings are briefly summarized, highlighting the answers to the research questions posed and whether or not the associated hypotheses were supported. Significant findings are compared to those in past research. In addition, implications, recommendations for future research, and limitations are presented.

Summary

Children and youth who are the victims of relational aggression may be more likely to experience depression, anxiety and academic and social problems than their peers (Nansel et al., 2001). Because of the particular impact of peer relationships on adolescent girls, it is important to determine the effectiveness of current programs designed to help adolescent females improve their relationships. This quasi-experimental study sought to understand how well the Goodwill Girls curriculum intervenes in non-Caucasian adolescent females peer relationships in regard to relational aggression, social aggression and conflict resolution skills.

There have been few programs focused directly on female peer relationships, or specifically on relational aggression. However, the focus of the Goodwill Girls curriculum is unique because it is based on psychological theory and solution focused approaches in order to work with a student that has been previously reprimanded for problematic behaviors (Field et al., 2009). Thus, the Goodwill Girls curriculum was identified as a potential avenue for addressing relational aggression within this sample of

non-Caucasian adolescent females who are placed in an alternative education setting for treatment of aggression. This study sought to understand whether the curriculum facilitated participant's ability to handle relational aggression. This study was intended to bridge the gap of limited research with non-Caucasian females that have issues with relational aggression and social aggression, as well as identify ways of preventing and intervening with relational aggression by teaching girls to utilize social problem solving and conflict resolution skills.

Research Findings

This study proposed to investigate the differences in relational and social aggression in a sample of non-Caucasian adolescent females who were being treated for aggressive behaviors by measuring the effects of providing an intervention designed to decrease relational and social aggression in youth. In addition, this study also investigated the influence of the GWG curriculum on the conflict resolution skills of the same youth. The first research question assessed if the GWG curriculum influenced relational and social aggression in minority female adolescents who were placed in an alternative education setting for treatment of aggression. As a result of the small sample size, several factors were utilized to answer this research question. For Site One this was measured by an independent samples t-test to compare the experimental groups pretest to the control groups posttest to determine if they were at the same starting point. Additionally, in order to assess if the curriculum influenced relational aggression means were compared using a paired sample t-test. Additionally, an independent samples t-test was used to assess if participants relational and social aggression was influenced by the

curriculum. For Site Two relational and social aggression was measured over three time periods by way of using a repeated measures ANOVA.

Results within this study do not support the hypotheses proposed for research question one within this study. Overall, all of the groups did report using relational and social aggression to some extent. However, results indicated that the curriculum was shown to decrease relational and social aggression to some extent. As a result of the small sample size and low power within the study the primary researcher determined it would be important to look at the changes in the overall and individual means of participants. There was no set pattern of means amongst participants; these findings within this research study are consistent with previous research that demonstrates inconsistent results amongst participants. For example, some studies (Graham & Juvonen, 2002; Osterman et al., 1994) found African Americans showed an overall higher form of aggression compared to other ethnic groups, other studies (Seals & Young, 2003) found no differences in bullying between African American and Caucasian students. Results also provide areas for continued improvement and future research, including a more differentiated breakdown of participants ages, race, and environment in order to differentiate differences across development.

Additionally, by investigating the individual means results indicated the GWG curriculum increased participant's levels of relational aggression and social aggression with Non-Caucasian adolescent females. Overall, results raise questions concerning the GWG curriculum's validity for assessing the influence of relational aggression and social aggression in non-Caucasian youth. As a result, continued pilot studies with larger sample sizes within this population need to be conducted to assess this measures face

validity. However, these findings were consistent with other important research findings with minority populations. For example, previous research reported that after implementing the Olweus Bullying Prevention Program minority participants did not significantly decrease in relational aggression (Black and Jackson, 2007). Although there are school-wide interventions successful in physical and verbal forms of bullying children there are fewer investigations of prevention programs designed to decrease relational aggression (Black and Jackson, 2007). The majority of research investigates mainly Caucasian populations and does not look at the effects of bullying on Non-Caucasian adolescents (Archer & Coyne, 2005; James & Owen, 2005; Olweus, 1991; Owens et al., 2000; Viemero, 1996).

