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# The Moderating Role of Body Appreciation on the Feminine Ideology and Aggression

Julie Buzgon

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THE MODERATING ROLE OF BODY APPRECIATION ON THE FEMININE  
IDEOLOGY AND AGGRESSION

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for  
the degree of Doctor of Philosophy

By

Julie W. Buzgon

August 2016

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Julie W. Buzgon

2016

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

*Dissertation*

Submitted in partial fulfillment of the requirements  
for the degree Doctor of Philosophy (Ph.D.)

**School Psychology Doctoral Program**

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**June 21, 2016**

THE MODERATING ROLE OF BODY APPRECIATION ON THE  
FEMININE IDEOLOGY AND AGGRESSION

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## ABSTRACT

# THE MODERATING ROLE OF BODY APPRECIATION ON THE FEMININE IDEOLOGY AND AGGRESSION

By

Julie W. Buzgon

August 2016

Dissertation supervised by Laura M. Crothers, D.Ed.

This study sought to elucidate and expand upon the possible relationships and interactions between the feminine ideology, body appreciation, and indirect aggression reported within a sample of female adolescents. Social learning theorists posit that girls are socialized and reinforced to utilize more ‘feminine,’ or covert, means by which to express their aggression in comparison to their male peers. Girls are instructed from a young age to behave in a manner that is in accordance with the traditional feminine ideology. Additionally, today’s culture has placed unrealistic body standards on the female population, both overtly and tacitly critiquing adolescent girls if their bodies do not conform to society’s standards. Although the existing research linking the feminine ideology and body appreciation to aggression is sparse, it was postulated that an

association between the feminine ideology, body appreciation, and indirect aggression may exist.

The study also aimed to evaluate the effectiveness of *The Goodwill Girls and Boys Curriculum*, which was created to encourage more adaptive conflict management styles in a late childhood and early adolescent sample. As bullying is a common problem in school-age children, it is imperative that interventions such as this one receive more attention in the research base. Therefore, another purpose of the current study was to assess whether the implementation of this curriculum could significantly reduce rates of relational and social aggression within a sample of adolescent girls.

Research questions were posed in which the relationship between the constructs of the feminine ideology, body appreciation, and indirect aggression were evaluated. Furthermore, *The Goodwill Girls and Boys Curriculum* was analyzed such that conclusions could be drawn from changes in the self-reported rates of aggression. The small sample size, in addition to other limitations, may have contributed to the few significant findings noted in this study. However, the implications of this study, and areas for future research are discussed within the context of the existing literature base.

## DEDICATION

This dissertation is dedicated to my incredibly strong and generous parents, Henry and Ellen. To my father, for exemplifying how far hard work can take you. You have been a constant inspiration to aim high and never give up. And to my mother, your selflessness for your children and family are without boundaries. You have provided me the encouragement and love I needed to reach my goals. I simply would not have achieved as much if it were not for the love and support you both have shown me.

This dissertation is also dedicated to my lovely partner, Bob. Thank you for telling me every day that I could.

## ACKNOWLEDGEMENT

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## Chapter I

### INTRODUCTION

Growing up, I was the abnormal one. I was taller than all the boys and always picked out and noticed even though I didn't want to be. There were times when I hated it and just wanted to be invisible. To be honest, I think it would have been much easier for me to be a boy. I always got asked how tall I was and to me it was rude, like asking someone how much they weighed or something else obvious about them. It became very confronting, especially because I wasn't really happy with my body while I was growing up...I just wanted to fit in with the cool group, but I never could because I was so different (*The West Australian*, 9 February 2014, p. 1).

Caitlin Bassett colors her adolescent years as a time of harassment for her height, a trait that would later contribute to her success as an Australian athlete. She recalls a troubling time in which she lacked the appreciation of her body and subsequently shunned her femininity. Her transition to a new school during the high school years brought with it a feeling of greater acceptance that afforded her the comfort and confidence to fully embrace her body. Although Caitlin's story is one detailing how an individual can overcome adolescent bullying and use her once 'abnormal' body to her advantage, many others do not find this level of body confidence and suffer as a result.

For adolescent girls, body image is an important factor in understanding how a girl relates to her femininity. As Caitlin recalls, it may have been easier for her to be a boy as she did not believe her body met her culture's expectations of femininity. Living in a society that places such a large emphasis on appearance makes it nearly impossible

for adolescent girls to feel completely satisfied with their bodies. Additionally, young girls who internalize a conventional feminine ideology and are dissatisfied with their bodies will likely have lower levels of self-satisfaction and self-appreciation, which may result in a variety of repercussions.

### **Significance**

A national survey conducted in 2009 (Robers, Zhang, & Truman, 2012) and another in 2011 (Robers, Kemp, Rathbun, & Morgan, 2014) found that about 28% of adolescents in the United States reported bullying victimization at school during the past year. Olweus and Limber (2010) characterize the act of bullying as intentional, repeated, and negative. More directly, this aggression and intentional harming includes repetitive actions towards a person within a relationship where an actual or perceived imbalance of power is evident (Olweus & Limber, 2010). Additionally, bullying may take place even without clear provocation from the victim (Olweus & Limber, 2010).

While the prevalence of bullying is significant, it is likely that some forms of bullying are not reported or recognized due to their indirect nature. Since indirect forms of aggression are manifested by more subtle means, the victim may not even be aware of the perpetrator's identity, let alone that the act was intentionally malicious (Björkqvist, Lagerspetz, & Kaukiainen, 1991). As indirect aggression is more easily disguised than are direct forms of aggression, instances of indirect bullying are more difficult for educators to identify and remedy (Archer & Coyne, 2005).

When bullying occurs undetected and is able to continue free of punishment, both the victim and perpetrator are subject to various negative consequences. Both victim and perpetrator are likely to encounter academic difficulties, psychological maladjustment,



and social relationship problems (Swearer, Espelage, Vaillancourt, & Hymel, 2010). Additionally, victims of bullying often encounter such problems as low self-esteem, depression, anxiety, and suicidal ideation, among others (Olweus & Limber, 2010). Although victims have received much attention in the existing research, it is important to recognize the harmful impact that bullying has on the perpetrators. Bullies are at risk of engaging in antisocial activities and delinquent behaviors in both the short and long term (Sourander et al., 2007). Therefore, it is of utmost importance to both the victims and aggressors that anti-bullying programs target all individuals involved, and all types of bullying.

In addition to the negative effects likely to be incurred by victims and perpetrators of bullying, it is essential for schools to fully recognize their responsibility to protect students from all forms of aggression (UNICEF, 1989). Students have the right to feel safe within their school, and educators and school staff must take it upon themselves to ensure a positive, safe school climate for all students (UNICEF, 1989). Although educators are likely to recognize and punish physical and verbal acts of aggression, school staff must take measures to better understand and identify indirect forms of aggression as to minimize these more subtle, yet still harmful, forms of violence at school.

During adolescence, girls are more likely to engage in indirect aggression than their male counterparts (Crick & Grotpeter, 1995), which may be due to their forming of closer relationships and the earlier development of a social network (Björkqvist et al., 1991). Since indirect aggression is more frequently used in adolescent female groups, it is crucial to examine other factors that may play a part in perpetuating aggression in this

population. One such factor of interest is body image, which may be understood as a person's evaluation and emotional experiences regarding her physical experience (Cash, 1994). Findings indicate that girls frequently have greater body dissatisfaction than boys (McKinley, 1999), and as body image may serve as a contributing factor to girl's understanding of femininity, it may further contribute to the ways by which adolescent girls express themselves within the peer group.

In order to better understand the overall aim of the study as well as the literature presented, feminine ideology and body appreciation will be defined. For the purposes of this study, feminine ideology is to be understood as a socially constructed ideology in which the current culture reinforces several ways in which a girl must act and behave in order to be viewed as “feminine” (Tolman, Impett, Tracy, & Michael, 2006). More specifically, the feminine ideology posits that girls must behave in a “feminine” manner within their relationships with others, and their bodies are to be objectified and kept within the standards espoused by society (Tolman et al., 2006). While body image refers to thoughts and feelings towards the body and often includes negative perceptions, body appreciation examines more closely the positive aspects of the body and focuses on the appreciation shown towards one's body (Avalos, Tylka, & Wood-Barcalow, 2005).

### **Theoretical Basis**

Although the literature has shown that adolescent girls use indirect forms of aggression more frequently than their male counterparts, it is essential to understand why this phenomenon occurs. According to Galambos (2004), the term, gender, encompasses characteristics that are observed and learned through social experiences instead of those

having a biological basis. Therefore, one such explanation for differing rates of indirect aggression between the genders may be found in social learning theory.