In regards to Site Two, no statistically significant differences was found with relational aggression across time. Results of this study were inconsistent with previous research findings that demonstrated moderate three-year stability in physical aggression, relational aggression, and prosocial behavior (Zahn-Waxler et al., 2005). Additionally, Zanh-Waxler et al., (2005) found that children's early social behavior, including relational aggression, and reputations established with classmates tends to stay with children into early adolescence even after they have switched schools and classrooms.

Overall, although social aggression did not lead to statistically significant results for either site, data from this study is consistent with previous research reporting that relational aggression and social aggression are two separate constructs (Crothers et al., 2009). It is important to note that even though it was a small sample size, relational aggression was approaching significance; however, social aggression was no where near significance.

The specific examination of bullying behavior in middle school settings is important because problems of aggression and interpersonal violence typically increases in severity during early adolescence, which is a known time for multiple physical, developmental, and social changes (Parault, Davis, & Pellegrini, 2007). These conclusions may be attributed to children's increasing awareness of relational aggression and social aggression terms and knowledge. Consequently, even though the curriculum did not demonstrate significant decreases in relational and social aggression, this may be due to the participant's cognitive level, developmental level, environment, and behaviors of the participants of the different groups. Further, due to the participants already being labeled as overtly aggressive, the curriculum may have served as a reinforcement of previously learned behaviors that potentially contributed to the lack of significant gains.

The second research question assessed the anticipated influence of the GWG curriculum on conflict resolution skills in minority female adolescents placed in an alternative education setting for treatment of aggression. Overall, very little is known about the conflict resolution strategies practiced in ethnic minority adolescent friendships (Hagen et al., 2004). Although some theoretical connections between rate and conflict resolution have been proposed empirical evidence is limited (Thayer, Updegraff, & Delgado, 2008). Similar to results from the first research question, there were no statistically significant differences with respect to participant's conflict resolution skills. Repeated measures ANOVA results indicate there was no statistically significant difference in conflict resolution skills from pretest to the second posttest measure. In addition, when looking at the second post-test given two weeks later, participants were not seen to retain the skills they potentially learned within the curriculum. Although

there was a lack of statistical significance, there was an increase in the means of student responses indicating that after participants learned the curriculum they demonstrated more conflict resolution skills. These findings were somewhat consistent with other important research findings (Lockwood, 1997). Findings within that particular study found that adolescents believe that when a conflict of disagreement arises, they have no choice but to fight. Additionally, research suggests that some adolescents see fighting as the only acceptable way to resolve disagreements and report not knowing how to avoid fights without tarnishing their reputation (Lockwood, 1997). Within this sample, participants' means increased at the first posttest then decreased after the second posttest given two weeks later. Ideally, we would want participants to maintain or increase in means after the initial posttest in order to demonstrate participant's stability to maintain information over time.

Consistent with previous research on implementing conflict resolution programs in schools (Crawford & Bodine, 1996), typically if participants' decrease in aggression they will increase in methods of dealing with conflict. As a result of participants not decreasing in relational aggression and social aggression, an increase of conflict resolution skills within this sample was not shown as significant. Sandy and colleagues (2000) found the effectiveness of conflict resolution programs in reducing aggression presents divergent findings. Findings from that study are similar to results of relational aggression research.

Limitations

This research study serves to better understand relational aggression, social aggression, and conflict resolution skills in non-Caucasian adolescent females in two

northeastern states in the United States.   A limitation to the study in terms of external validity is the extent to which the results can be generalized to the greater population at large. This study does not adequately allow for generalization because it solely looked at a small sample of non-Caucasian females who were identified as overtly aggressive. This population was also largely homogeneous in nature in regard to racial background and educational environment, which in indicative of the settings studied but not necessarily other areas of the country. For example this pre-existing data set was formed using participants that were already removed from their home school district as a result of negative behaviors. As a result, this cannot be generalized all non-Caucasian females.

Another threat to external validity is that the participants' responses may have been susceptible to issues of social desirability and may have responded to appear non-relationally or socially aggressive on the YASB. The YASB may not be sensitive to issues of social desirability, and may need to be altered to address this issue. In addition, participants' reading level and comprehension of each of the measures were not tested before administration. Participants in this study may have missed a great amount of schooling and have issues with reading on grade level as well as potentially having comprehension issues. Results of this may have hindered participant's responses to the items given. In the future, it may be helpful to compare self-reports with teacher or parent reports of relational and social aggression, as well as measures of conflict resolution. By cross-referencing and talking with outside resources, a more holistic presentation will be provided of participant's relational and social aggression and conflict resolution skills.