Through social learning theory, children learn gender appropriate behaviors through role modeling, reinforcement, and punishment (Pressley & McCormick, 2007). Consequently, adolescent girls come to understand that they are to engage in more feminine behaviors by witnessing their parents and teachers model such behaviors, by enjoying reinforcement for gender typical behaviors, and by receiving punishment for gender atypical behaviors (Galambos, 2004). In this way, adolescent girls may often be reprimanded for using overt forms of aggression, since physical aggression is not viewed as “feminine” behavior (Bowie, 2007). As a result, adolescent girls will likely internalize such gender boundaries in handling conflict and search for other means by which to solve problems with peers (Field, Crothers, & Kolbert, 2006), which often leads them towards relational and social aggression.

Another factor that may contribute to an adolescent girl’s internalization of her gender includes body image, which has been found to greatly impact her psychological health. Such components of social learning theory as reinforcement and punishment help to explain why girls have heightened body image ideals. Girls are known to spend an increasing amount of time with their same-sex peers throughout adolescence and young adulthood; therefore, it is essential to understand how a social group can create an appearance culture in which the girls share similar expectations (Paxton, Schutz, Wertheim, & Muir, 1999). Since girls place such importance on maintaining their close friendships, they may be willing to conform to the group norms in terms of body image, which may lead to greater body dissatisfaction. Additionally, adolescent girls will likely

conform to the group norms in an effort to enjoy the social benefits and preserve their standing within the group (Oliver & Thelan, 1996). The social benefits reaped may serve as reinforcement, while those who have gender atypical ideals regarding their bodies are likely to be punished in that they are not as well-received by the peer group.

Although social learning theory helps in the understanding of gender identity and aggression, Erikson's psychosocial theory allows for a greater understanding of the overall internalization of ideology. Erikson's theory includes eight stages of development in which the child or adolescent must resolve a central conflict in order to move to the next stage of development (Pressley & McCormick, 2007). Among these eight conflicts, the crisis encountered during adolescence, identity versus role confusion, is the most important crisis faced. During this stage, an adolescent will take on different identities before committing to a specific one (Pressley & McCormick, 2007).

This theory relates to gender identity, body image, and aggression in that adolescents must make decisions regarding their individual identity, which will impact how they are viewed within the social group and how they choose to behave in the future. This particular crisis forces the adolescent to make decisions as to the type of person she wishes to be, which may either reinforce her conformity to feminine types of behaviors or encourage her to break free of such gender constraints. If an adolescent is unable to achieve an identity, role confusion may occur in which the adolescent feels conflicted regarding her identity. Role confusion may lead the adolescent to simply follow rules and norms dictated by the group, rather than following her own beliefs and ideals. Therefore, social learning theory helps shape an individual's gender development while Erikson's psychosocial theory aids in the understanding of gender internalization.

## **Relevant Literature**

Although the literature connecting feminine ideology, body image, and aggression in adolescent girls is sparse, certain studies should be reviewed to understand the current findings in this area. Swami and Abbasnejad (2010) conducted one of the only studies to examine the direct link between the feminine ideology and body appreciation. The researchers examined the association between feminine ideology and body appreciation in female undergraduate students, and found that those who held more traditional feminine ideologies exhibited lower levels of body appreciation for their own bodies (Swami & Abbasnejad, 2010).

This study is particularly significant in that it confirms a relationship between feminine ideology and body appreciation, and although the relationship was weak, further research in this area is needed (Swami & Abbasnejad, 2010). The constructs used in this study were also noteworthy as there is very limited research on body appreciation, as body image is more frequently reviewed (Swami & Abbasnejad, 2010). Additionally, this investigation is one of first to study femininity separate from the construct of gender role orientation (Swami & Abbasnejad, 2010). Rather, the researchers aimed to operationalize feminine ideology as the participants' endorsements of behaviors regarding how women should behave within today's society (Swami & Abbasnejad, 2010).

Further linking a relationship between femininity and body image was a study conducted by Monge-Rojas et al. (2015) in which the researchers assessed a sample of adolescents' definitions of femininity. These adolescents highlighted how their outward appearance provided insight into their level of femininity (Monge-Rojas et al., 2015).

This study confirms that adolescents frequently associate characteristics associated with their body to their interpretation of femininity, which promotes an association between these two constructs within the adolescent population.

Another study that examined the internalization of feminine ideology found that those adolescent girls who internalize conventional femininity reported lower levels of self-esteem and higher depressed mood (Tolman et al., 2006). The researchers found these particular results to be the most true for participants who held strong beliefs regarding objectifying their bodies (Tolman et al., 2006). Such findings are remarkable in that they boast that those adolescents who subscribe to traditionally feminine conventions are likely to suffer from greater psychological distress as they move through adolescence and into adulthood (Tolman et al., 2006).

A significant finding includes the discovery that body objectification had especially predictive effects for psychological well-being (Tolman et al., 2006), which solidifies the idea that body image is an essential component of the feminine ideology and is worthy of further research. If body image plays such a role in the internalization of feminine ideology, it may serve as an essential link in understanding the relationship between the feminine ideology and aggression in adolescent girls.

Additionally, few studies have provided evidence for the construct of body image impacting an adolescent's employment of aggression; however, Reulbach et al. (2013) did just that. These researchers examined the body image of a group of 9-year-old children and their self-reported rates of bullying. They revealed that children describing themselves as underweight and overweight were more likely to report engaging in aggressive behaviors in comparison to their peers who were of a more typical body type

(Reulbach et al., 2013). These results indicate that not only does the construct of body image contribute to a girl's overall impression of her femininity, but it also may alone advance the use of aggressive behaviors.

### **Statement of the Problem**

Bullying in schools has long been an area of concern and intervention, as violence within a child's place of learning is unacceptable in all of its many forms. Over time, various strategies and tools have been instituted to minimize aggression within schools; however, it is the covert, indirect forms of aggression that are in need of further intervention. As previously stated, these forms of aggression are more frequently used by adolescent girls and often go unnoticed by school staff due to their indirect nature.

Although much research has investigated bullying in general, further research is needed regarding instances of 'girl bullying,' as these types of bullying are just as harmful and detrimental to children as are overt forms of aggression. Additionally, as these behaviors frequently occur undetected, it is essential to identify and evaluate specific interventions targeting these types of aggression within the school environment.

Currently, the literature is lacking regarding the internalization of the feminine ideology and the impact of body appreciation, or positive body image, on girls' use of indirect aggression. It is essential to examine these two constructs as girls are socialized throughout their childhood and adolescence to handle conflict differently than their male peers and to conform to society's standards regarding how their bodies should look. The literature has documented how adolescent girls rely heavily upon a close-knit group of friends who often share similar beliefs. These similar beliefs may include how intensely girls subscribe to the conventional, feminine ideology as well as how girls value their

bodies. Since internalizing the feminine ideology has been linked to lower levels of self-satisfaction in adolescent girls, and because girls who conform to such ideologies are in turn likely to have heightened body standards, these two constructs may work together to create more psychological distress within the members of the social group, thus increasing their use of aggression.

Therefore, the overall aim of this study is to examine the moderating role of body appreciation on the feminine ideology and indirect forms of aggression in adolescent girls. The paper will also detail the implementation of an intervention that aims to reduce these behaviors in adolescents, and evaluate its effectiveness. This study will contribute to the limited research base on feminine ideology and the construct of body appreciation in the adolescent population, and will additionally contribute to the limited research that has been conducted regarding the efficacy of programs working to instill more adaptive conflict management styles.

### **The Current Study**

After investigating the extant literature regarding feminine ideology, body appreciation, and indirect aggression in adolescent girls, the author proposed the current study to address the following research questions, accompanied by the corresponding hypotheses.

1. **Research Question:** Does the internalization of the feminine ideology impact adolescent girls' use of indirect aggression?
  1. **Hypothesis:** Adolescent girls who internalize conventional feminine ideologies are more likely to exhibit greater levels of indirect aggression than those who are more gender atypical.