Another limitation of the study is that a pretest/posttest rating scale was used. Crothers et al., (2007) discussed when using a self-report questionnaire provides a firsthand look at the aggressor, their environment, and particular opportunities for up to date evaluation of the participant's overall psychological well being. However, a limitation within this study is the result of the participants being given the same instruments for both the pretest and the posttest. This allowed for consistency in determining statistical significance, but may have promoted participants to modify answers based on what they thought was the "correct" or socially desirable response given the themes and lessons they were exposed to when given the Goodwill Girls curriculum.

Additionally, given the small sample size of the current study, power was extremely low across all constructs. Cohen (1988) suggests that power is at least .80 in research studies to determine adequate sample size and measurement of significance. As a result, the findings within this study should be taken with caution.

The YASB measured participant's perceptions of relational and social aggression; whereas the conflict resolution survey measured participants' actions in school and everyday life. Participants may have felt confused by this switch in focus. As a result, they may have changed their attitudes towards conflict resolution skills but were unable to mark responses accordingly in the survey because of the nature and focus of the questions (e.g., *other kids mess with me on the way to and/or from school*). As a result, the insignificant findings for this scale may not capture conflict resolution skill development within this sample.

Recommendations for Future Research

The findings from this study have provided future direction regarding relational and social aggression interventions for females of different ages and groups. This study is one of the first attempts to bridge the gap in the research on relational aggression, social aggression and conflict resolution with non-Caucasian populations. One thing that remains unclear is the relationship between relational and social aggression. Archer & Coyne (2005) suggested that relational aggression and social aggression are the same construct; however, Crothers and colleagues (2009) suggested that relational aggression and social aggression are actually two separate constructs. Future research should focus on determining why these differences exist between relational and social aggression in terms of ethnicity and cultural background. Additionally, given the small sample size of the current study, it is recommended that additional research be conducted with a larger sample size to further investigate these differences in social and relational aggression.

Overtly aggressive episodes between non-Caucasian females are often precipitated by relational aggression (Xia et al., 2003); therefore, it is important that future studies focus on understanding the context of female aggression that erupts into violence, including future research to address relational aggression as an antecedent to female violence against other females. In the end, research that focuses on understanding the situational contexts of female violence, conflict resolution skills and aggression could potentially advance both prevention and intervention efforts to address female bullying.

The findings in the study suggest additional research is needed on the GWG curriculum within the middle and high school environment. For example, participant

make up of the experimental group for Site 1 was mainly high school students; whereas participants for Site 2 were mainly in middle school. After implementing the curriculum for Site 1, relational aggression and social aggression increased of maintained post curriculum for five of the six participants. However, for Site 2, relational aggression decreased for six out of the eight participants and social aggression decreased for seven out of the eight participants. Results of the changing of means amongst different sites can be explained in research. For example, Crick and Grotpeter, (1995) explains that changing schools from elementary to middle school leads to new friends, more challenging school work, less socialization time at school, and more competition for resources. As a result, an adolescent female's priorities begin to change from wanting to spend the majority of their time with other girls to being interested in the opposite sex (Duncan, 2004). Many of these factors are also mirrored with an individual's physical development, need for fitting in, and acquiring social status.

Given the opportunity to conduct research of an adolescent population within a larger population could potentially yield different results. Additionally, including more than three school districts at one time would also provide comparative data for the research. Future research should investigate how children interpret and react to bullying behaviors and resolve conflict (i.e. critical influences on how peers perceive them). Overall, school personnel and school psychologists can work together to better understand the intersection of peers and relationships that lead to bullying.

It is important to note that a major criticism of the GWG curriculum is that it does not address multicultural concerns (Kayler, 2010). Although the GWG curriculum is strongly based in theory, it has been hypothesized to work with non-Caucasian

populations based of psychological theory and solution focused approaches in order to work with a student that has been previously reprimanded for problematic behaviors (Field et al., 2009). However, this is the first measurement of the curriculum being tested on a majority non-Caucasian participant sample. As a result, in order to most accurately describe the GWG curriculum as evidence-based with non-Caucasian populations, there should be continued sufficient evidence to allow unequivocal documentation that the practice is effective within this population.