2. **Research Question:** Does body appreciation impact adolescent girls' use of indirect aggression?
  2. **Hypothesis:** Adolescent girls who exhibit lower levels of body appreciation are more likely to exhibit aggressive behaviors than those with higher levels of body appreciation.
3. **Research Question:** Are adolescent girls' levels of interpersonal maturity impacted by such constructs as the internalization of feminine ideology or body appreciation?
  - 3a. **Hypothesis:** Adolescent girls subscribing more deeply to the traditional feminine ideology will report lower levels of interpersonal maturity than those who do not internalize the feminine ideology as strongly.
  - 3b. **Hypothesis:** Adolescent girls reporting higher levels of body appreciation will exhibit greater levels of interpersonal maturity than those reporting lower levels of body appreciation.
4. **Research Question:** Does *The Goodwill Girls and Boys Curriculum* influence the self-reported rates of indirect aggression and interpersonal maturity in adolescent girls?
  - 4a. **Hypothesis:** Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report reduced rates of relational aggression on a post-test measure in comparison to a pre-test measure collected before implementation of the program.
  - 4b. **Hypothesis:** Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report reduced rates of social aggression on a post-test measure

in comparison to a pre-test measure collected before implementation of the program.

4c. **Hypothesis:** Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report greater levels of interpersonal maturity on a post-test measure in comparison to a pre-test measure collected before implementation of the program.

5. **Research Question:** Does body appreciation moderate the relationship between feminine ideology and indirect aggression in adolescent girls?

5. **Hypothesis:** Adolescent girls who have lower levels of body appreciation will report internalizing more traditional feminine ideologies, which will be related to elevated rates of aggressive behaviors.

### Summary

This chapter has provided a brief introduction to the topic of interest. Bullying is a widespread and significant problem throughout childhood and adolescence, and indirect methods of bullying often occur unchecked due to their covert nature. Research has suggested that female adolescents display more indirect aggression than their male counterparts; therefore, it is of utmost importance to focus on these indirect methods by which girls aggress against their peers. The literature linking feminine ideology and aggression is sparse, and the research examining the contribution of body image or body appreciation to these two constructs is nearly non-existent. Therefore, the current study will contribute to the literature base on indirect aggression in adolescent girls, and help researchers better understand how feminine ideology and positive body image may contribute to aggression in this population. This investigation will also serve the purpose

of evaluating a curriculum that instructs adolescent girls in the use of more adaptive techniques by which to communicate with their peers; thus, expanding upon the literature in this area as well.

Now that an overview of the problem has been introduced, it is essential to delve deeper into the literature surrounding feminine ideology, body image, and aggression to fully understand the constructs separately as well as how they may work in conjunction to result in a certain outcome. The paper now turns towards an in-depth review of the literature, including the most relevant background information, research studies, and theories of explanation in order to provide the need for the proposed investigation.

## Chapter II

### LITERATURE REVIEW

#### **Understanding Aggression**

Often, educators and parents pay greater attention to direct forms of aggression, such as physical or direct verbal comments, than to indirect forms of aggression, such as relational and social aggression. There is no doubt that direct aggression can cause immediate pain and turmoil in the lives of adolescents and the school environment; however, indirect forms of aggression may cause just as much damage as direct forms of aggression. Direct forms of aggression typically receive more attention as physical and verbal acts of violence are often obvious to an adult, and are cause for immediate intervention. Conversely, indirect aggression is manifested in more subtle forms and therefore may not be as noticeable to an adult.

In the past, researchers identified rates of verbal and physical aggression through questionnaires and self-report measures, and largely ignored the prevalence of indirect aggression (Björkqvist et al., 1991). Indirect aggression is more difficult to identify by educators and adults because it is more easily disguised than overt, direct aggression. Accordingly, asking an outside observer, such as a parent or teacher, to report on instances of indirect aggression may prove unreliable (Bowie, 2007). Therefore, many researchers have turned to the adolescents themselves to obtain an estimate of the use of such forms of aggression.

In a study conducted by Lagerspetz, Björkqvist, and Peltonen (1988), a high correlation was found between self-rated and peer-nominated reports of direct aggression for the male sample, while a low correlation was found between self-rated and peer-

nominated indirect aggression for both genders. This could translate to mean that the aggressor may not even recognize that his or her actions are “aggressive” when making use of indirect aggression (Björkqvist et al., 1991). Therefore, if indirect aggression is a phenomenon that is not easily recognizable by its’ perpetrators, it is a set of behaviors that are likely difficult for researchers to fully understand.

### **Types of Indirect Aggression**

Indirect aggression comes in varying forms, so it is first essential to understand how indirect aggression may be manifested as well as the different terms used to identify these forms of aggression. The term, indirect aggression, is more of an overarching term, and is often confused with the term, relational aggression. Archer and Coyne (2005) distinguished the two terms by emphasizing whether the victim can identify the aggressor. A hallmark of indirect aggression is that the victim is often unaware of the aggressor’s identity, as these forms of aggression serve as a “behind-the-back” function (Archer & Coyne, 2005). Other researchers have claimed that this particular feature is not always evident with indirect aggression, as some aggressors choose to ignore a peer or use other peers to make a friend jealous, in which the victim would be able to identify the perpetrator (Björkqvist et al., 2001). Either way, the aggressor is more likely to avoid aggression in return as he or she is either able to remain unidentified or make it seem as though it was not his or her intention to cause any harm at all (Björkqvist et al., 1991).

Although there is much overlap between the terms indirect and relational aggression, relational aggression is manifested more specifically within a dyadic relationship (Archer & Coyne, 2005). The aim of relational aggression is to harm or manipulate relationships. In this case, the aggressor will use more covert means, such as

spreading rumors or gossiping to cause harm to a friendship (Archer & Coyne, 2005). Although relational aggression usually takes a more subtle form, this type of aggression may also include direct behaviors. For example, a friend may threaten to end a friendship if the victim does not comply with the aggressor's wishes. In this example, the act is more overt, as the victim can identify the aggressor. Relationally aggressive acts often serve as a form of retaliation against a friend for a perceived wrongdoing, and this tactic aids in demonstrating the perpetrator's greater social power over the victim (Field et al., 2006). The previously stated example also explains how relational aggression can be utilized as a coercion of a friend to get the victim to comply with the perpetrator's requests or beliefs (Field et al., 2006).

Additionally, it is important to distinguish social aggression from the previously mentioned terms. The aim of social aggression is to harm an individual's social standing within a group, and encompasses the previously mentioned forms of aggression along with nonverbal forms of aggression, such as eye rolling and dirty looks (Archer & Coyne, 2005). Researchers are careful to note that social aggression makes use of more gestural forms of communication, while direct verbal remarks remain under the category of direct aggression (Crick et al., 1999). Perpetrators of social aggression intend to cause maximum social damage to their victim, and this may be manifested through such means as social isolation, public confrontation, or sabotaging the victim's relationship with others (Field et al., 2006).

Social aggression is more likely to occur between acquaintances, while relational aggression typically requires a dyad, such as a close friendship or bond (Field et al., 2006). As relational aggression is used to harm a dyadic friendship, social aggression is

used to tarnish an individual's social standing within a group of friends, meaning that the two terms differ in their intended endpoints (Archer & Coyne, 2005). Similarly to relational aggression, social aggression may be used in either covert or overt forms wherein the perpetrator's identity is either unknown or known to the victim.

In addition to defining the terms associated with indirect aggression, targeted research has sought to experimentally demonstrate the distinction between types of indirect aggression. Researchers have developed an instrument, the Young Adult Social Behavior Scale (YASB), to distinguish relational and social aggression from prosocial friendship behaviors (Crothers, Schreiber, Field, & Kolbert, 2009). The YASB was distributed to a sample of college students, and the self-report measure yielded results that indicated that socially aggressive behaviors are distinct from direct relationally aggressive behaviors (Crothers et al., 2009).

The researchers used confirmatory factor analysis (CFA) to investigate the factor structure of the YASB (Crothers et al., 2009). According to the CFA, the model with the best fit for the data was one that was comprised of three factors that distinguished between relational aggression, social aggression, and interpersonal maturity (Crothers et al., 2009). This finding is significant in that it demonstrates how relational and social aggression are different constructs, and the behaviors associated with these types of aggression can be teased into two separate categories (Crothers et al., 2009).

Differentiating between relational and social aggression as well as interpersonal maturity allowed for some insight as to the intention of the perpetrator. Those who use relational aggression may not have the interpersonal maturity necessary to resolve conflict within their close relationships; therefore, these girls will utilize relational aggression in an

effort to gain more influence within the friendship as opposed to more sophisticated means (Crothers et al., 2009). Conversely, those using social aggression may have more interpersonal maturity, thereby using social aggression to climb the social ladder in an effort to acquire dominance over their victim (Crothers et al., 2009).

### **Gender and Aggression**

Historically, it has been evident that boys more frequently engage in direct forms of aggression, as boys tend to opt for physical forms of violence as their choice of aggression within the peer group (Crick & Grotpeter, 1995). Conversely, girls tend to use indirect means of aggression more frequently than boys. Generally, boys are more concerned with displaying physical dominance, while girls are taught to deal with conflicts by use of social interactions with others and through their interpersonal relationships (Crick & Grotpeter, 1995). Although boys are often perceived to be more aggressive than female counterparts, when taking indirect and relational aggression into consideration, it appears as though the levels of aggression exhibited by the two genders are roughly equal (Crick & Grotpeter, 1995).

A number of studies have aimed to examine whether a difference exists between males' and females' use of aggression, and many have found that this difference is small to nonexistent until about 8 years of age (Archer & Coyne, 2005). These gender differences appear around the ages 8 to 11 years and peak in adolescence (Archer & Coyne, 2005). However, when examining sex differences among adults' use of aggression, findings indicate that the difference is quite small (Archer & Coyne, 2005). Although it is evident that girls begin using indirect aggression prior to adolescence,



findings indicate that males' use of indirect aggression increases during young adulthood (Björkqvist, Österman, & Kaukiainen, 1992).

This phenomenon may be explainable by development and maturation. Indirect aggression requires the perpetrator to have a level of verbal and social skills that direct aggression does not require (Björkqvist et al., 1991). In order to engage in relational and social aggression, the adolescent must demonstrate social intelligence in order to effectively manipulate relationships and tarnish the victim's social standing (Crick, Casas, & Nelson, 2002). As it is known that girls develop verbal skills earlier than boys do (Maccoby & Jacklin, 1974), it is reasonable to expect that girls will make use of these more cognitively difficult strategies than that of their later-developing male peers. This would prove helpful in explaining that "catching-up" effect seen in males' use of indirect aggression later in life.

Additionally, the use of indirect aggression is based on the existence of a social group and strong friendships; therefore, one would not witness as much indirect aggression early in life as friendships are not as resilient in younger children, and social groups do not take form until adolescence (Björkqvist et al., 1991). When girls reach adolescence, they often find themselves in very close relationships with female peers, and girls learn to rely on the members of their tight social group for support and stability. As the maturation process continues, cliques take form and allow a platform for girls to manipulate others as an aggressive strategy to achieve some goal (Björkqvist et al., 1991).

In order to observe differences in the use of direct and indirect aggression between the genders, Björkqvist et al. (1991) conducted a study examining three different

age cohorts. Findings indicated that within the age 8 year cohort, the structure of friendships did not significantly differ by gender; however, in the age 11 and 15 year cohorts, the researchers noted an observable difference in which the girls began to form closer friendships within “pairs” (Björkqvist et al., 1991). By forming these closer friendships and developing a social network, this allowed for the girls to make use of indirect forms of aggression (Björkqvist et al., 1991). Females’ advanced verbal skills in comparison to their male peers also permitted the girls to engage in more manipulation within their social groups (Björkqvist et al., 1991).

Crick and Grotpeter (1995) also aimed to examine the difference between the use of overt and relational aggression between the genders. The researchers examined the use of these two types of aggression in children in third through sixth grade to determine if gender played a role in their aggressive tactics (Crick & Grotpeter, 1995). This early study was among the first to demonstrate that girls exhibit aggression more often than previously thought, and that boys had been viewed as traditionally more aggressive merely because the types of aggression most utilized by girls had not yet been examined (Crick & Grotpeter, 1995). Crick and Grotpeter (1995) found that boys used more overt types of aggression, while girls exhibited more relational aggression (Crick & Grotpeter, 1995). This piece of research was particularly important in highlighting aggression in girls, and directing researchers towards investigating different types of aggression by gender.

## **Gender Ideology**

### **Gender Development**

When examining a rationale for why the genders differ in their use of aggression, it is important to understand the role of gender development. According to Galambos (2004), gender refers to the characteristics that are observed and learned through social experiences instead of those that have a biological basis. For example, children are taught how their particular gender is to act through role modeling by parents and teachers, reinforcement of gender appropriate responses, and punishment for inappropriate gender responses (Galambos, 2004). Social learning theory posits that these three essential components: role modeling, reinforcement, and punishment all contribute to the development of gender identity (Pressley & McCormick, 2007). In this way, boys are able to learn which behaviors and types of aggression are seen as masculine, while girls learn which behaviors are more feminine and appropriate to their particular gender.

Often, when young girls engage in physical or direct verbal acts of aggression, girls will often be provided an explanation for why they are not to engage in these overt forms of aggression (Bowie, 2007). Boys may also be given a verbal explanation as to why they should not engage in physical acts of aggression, but this explanation does not have as much to do with failure to conform to their gender role as it does for their female counterparts. Because of this difference in rationale, girls are led to mask their anger and take other, more surreptitious, routes to harm their peers (Zahn-Waxler & Polanichka, 2004). Additionally, peers and significant adults may not consistently reinforce females' use of assertive methods in handling conflict as some expect girls to be friendly,

compliant, and accommodating to others (Field et al., 2006). Whether done consciously or not, parents and teachers reinforce consistent and punish inconsistent gender behaviors in children and adolescents (Brody, 1999; Turner & Gervai, 1995). This reinforcement causes adolescent females to internalize these gender boundaries in handling conflict, and leads girls to adhere to socially appropriate female behavior, which often includes hiding such emotions as anger and jealousy (Field et al., 2006).

Besides role modeling, reinforcement, and punishment, the media also acts to reinforce gender ideologies, especially with developing adolescents. In the media, those characters exhibiting overt forms of aggression are often male, implicitly informing females that it is more appropriate for boys to use physical aggression than it is for girls (Bowie, 2007). Archer and Coyne (2005) found a significant relationship between how much indirect aggression was viewed by girls on television with how much indirect aggression those girls exhibited. This finding is significant as it demonstrates the contribution of the media to the presence of indirect aggression.

Gender development also occurs through gender socialization, in which adolescents tend to segregate themselves into groups of same-sex peers (Maccoby & Jacklin, 1987). By choosing to associate with same-sex peers, this further solidifies the adherence to traditional gender roles. If a peer begins acting in a manner that is not consistent with the female gender ideology, then her same-sex peers within her social group will express dissatisfaction, which will likely deter her from engaging in such activities and encourage her to align her behaviors with the more feminine ideology. Werner and Crick (2004) found that girls who are friends with relationally aggressive girls tend to exhibit higher levels of relational aggression themselves one year later. It

seems likely that because girls form such tight bonds, their actions are greatly influenced by their peers, and their aggressive tactics are shared within gender groups.

As girls are socialized more often with same-sex peers, it is interesting to understand how they identify with their gender. It has been previously stated that girls who associate with relationally aggressive girls tend to exhibit relational aggression themselves; therefore, many girls adopt the outlook of the peers of their social group. One way in which girls may group themselves is based on how they internalize their gender. Therefore, do these girls that exhibit indirect aggression identify as more feminine than their less aggressive peers? As it has been shown that girls as a whole tend to use more indirect means by which to exhibit aggression than male counterparts, it may be understood that girls who align more closely with the feminine gender will make use of these indirect means of aggression more often than those girls who do not typically align their behavior with such traditional gender norms.

Another theory by which to understand development in adolescents is Erikson's psychosocial theory of development. Erikson emphasized important social interactions in each of his eight stages of development that were essential to experience in order to successfully move from one stage to the next (Pressley & McCormick, 2007). Within each stage existed a central conflict in which the child or adolescent could either resolve positively or negatively, and would affect his or her development (Pressley & McCormick, 2007). When examining each crisis within Erikson's theory, it is evident that the identity crisis is the most prominent one that an individual will face (Schwartz, 2001). Identity versus role confusion occurs during adolescence, and it is a period in which adolescents begin to determine who they are, what they choose to believe, and who

they wish to become (Pressley & McCormick, 2007). This crisis requires the adolescent to experience different identities before committing to a specific one (Pressley & McCormick, 2007).

Marcia (1966) elaborated on Erikson's identity versus role confusion stage further, and proposed four different identity statuses that the adolescent could be experiencing. Identity achievement indicates that an adolescent has faced a crisis, and has successfully resolved the conflict, leading him or her to feel confident in who he or she is (Marcia, 1966). Identity diffusion indicates that an individual has not yet encountered a crisis that causes him to question who he or she is, and he or she is not yet committed to a particular life path (Marcia, 1966). Identity moratorium is the stage in which an individual has encountered a crisis, but the identity crisis has not yet been resolved, meaning he or she remains uncertain about his or her beliefs (Marcia, 1966). And lastly, identity foreclosure describes those who have not experienced an identity crisis yet, but are currently committed to their beliefs (Marcia, 1966).