Additionally, modifications may be needed to the GWG curriculum to enhance its efficacy with non-Caucasian populations. One such modification would be to add more teaching sessions that breakdown the definitions and key components of the curriculum (Chandler, Lubeck, & Fowler, 1992). Giving the participants more opportunities to encode the lessons and then to rehearse those skills may improve the likelihood of generalization and maintenance of gains (Chandler et al., 1992). Also, guidelines for assessing and outlining future research include the number of studies documenting and experimental effect, methodological quality of those studies, replication of findings, size of documented effect, and durability and generalizability of the observed effect (Horner, Sugai, & Anderson, 2010).

Prior to selecting a specific intervention, it is important that educators investigate whether or not the intervention is based in research and if there is documented outcome data. Finally, it is important to consider school bullying as part of a larger focus within schools on social and emotional development and learning to meet the needs of all students (Swearer et al., 2010). Given the past insults, threats, and slights featured prominently in the use of aggression in females, future studies would benefit from

expanding the focus on the role of relational aggression within schools today. With the increase of diversity within our schools today, it is imperative to expand the literature base to a more diverse sample. Specifically, studies in female dyads are rare; future studies should focus on non-Caucasian friendship dyads. Future research should be conducted to meet the needs of females and their perspectives on friendships, bullying and aggressive behaviors. An increase in knowledge about female aggressive behaviors can further inform school personnel on bullying policy and program efforts to be aligned with the changes with state laws regarding bullying in our schools today.

In addition, curriculums have been shown to be effective when there is effective education and training in the concept of relation aggression (Merrell et al., 2006). As a result, the school personnel and administration getting actively involved with the interventions and promote positive social behaviors and attitudes among students (Merrell et al., 2006).

Implications

Overall, educators can provide school-wide workshops and training raising awareness that children's aggression include both direct and indirect forms. As a result of school psychologist being trained in data-based decision making, they can potentially take a central role in the implementation and evaluation of intervention programs. Accordingly, they could be part of a consultation team that reviews potential programs such as the GWG for adoption in their schools, help select the most effective one, and collect data on outcomes and treatment fidelity for a selected program, as well as actively be on a data analysis team. Specifically, it is suggested that school practitioners consider their school's needs and resources in conjunction with the mode of operation, target

population, and preliminary findings for each of the promising existing programs in order to determine which program would best serve their school. For example, In addition, the majority of bullying interventions are not cost effective resulting in a lack of training and overall means to assist the population with bullying behaviors (i.e. Olweus Bullying Prevention Program). Field and colleagues (2009) allowed counselors, psychologists and trained personnel to intervene with youth today in a cost effective manner. For example, some intervention programs may not fit into the budget of the school costing the district thousands of dollars. The positive part of the GWG curriculum is that all training materials needed are provided with the curriculum and facilitator notes are given within the readings after the initial pilot study was conducted (Field et al., 2009). In the end, until more programs target and measure outcomes specifically related to relational bullying and victimization, it is also critical to recognize that general bullying programs require systematic evaluations related to bullying and victimization before extensive implementation begins to address relational aggression.

Furthermore, school psychologists can be incorporated into implementation of interventions for relational aggression by serving as school personnel trainers on the effects of relational aggression, social aggression, and conflict resolution skills. School psychologist can help ensure buy-in to the program as well as follow appropriate implementation guidelines. Although there is limited research on the effects of this indirect form of bullying, the current findings from developmental research and some ground-breaking intervention studies suggest that the field is moving in the right direction for preventing and reducing relational aggression and related challenges.

Conclusion

This research study provided a starting point from which additional research could be conducted on the implementation of the GWG curriculum with non-Caucasian populations. A benefit of the study is that it provides data to educators and students regarding relational aggression, social aggression, and conflict resolution skills. School districts are responsible for not only the education of our children, but the responsibility for fostering a safe environment for learning. School districts must focus on developing the whole child. Overall, this research serves as a foundation to provide information to educators to use in implementing and modifying relational aggression interventions, as well as adding to the literature base regarding relational aggression prevalence within diverse populations. Additionally, investigating conflict resolution skills can potentially contribute to decreasing aggressive acts by way increasing how one responds to aggressive behaviors.

In conclusion, recognizing and intervening with displays of relational and social aggression is an important aspect to the social and emotional development of our youth today. Bullying is a serious problem that can dramatically affect the ability of students to progress academically and socially. Currently, there is very little research regarding the cultural factors associated with race and at-risk population factors that contribute to the frequency of bullying (e.g. physical, relational and social aggression) in schools. Collectively, students come from diverse backgrounds, social economic statuses, environments, and family backgrounds that deal with aggressive (bullying) acts in different ways. Even though there are preliminary supports for effective interventions

aimed at reducing bullying behavior (e.g. Crothers et al., 2005; Olweus, 1993), these findings do not specifically consider the needs of diverse students.

Current findings within this study of insignificant results suggest that relational aggression intervention programs call for modifications to meet the unique needs of females from different cultural and ethnic backgrounds. In the future, it is recommended that additional research be conducted with a larger sample size to further investigate the role of ethnicity and cultural backgrounds in the use of relational aggression and social aggression in females.

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DEMOGRAPHIC QUESTIONNAIRE

Please **do not** put your name on this form.

Please circle the number that corresponds to the response which best describes you.

Age:	1	(12 – 13 years old)
	2	(14 – 15 years old)
	3	(16 – 17 years old)
	4	(18 – 19 years old)
	5	(20 years old of older)
Gender	1	(Female)
	2	(Male)
	3	(Other)
Race	1	(African American)
	2	(Asian/Pacific Islander)
	3	(Caucasian)
	4	(Latino)
	5	(Native Indian)
	6	(Biracial)
	7	(Multiracial)
	8	(Other – *please write in*) _____
Year in School	1	(Freshman)
	2	(Sophomore)
	3	(Junior)
	4	(Senior)
	5	(Eighth Grade)
	6	(Seventh Grade)
	7	(Sixth Grade)

Young Adult Social Behavior Scale

Directions: Please put a check next to the appropriate frequency in which you engage in each of the following behaviors.

Behavior	Never	Sometimes	Occasionally	Frequently	Always
	5	4	3	2	1
1. When I am angry with someone, that person is often the last to know. I will talk with others first.					
2. When I am frustrated with my partner/colleague/friend, I give that person the silent treatment.					
3. I deal with interpersonal conflict in an honest, straightforward manner.					
4. When I do not like someone's personality, I derive a certain degree of pleasure when a friend listens to and agrees with my assessment of the person's personality. I am also okay with my friend acting upon this negative assessment.					
5. I contribute to the rumor mill at school/work or with my friends and family.					
6. I honor my friends' need for secrets or confidentiality.					
7. I break a friend's confidentiality to have a good story to tell.					
8. I confront people in public to achieve maximum damage.					
9. I criticize people who are close to me.					
10. I respect my friend's opinions, even when they are quite different from my own.					
11. I intentionally exclude friends from activities to make a point with them.					
12. I have attempted to "steal" a rival's friend.					
13. When I am angry with a friend, I have threatened to sever the relationship in hopes that the person will comply with my wishes.					
14. Working through conflicts with friends makes our friendship stronger.					

Conflict Resolution Scale - Part I

Directions:
- A. Please respond to the following 25 questions located on sides A and B of this form.
- B. Choose the category that best describes how often each situation happens.
- C. Fill in the answer sheet with the corresponding number.
- D. Mark each answer clearly. Do not mark outside of the circle.
- E. Use a No. 2 pencil.