These identity theories relate to gender development and aggression in that adolescence is a time in which individuals are bound to make decisions with regard to their social groups and behaviors. The Eriksonian crisis requires the individual to make a decision as to the type of person she wishes to be, thus either aligning or disconnecting herself with a particular friend or social group. If an adolescent fails to establish an identity, role confusion may occur in which the adolescent feels conflicted. This is a period in which the individual chooses to embrace a gender role, or breaks free of them. This is an essential stage in which the adolescent is forced to make decisions regarding

his or her beliefs, which will either reinforce the commitment to a social group or deter him or her from aligning with such a group.

The research examining this identity crisis in relation to aggression is limited; however, Kolbert et al. (2012) investigated ego identity status, cognitive processing style, and perpetrators' use of relational and social aggression. The cognitive processing styles included an examination of both deep processing, in which an individual puts forth the needed effort to categorize new stimuli, and elaborative processing, in which the individual compares new stimuli to known information (Schmeck & Ribich, 1978).

Results collected from college students indicated that when individuals in ideological diffusion use deep or elaborative processing, they tend to utilize social aggression more frequently within their relationships (Kolbert et al., 2012). This did not prove true for measures of relational aggression, which further solidifies the finding that relational and social aggression are separate constructs (Kolbert et al., 2012). These results indicate that those who exhibit higher levels of cognitive sophistication and lower levels of psychosocial maturity to aid in the resolution of conflicts were more likely to use social aggression than the individuals with poorer cognitive processing skills or those who had higher ideological identity statuses (Kolbert et al., 2012).

### **Feminine Ideology and Associated Outcomes**

In an examination of the internalization of conventional feminine ideology and its association with mental health in adolescent girls, Tolman et al. (2006) postulated that by internalizing feminine ideology, such as the notion that true thoughts and feelings are not important and that looks are of the utmost importance, girls may be at risk for poor mental health. Their study included a sample of 148 girls aged 12 to 15 years who

completed surveys regarding their perception of feminine ideology, self-esteem, and depression (Tolman et al., 2006).

Tolman et al. (2006) found that girls who internalized traditional feminine ideologies had lower self-esteem and higher depressed moods, and this was particularly true for the participants who held strong beliefs regarding objectifying their bodies. The results specifically revealed that internalizing feminine ideals explained more than half of the variance in depression, and more than two-thirds of the variance in the self-esteem measure (Tolman et al., 2006). These findings are significant in that they provide compelling evidence that those who are more in tune with feminine conventions are likely to be at greater risk for psychological distress as they move towards adolescence and adulthood (Tolman et al., 2006). An important finding includes the revelation that body objectification had especially strong predictive effects for psychological well-being, and this result reveals that this particular aspect of femininity is a strong predictor for self-esteem in adolescents (Tolman et al., 2006).

Crothers, Field, and Kolbert (2005) took the research one step further, looking beyond the impact of gender, and towards the influence of gender identity on aggression. This study aimed to investigate the relationship between gender identity in adolescent girls and their use of relational aggression (Crothers et al., 2005). The results indicated that girls who classified themselves as more feminine were more likely to indicate that they used relationally aggressive tactics in comparison to their adolescent female peers who identified with a more atypical gender role (Crothers et al., 2005).

Overall, girls believed that by using indirect conflict management styles, they could gain greater power and social status within their group (Crothers et al., 2005).



Conversely, adolescent girls who identified as more gender atypical appeared to be more vulnerable within the social group and were more likely to face rejection by peers (Crothers et al., 2005). Rejection from the peer group is perceived as highly negative to adolescent girls who strive for feelings of belongingness within their social structure. Therefore, this study may provide support to the concept that girls who internalize traditional gender identities are more accepted by their social group, and thus may be more likely to come in contact with indirect methods of aggression.

### **Body Image**

Therefore, it must be understood exactly how an adolescent girl will internalize her feminine identity. One factor that should be taken into consideration is body image. Body image refers to a person's evaluation and emotional experiences regarding her physical appearance (Cash, 1994). Many have explained greater body dissatisfaction in girls than in boys by placing an emphasis on heightened sociocultural expectations on physical appearance in girls (McKinley, 1999). Bearman, Martinez, Stice, and Presnell's (2006) longitudinal study found that as adolescents age, they grow more dissatisfied with their bodies. By the age of 14, the adolescent girls sampled reported significantly more dissatisfaction with their bodies in comparison to their same-aged male peers (Bearman et al., 2006). It is important to note that girls who felt satisfied with their bodies were significantly thinner than their male peers expressing the same level of satisfaction, suggesting that the societal standards regarding physical appearance may be felt more strongly by girls (Bearman et al., 2006).

Due to societal expectations, many girls internalize appearance ideals and choose to make them an overall goal (Jones, 2004). From a very young age, girls engage in self-

surveillance more frequently than their male peers, meaning that girls tend to monitor their own bodies from the view of an outsider rather than appreciating their bodies as their own (Lindberg, Grabe, & Hyde, 2007). There exists a growing body of literature that links internalized appearance ideals with body dissatisfaction (Jones, 2004). Because it is extremely difficult to reach idealized body images, many girls will feel an overall sense of dissatisfaction with their bodies, which may have an effect on the internalization of their feminine identity.

Many argue that body dissatisfaction among adolescent girls is a direct result of the unrealistic standards available in the media (Hargreaves & Tiggemann, 2004). It is difficult for adolescent girls to tune out such images as they find themselves surrounded by TV programs, billboards, magazines, and advertisements that all espouse an overall emphasis of thinness in women. As body image is one of the most prevalent components in the self-esteem of adolescent girls, it is important to understand how body image may regulate a girl's conformity to more feminine ideologies (Levine & Smolak, 2002).

Both correlational and experimental studies have found that adolescents who are exposed to these media images are more dissatisfied with their bodies (Hargreaves & Tiggemann, 2004). Girls not only compare themselves to their peers, but also to the idealized images available in the media. This act of social comparison often becomes detrimental to the physical and psychological health of so many adolescent girls, as this period of maturation may bring with it a heightened level of insecurity as girls struggle to accept and appreciate their changing bodies.

In a study comparing the effects of the media on girls versus boys, the findings imply that the effects were greater for girls (Hargreaves & Tiggemann, 2004).

Researchers examined 595 adolescent students aged 8 to 12 years old, and compared their body dissatisfaction prior to and after watching television commercials either containing images of the thin ideal versus the non-appearance commercials (Hargreaves & Tiggemann, 2004).

The results indicated that girls who were exposed to thin-ideal commercials experienced an increase in body dissatisfaction as well as an increase in negative affect when compared to girls who were in the control group (Hargreaves & Tiggemann, 2004). Particularly, it appeared that girls processed self-related appearance information more intensely and more routinely than their male counterparts (Hargreaves & Tiggemann, 2004). Another interesting finding includes the result that those adolescents who were high on appearance investment were more likely to take part in appearance comparisons to these idealized images in the media (Hargreaves & Tiggemann, 2004). Overall, the media appears to have a greater impact on the body image ideals of girls than it does for boys (Hargreaves & Tiggemann, 2004).

In addition to internalizing such ideals, girls also make use of social comparisons in which they evaluate their bodies with those of their peers (Jones, 2004). Throughout adolescence and even adulthood, many girls find themselves comparing their bodies to those of their peers. It is no wonder then that these girls who frequently draw comparisons between their bodies to others would experience a negative self-evaluation.

An adolescent's peer group also holds a great amount of power in regards to the individual's body image. As girls spend an increasing amount of time with their same-sex peers, it is important to evaluate how the social group creates an appearance culture in which the girls share similar expectations (Paxton et al., 1999). Girls place such

emphasis on maintaining their close friendships and social standing within the peer group that they may experience greater body dissatisfaction as they feel the need to conform to group norms. Girls will attempt to conform to these norms in order to reap the social benefits and maintain their status within the group (Oliver & Thelan, 1996). Additionally, research has confirmed that those adolescents who engage in more frequent conversations about appearance with their friends are likely to have more inflated internalized appearance ideals and greater body dissatisfaction than those who do not frequently discuss their appearance (Jones, Vigfusdottir, & Lee, 2004).

Previous studies have found that members of a social group tend to share similar body image concerns, and may also have similar levels of depressive symptoms and self-esteem (Shroff & Thompson, 2006). In order to further understand the impact that the social group has on the identity an adolescent brings to a friendship and her feelings about her appearance, investigators assessed similarities among girls in friendship groups regarding body image dissatisfaction and self-esteem, among other variables. Therefore, the researchers intended to expand upon the research of the influence of the peer group on such variables that are of utmost importance to adolescents.

The results of the study supported the notion that friends are important factors involved in an adolescent's evaluation of body image, eating disturbance, and self-esteem (Shroff & Thompson, 2006). Of particular importance, it was revealed that self-esteem was similar among those within a friend group (Shroff & Thompson, 2006). It appears as though adolescent girls spend more time with friends who share similar beliefs, which may mean that girls either choose to associate with friends who are similar in levels of self-esteem, or girls become more similar to their friends over a period of time (Shroff &

Thompson, 2006). Additionally, the study helped to solidify the idea that adolescent girls highly value the opinions of their peers when evaluating their bodies (Shroff & Thompson, 2006).

### **Body Image and Associated Outcomes**

Polce-Lynch, Myers, Kliewer, and Kilmartin (2001) investigated the relationship between body image and emotional expression in adolescents in fifth, eighth, and twelfth grades. The overall aim of the study was to examine the associations between specified predictors with self-satisfaction that could possibly account for differing gender patterns within adolescents (Polce-Lynch et al., 2001). These predictor variables included the influence of the media, sexual harassment, peer relationships, family, and body image (Polce-Lynch et al., 2001). The researchers hypothesized that body image would be a large mediating factor between the social predictors and the self-esteem levels of girls (Polce-Lynch et al., 2001).

Results indicated that although the self-esteem of boys and girls included in the study was similar overall, girls displayed lower self-esteem than their male peers in the eighth grade sample (Polce-Lynch et al., 2001). This is worth noting, as this period of adolescence is known for being a difficult transition for many, and indicates that girls at this age are more likely to engage in activities and behaviors that are undertaken by the social group as they are in a period of greater vulnerability.

Additionally, results showed the media to be influential in impacting girls of all three age groups (Polce-Lynch et al., 2001). The messages displayed through the media were associated with body image, which led to negative feelings about the self (Polce-Lynch et al., 2001). Body image served as a mediating force between the media and

evaluations of the self, so adolescent girls who felt that their bodies were more consistent with culture's expectations tended to have higher self-esteem, and vice versa (Polce-Lynch et al., 2001). This study also showed that as girls age, they become more emotionally expressive (Polce-Lynch et al., 2001). These results show that body image has an influence on how adolescent girls feel about themselves, and that this may be related to the way in which they express themselves. This causes one to wonder how this emotional expression and differences in self-satisfaction may manifest themselves, and how body image and self-esteem mediate this emotional expression, whether it be through aggressive or more subtle means.

Janssen, Craig, Boyce, and Pickett (2004) took a more direct look at the specific link regarding body weight and several types of aggression in a large sample of Canadian adolescents. Although they evaluated a sample of adolescents ranging in age from 11 to 16-years old, results revealed that only 15 to 16-year-old adolescents (girls and boys) that had a higher Body Mass Index (BMI) indicated higher levels of bully perpetration in comparison to their peers who had more typical BMI's (Janssen et al., 2004). More specifically, there existed a positive association between BMI and physical bullying within the female sample; however, these significant associations were not found for verbal or relational perpetration (Janssen et al., 2004).

Overall, this study was significant in that it elucidated the notion that poor body image may propel acts of aggression during the unstable time of adolescence. Perhaps the negative body images held by overweight adolescents compelled these participants to aggress against their peers in an effort to remove the focus of their peers from their perceived flaws. Another lens by which to scrutinize these results is that overweight

adolescents may attempt to exert domination within the peer group by whatever means possible (Janssen et al., 2004). Regardless of the rationale, these results warrant further investigation.

Reulbach et al. (2013) revealed further results regarding body image and bullying victimization and perpetration in a sample of Irish 9-year-old children. Bully perpetration was significantly related to self-reported weight descriptors such that 20.6% of children describing their body as “very skinny,” 17.1% describing their body as “skinny,” and 17.6% describing their body as “a bit/very overweight” reported picking on or bullying others (Reulbach et al., 2013). These results are presented in contrast to the 11.9% of participants admitting to bullying other children that described their body as “just the right size” (Reulbach et al., 2013).

These findings are interesting in that participants describing themselves as both underweight and overweight report higher rates of bullying behaviors, while those who appear to be more satisfied with their outward appearance report reduced instances of aggression. This study hints at the notion that more research is needed in order to clarify the relationship between body image and bullying. Overall, the existing literature on body image and aggression is sparse. While several studies point towards a relationship between body image and aggression, further research is necessary in order to better understand this association and the implications for the adolescent population.

### **Body Image and Gender Ideology**

To date, the literature is lacking in research directly evaluating the effects of body image on gender ideology; however, several studies exist that attempt to relate how body image is an essential component of the construct of femininity. When Leavy, Gnong, and

Ross (2009) questioned college-aged women as to the definition of femininity, many responded with physical characteristics and discussed societal standards regarding appearance. This sample of women described femininity as a number of behaviors that they must engage in to be seen as attractive by the opposite sex (Leavy et al., 2009). Additionally, these women suggested that their relationships with others are essential to their self-representations and their feelings towards their bodies (Leavy et al., 2009). Out of their 20 female participants, not one of them indicated complete satisfaction with her current body. Furthermore, when asked what they would change about themselves, all participants listed an issue relating specifically to her body (Leavy et al., 2009). Even more troubling is the notion that these participants equated an improved body with greater levels of happiness and success (Leavy et al., 2009).

Monge-Rojas et al. (2015) also questioned the definition of femininity, but with an adolescent population. These researchers conducted focus groups with a sample of Costa Rican adolescents (aged 14 to 17-years) to better understand how they defined femininity (Monge-Rojas et al., 2015). The participants relayed how personal appearance was viewed as “an intrinsic part of being feminine” (Monge-Rojas et al., 2015). The study also revealed that adolescents feel consuming moderate amounts of healthy foods is also viewed as engaging in feminine behavior (Monge-Rojas et al., 2015). This study suggests that adolescent girls from a variety of backgrounds have been socialized to believe that in order to be feminine, one’s body must align with the thinness espoused by the common culture.

These studies are essential in understanding the cognitive correlations today’s female population has towards the notion of femininity. Girls ranging in age from



adolescence to college-age believe that their bodies are an essential indicator of their level of femininity. More distressing is the notion that they feel they will reap greater rewards if their bodies conform to what society expects of them. Moving forward, it should be noted that body image appears to be at least somewhat related to both aggression and the feminine ideology as espoused by a number of studies within the literature base.

**Body appreciation.** Although much research has centered around the idea of body image and body dissatisfaction, the construct of body appreciation has enjoyed little attention in comparison. Body appreciation is important to consider within today's adolescent population as it indicates the ways in which one values her body and the positive manner by which she thinks of her body (Halliwell, 2013). Furthermore, the construct of body appreciation promotes a healthy image of the body while protecting her from negative messages regarding female bodies that are readily accessible within a variety of sources within our current society (Halliwell, 2013). While the current study focuses heavily upon positive body image, it is essential to document the existing literature on body appreciation and its associated outcomes.

A study conducted that examined differing levels of body appreciation, as indicated on the Body Appreciation Scale (BAS), and felt pre- and post-body evaluations after viewing images in the media yielded important implications for the promotion of body appreciation (Halliwell, 2013). The findings indicated that body appreciation protected college-aged women from the effects of negative media exposure (Halliwell, 2013). More interestingly, women who held both high levels of body appreciation and stereotyped beliefs regarding appearance standards tended to minimize the impact of the

negative media images displayed (Halliwell, 2013). Conversely, women rating themselves lower on the Body Appreciation Scale were more susceptible to body dissatisfaction after viewing thin models (Halliwell, 2013). Although this study was conducted with a sample of women older than the stage of adolescence, the results hold great weight in further exploring the construct of body appreciation and its possible protective implications in a world where girls and women are frequently meant to buy into societal standards of beauty.

One study was found that examined the association between feminine ideology and body appreciation in female undergraduate students. Although this study included older participants than the aim of this paper, this study is included for consideration as it is one of the only studies that examines the direct association between the two constructs. Body appreciation was selected for review as opposed to the traditional construct of body image, as few studies have measured a woman's respect for and appreciation of her own body (Swami & Abbasnejad, 2010). The research included 135 women in their undergraduate experience that ranged in age from 17 to 51 years (Swami & Abbasnejad, 2010). The scales used included the Body Appreciation Scale, which will be utilized in the current study, and the Femininity Ideology Scale (Swami & Abbasnejad, 2010).