Sample Questions:	Never	Sometimes	Once a Week	Two or three times a week	Once a day or more
A. I eat candy.	1	2	3	4	5
B. My friends eat candy.	1	2	3	4	5

Sample Answers:	A	B	C	D	E
Sample question A	•	•	•	•	•
Sample Question B	•	•	•	•	•

	Never	Sometimes	Once a Week	Two or three times a week	Once a day or more
1. I have problems with other kids.	1	2	3	4	5
2. I have problems with teachers.	1	2	3	4	5
3. I argue with adults (teachers, coaches, bus drivers, parents, family members, etc.).	1	2	3	4	5
4. When I'm **mad** I threaten people.	1	2	3	4	5
5. When I have an argument with someone, we end up in a fight.	1	2	3	4	5
6. I get into physical fights with other kids.	1	2	3	4	5
7. I get put on after-school detention because of problems with other kids.	1	2	3	4	5
8. I get in-school suspension because of problems with other kids.	1	2	3	4	5
9. I get out -of- school suspension because of problems with other kids.	1	2	3	4	5

	Never	Sometimes	Once a Week	Two or three times a week	Once a day or more
10. Other people at school don't respect my opinion.	1	2	3	4	5
11. I have trouble letting people know what I want.	1	2	3	4	5
12. When I say something other kids don't like, they interrupt me.	1	2	3	4	5
13. I avoid talking to people because I'm angry with them.	1	2	3	4	5
14. In order to avoid problems, I say I'm wrong.	1	2	3	4	5
15. I complain about things until I get my way.	1	2	3	4	5
16. Other kids mess with me on the way to and/or from school.	1	2	3	4	5
17. Arguments at home affect the way I feel at school.	1	2	3	4	5
18. I get distracted from my schoolwork because of other people arguing.	1	2	3	4	5
19. I could use someone to help settle arguments (friend, teacher, parent, or counselor).	1	2	3	4	5
20. I use the guidance department to help solve problems I have with other kids.	1	2	3	4	5
21. I help other people solve problems.	1	2	3	4	5
22. I get into arguments because of rumors.	1	2	3	4	5
23. I have problems with other kids talking bad about my family.	1	2	3	4	5
24. When I get into a fight, my friends back me up.	1	2	3	4	5
25. When my friends get into a fight, I back them up.	1	2	3	4	5

APPENDIX D

Conflict Resolution Scale - Part II

<u>Directions:</u>
- A. Please respond to the following 22 questions located on sides C and D of Part II.
- B. Choose the category that best describes how hard each situation is for you.
- C. Fill in the answer sheet with the corresponding number.
- D. Mark each answer clearly. Do not mark outside of the circle.
- E. Use a No. 2 pencil.

<u>Sample Questions:</u>
How hard or easy is it for you to do the following:

		Very hard				Very easy
A.	Asking your teacher a question	1	2	3	4	5
B.	Ice skating at an outdoor rink	1	2	3	4	5

<u>How hard or easy is it for you to do the following:</u>

		Very hard				Very easy
1.	Asking if you can play a game with your classmates	1	2	3	4	5
2.	Telling the correct rules to your classmates who are arguing about how to play a game	1	2	3	4	5
3.	Telling kids who are teasing your friend to stop the teasing	1	2	3	4	5
4.	Asking kids to play a game you have chosen	1	2	3	4	5
5.	Telling someone that it's your turn during a game	1	2	3	4	5
6.	Asking if you can sit with your classmates in the cafeteria	1	2	3	4	5
7.	Telling a classmate who cuts in front of you to go to the end of the line	1	2	3	4	5
8.	Asking a classmate to do something else when they want you to do something that will get you in trouble	1	2	3	4	5
9.	Telling your classmates to stop making fun of someone	1	2	3	4	5

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	Very hard				Very easy
10. Asking to be on a team when your classmates need more players	1	2	3	4	5
11. Asking a classmate to help you carry some things home after school	1	2	3	4	5
12. Telling a classmate who always wants to go first that you are going first	1	2	3	4	5
13. Asking someone to be your partner on a field trip	1	2	3	4	5
14. Telling your classmate who does not like your friend to be nice	1	2	3	4	5
15. Telling your classmate about what you like when they are trying to choose a game to play	1	2	3	4	5
16. Asking your classmates to finish an activity that you are having fun doing, even though they want to stop	1	2	3	4	5
17. Asking a classmate to help you with a project	1	2	3	4	5
18. Asking some kids who are standing in front of your locker to move	1	2	3	4	5
19. Telling your classmates who are deciding what to do after school what you want to do	1	2	3	4	5
20. Asking a group of your classmates to do what you want when they are planning to do something you don't like	1	2	3	4	5
21. Asking some of your classmates who are planning a party to invite your friend	1	2	3	4	5
22. Telling your classmate to stop yelling at you	1	2	3	4	5