Results revealed that those who held a more traditional feminine ideology were more likely to exhibit lower levels of body appreciation (Swami & Abbasnejad, 2010). This study is significant as it is one of the first to study femininity separate from the rigid construct of gender role orientation; rather, femininity ideology was described as the participants' endorsement of behaviors regarding how women are to act in society (Swami & Abbasnejad, 2010). Although the association between feminine ideology and

body appreciation was weak, this study confirms a relationship between the two and calls for further research in this area (Swami & Abbasnejad, 2010).

These specific findings coupled with the previous research regarding the internalization and social comparisons used by female adolescents should be understood in how girls relate to their feminine identity. Perhaps body image serves as a moderating factor on the feminine ideology experienced by adolescent girls. For example, girls who experience greater body dissatisfaction may be a part of a social group that places great emphasis on conforming to traditionally feminine gender norms, and in turn, makes use of more indirect methods of aggression. Therefore, it should be noted that one of the aims of this study is to contribute to the literature base directly linking positive body image with the feminine ideology in female adolescents.

### **Interventions Targeting Aggression**

The employment of relationally and socially aggressive behaviors proves to be problematic for both victims and perpetrators, and although the research in this area is growing, school personnel and educators are in need of evidence-based interventions targeting these behaviors. Such interventions are more recently being developed and evaluated for effectiveness, so the following section details the essential components of programs as well as specific interventions that have been developed for the stated problem and their findings.

It is important that interventions address individual behaviors as well as peer-group dynamics (Young, Boye, & Nelson, 2006). It has been cited that programs focusing strictly on aggressive students will not likely lead to change, as the possible detrimental effects have been documented in grouping highly aggressive adolescents

together (Young et al., 2006; Leff, Waasdorp, & Crick, 2010). Programs that include both high-risk students in terms of aggression as well as prosocial peers yield more promising results, as purely targeting a group of aggressive individuals may only further support the use of relational aggression (Leff et al., 2010; Young et al., 2006). The larger group dynamic assists in the encouragement of altering which behaviors are received with higher levels of social status (Young et al., 2006).

Merrell, Buchanan, and Tran (2006) explain how little evidence exists regarding lasting change utilizing interventions that solely target relationally aggressive behaviors. However, it appears as though systemic approaches are more appropriate for reducing these forms of behavior by pursuing a wider scope in promoting the reduction of antisocial behaviors and increase of constructive social-emotional behaviors (Merrell et al., 2006). These more comprehensive programs have been shown to yield greater benefits in terms of fostering healthy social-emotional development (Merrell et al., 2006).

Additionally, programs fostering the development of essential skills in developing and maintaining support amongst peers are likely to reduce the overall effect of victimization from indirect forms of aggression (Young et al., 2006). Interventions instilling social-skills training and strengthening components of individuals' characters will aid students in maintaining caring and supportive peer relationships (Young et al., 2006). Lessons should address healthy friendship behaviors and appropriate qualities of a good friend (Young et al., 2006). Specifically targeting students' attitudes and beliefs may prove difficult; therefore, it may be more appropriate to instruct adolescents in skills that can be viewed, practiced, and rewarded (Knoff, 2003).

Several programs have been established in the hopes of targeting these aggressive behaviors. Some of these interventions will be discussed to further understand their general effectiveness with adolescents in the current climate. The *Making Choices: Social Problem Skills for Children* (MC) program is a group intervention implemented in the school environment that focuses on specific deficits frequently found in children exhibiting aggressive behaviors (Leff et al., 2010). A study implementing this program with children aged 6 – 12 years found medium to large effect sizes in terms of prosocial behaviors, emotion regulation, social contact, and relational aggression in comparison to students in a control group (Leff et al., 2010). A separate study implementing the MC program with over 500 third-grade students also found medium to large effect sizes for prosocial behaviors, as well as encoding social cues when compared to the control conditions (Leff et al., 2010). Additionally, moderate effect sizes were evident in terms of social aggression (Leff et al., 2010).

The *Friend to Friend* (F2F) intervention was developed in order to reduce both relational and physical aggression, increase problem-solving skills, and improve prosocial actions in third through fifth grade girls utilizing relational aggression within an urban setting (Leff et al., 2010). A study evaluating its effectiveness found relationally aggressive girls exposed to the F2F program exhibited great improvements in peer likeability as rated by educators, significant reductions in relational aggression, and modest decreases in their use of physical aggression in comparison to girls exhibiting relational aggression who were assigned to a control group (Leff et al., 2010). One documented reason for the F2F program's success is the incorporation of the relationally aggressive girls as "co-facilitators" throughout the program (Leff et al., 2010).

*Second Step* is a school-based program that is known to enhance students' social competence and reduce instances of both physical aggression and antisocial behaviors (Leff et al., 2010). Additionally, several lessons instructing students specifically in relational aggression have been included in the program (Leff et al., 2010). To date, only one evaluation has been conducted on this curriculum since it has included the lessons targeting relationally aggressive behaviors (Leff et al., 2010). This particular study included over 700 students enrolled in the sixth through eighth grades, and found that students in one of the experimental groups reported enhanced attitudes in regards to social exclusion, physical aggression, and verbal derogation in comparison to individuals within a control group (Leff et al., 2010).

The *Social Aggression Prevention Program* (SAPP) was created with the aim of decreasing social aggression, and improving upon empathy skills, social problem-solving skills, and prosocial actions in a group of girls (Leff et al., 2010). The intervention makes use of a small-group format designed for fifth grade girls (Leff et al., 2010). A study of over 130 fifth grade girls found that high-risk girls in the experimental group enjoyed greater gains than high-risk girls in the control group on such areas as social problem-solving, prosocial behaviors, and empathy (Leff et al., 2010). This particular study was limited in that it did not document reductions in socially aggressive behaviors in the participants (Leff et al., 2010).

The *Sisters of Nia* program is a small-group intervention created specifically for African-American adolescent girls that focuses on ethnic identity as well as gender roles and social behaviors (Leff et al., 2010). Additionally, the program works to decrease relational aggression in its participants by focusing on bolstering healthy relationships

and decreasing negative contact with members of their peer group (Leff et al., 2010). A study examined the effectiveness of the *Sisters of Nia* intervention with nearly 60 girls, and found the program to yield positive results in terms of relational aggression (Leff et al., 2010). Reductions in relational aggression were clearly evident in comparison to girls assigned to a control group (Leff et al., 2010).

It is evident that relationally and socially aggressive behaviors are garnering enough attention to warrant the development of many program aimed at reducing these behaviors while improving upon more adaptive and positive friendship skills. Although several programs have been documented as reducing the behaviors of interest, more research is needed into such interventions in order to solidify their utility and effectiveness. The intervention that will be utilized in this paper, *The Goodwill Girls and Boys Curriculum*, is one such program that aims to assist adolescents in reducing aggressive actions while promoting prosocial behaviors. This particular curriculum has only recently been employed within several schools; therefore, its evidence base has not yet been established. By evaluating *The Goodwill Girls and Boys Curriculum's* effectiveness in reducing relational and social aggression in the adolescent female population, the findings of this paper will contribute to the extremely limited literature base on this particular intervention as well as on the utility of this group of programs as a whole.

### **Summary**

The research on aggression and bullying has come a long way in terms of identifying differing types of aggression and their varying purposes. Gender preferences in the use of aggression have been examined in order to better target interventions that

will prove effective for a variety of children and adolescents. However, the research is lacking in examining the internalization of feminine ideology and how each adolescent may differ in how she views herself within the context of friendships and how she appreciates her body, and how this relates to the use of aggression.

Presented research has found various links among feminine ideology, body image, and indirect aggression used by adolescent girls. Many adolescent girls thrive upon a close-knit circle of friends, and this social group tends to share similar beliefs. Thus, if particular individuals within the social group subscribe to more feminine ideologies, others within the group may adopt such outlooks. Internalizing the feminine ideology has been linked to lower levels of self-esteem in females and higher levels of psychological distress, including greater body objectification. Since it has been noted that body appreciation is also similar within the context of a social group, one may hypothesize that a social group that subscribes to more strict feminine ideals are likely to have heightened standards regarding body objectification, as this is espoused by today's culture and media. By adopting these unattainable body ideals, many girls within such a social group will feel dissatisfied with their bodies, and are more likely to have a poor self-representation.

Both those embracing more feminine ideals and those dissatisfied with their bodies are shown to exhibit lower levels of self-esteem. Low self-esteem may have an impact on the aggression utilized by adolescent girls, and indirect aggression affords adolescent girls the shelter they need to aggress against others without fully experiencing the consequences of such actions. Therefore, this research aims to add and expand to the literature base regarding gender and aggression, and intends to further identify how body



image moderates the relationship between gender ideology and aggression in adolescent girls.

## Chapter III

### METHODS

This chapter details the methodology used to assess the impact that body appreciation has on the feminine ideology and indirect aggression in adolescent girls. In order to better understand how this study will answer the research questions previously posed, the participants, instruments, design, procedures, and analyses will be discussed in detail. Specific characteristics of the participants will be reported, and an explanation of the instruments used, including psychometric properties, will be given. A description of the research design and variables will be specified, and the procedures will be listed. Lastly, the statistical analyses selected to answer the research questions will be stated.

#### **Participants**

The population for this study is unique in that it consists of only female students ranging in age from 8 – 19 years old attending faith-based schools in the mid-Atlantic United States. Students at these schools were provided information on the nature of the study, and were invited to participate in the research. The final sample of participants included 45 female students taken from an overall sample of 116 students. Almost 76% of the sample identified as Caucasian, 17.8% African-American, 2.2% Biracial, 2.2% Asian/Pacific Islander, and 2.2% endorsed “Other.”

Protocols were excluded from the analysis if they were completed by a male student, or if the protocol was incomplete. Additionally, protocols were excluded if the participant was randomly assigned to a control group in the initial study. These protocols were not included in the current analysis because this investigation focuses on a sample of students that were all exposed to the same conditions, in this case being *The Goodwill*

*Girls and Boys Curriculum*. A control group was only present at one of the schools from which the data was obtained; therefore, this sample of students ( $n = 8$ ) is not large enough to draw further conclusions or make valid comparisons to experimental groups in the present investigation.

### **Measures**

Within the existing dataset, the following three measures were examined for the specific purposes of the current study: the *Adolescent Femininity Ideology Scale*, the *Body Appreciation Scale*, and the *Young Adult Social Behavior Scale*. These three instruments will be discussed in-depth as to evaluate the constructs measured, as well as their reliability and validity.

#### **The Adolescent Femininity Ideology Scale**

Data obtained from the *Adolescent Femininity Ideology Scale* (AFIS) will be examined to understand how adolescent girls relate to the feminine ideology. The AFIS was developed to evaluate the extent to which adolescent girls internalize two significant aspects of femininity (Tolman & Porche, 2000). This measure utilizes 20-items within two subscales to examine how adolescent girls feel about themselves. Each item is rated on a 6-point Likert scale in which 1 denotes that a girl *Strongly Disagrees* and 6 indicates that a girl *Strongly Agrees*. The AFIS consists of two subscales that are to be scored separately, and allows the researcher to examine two key aspects of femininity (Tolman & Porche, 2000). After reverse-scoring several of the items, the scores on the two subscales are then averaged separately in order to examine these subsets of femininity (Tolman & Porche, 2000). Higher scores on these subscales indicate a stronger

internalization of the feminine ideology, while lower scores point towards weaker internalization of femininity (Tolman & Porche, 2000).

The Inauthentic Self in Relationship Subscale (ISR) measures an individual's ability to be authentic in the expression of her thoughts and feelings towards another within a close relationship (Tolman & Porche, 2000). Several items on the ISR subscale include, *"I worry that I make others feel bad if I am successful," "Often I look happy on the outside in order to please others, even if I don't feel happy on the inside," "I usually tell my friends when they hurt my feelings,"* and *"I express my opinions only if I can think of a nice way of doing it"* (Tolman & Porche, 2000). The Objectified Relationship to Body Subscale (ORB) illustrates how a girl may evaluate, rather than appreciate, her own body (Tolman & Porche, 2000). Items evaluated on the ORB subscale include, *"I often wish my body were different," "I think a girl has to have a light complexion and delicate features to be thought of as beautiful," "I often feel uncomfortable in my body,"* and *"I am more concerned about how my body looks than how my body feels"* (Tolman & Porche, 2000).

The AFIS has been shown to exhibit acceptable reliability as evidenced by the internal consistency of the measure. The ISR subscale had Cronbach's alpha score of  $\alpha = .81$  for a first-year college sample (Tolman & Porche, 2000). Similarly, the ORB subscale yielded Cronbach's alpha score of  $\alpha = .81$  for a first-year college site (Tolman & Porche, 2000).

Additionally, Tolman and Porche (2000) demonstrated the validity of the AFIS through several analyses. In terms of convergent validity, a moderate negative correlation was found between the ISR subscale and responses on the Mutual

Psychological Development Questionnaire, which targets mutuality within close relationships, for the first-year college population ( $r = -.33, p < .001$ ; Tolman & Porche, 2000). For the eighth-grade sample, the ORB subscale had a strong correlation with a tendency to evaluate one's appearance ( $r = -.65, p < .001$ ), as measured by the Appearance Evaluation subscale of the Multidimensional Body-Self Relations Questionnaire (Tolman & Porche, 2000). The ORB subscale also had a strong correlation with girls' body image for both the eighth-grade ( $r = -.51, p < .001$ ) and high school ( $r = -.75, p < .001$ ) populations, as measured by the Body Image subscale of the Self-Image Questionnaire for Young Adolescents (Tolman & Porche, 2000).

The AFIS has been shown to have acceptable predictive validity, as high scores on both the IRS and ORB subscales have been linked to low self-esteem and depression (Tolman & Porche, 2000). Adolescent girls who scored higher on the ISR subscale had lower self-esteem scores ( $r = -.57, p < .001$ ) and higher rates of depression ( $r = .42, p < .001$ ; Tolman & Porche, 2000). Similarly, girls who scored high on the ORB subscale also showed lower self-esteem ( $r = -.53, p < .001$ ) and elevated rates of depression ( $r = .42, p < .001$ ; Tolman & Porche, 2000). Additionally, those scoring higher on the ORB subscale evidenced a more intense drive for thinness ( $r = .60, p < .001$ ) as well as higher bulimia scores ( $r = .39, p < .05$ ) in the high school population (Tolman & Porsche, 2000). Overall, higher scores on both subscales of the AFIS are associated with greater levels of psychological distress; however, the correlations between psychological distress and the ORB subscale were stronger than they were for the ISR subscale (Tolman & Porsche, 2000).

Tolman and Porsche (2000) evaluated discriminant validity for the instrument by examining the relationships the subscales had to other measures of femininity. In a high school population, the ISR subscale had no relationship to the Femininity subscale of the Bem Sex Role Inventory (BSRI;  $r = .13, p < .10$ ), and the ORB subscale was not significantly related to the Femininity subscale measured by the BSRI ( $r = .14, p < .10$ ; Tolman & Porsche, 2000). When compared to the Attitudes Towards Women Scale for Adolescents (AWSA), the ISR subscale showed a non-statistically significant relationship for the eighth-grade sample ( $r = -.16, p < .10$ ) as well as the high school sample ( $r = -.23, p < .10$ ), while the ORB subscale showed a non-statistically significant relationship for the eighth-grade population ( $r = -.06, p < .10$ ; Tolman & Porsche, 2000). These analyses provide evidence that the AFIS is a unique scale that is not significantly related to any other current measures of femininity.

As demonstrated, the AFIS has acceptable psychometric properties, and has proved to be a sound instrument among adolescent girls of varying ages (Tolman & Porsche, 2000). The reliability and validity of the measure has been examined in-depth, and the subscales have been found to predict important mental health and behavioral outcomes (Tolman & Porsche, 2000). Lastly, research has shown the AFIS to be a unique measure in that it evaluates feminine ideology separate from previously conceived ideas of the construct, such as a personality trait or gender role (Tolman & Porsche, 2000).

### **The Body Appreciation Scale**

The *Body Appreciation Scale* (BAS) will be evaluated, as it is an instrument that will be utilized to understand positive body image (Avalos et al., 2005). As most

research surrounding the construct of body image focuses on the pathology associated with negative body image, using the BAS in this study will further add to the very limited research base on the construct of positive body image (Avalos et al., 2005). The BAS utilizes 13-items to examine an individual's favorable opinions of the body, acceptance of the body regardless of weight, body shape, and imperfections, respect for the body by engaging in self-care behaviors, and protection of the body by resisting unrealistic body images (Avalos et al., 2005). BAS items are rated on a 5-point scale ranging from *Never* (1) to *Always* (5). The scores are averaged to provide a global measure of body appreciation, with higher scores reflecting greater body appreciation (Avalos et al., 2005). A sample of items included on the BAS are, "*I respect my body,*" "*Despite its flaws, I accept my body for what it is,*" "*I am attentive to my body's needs,*" and "*I engage in healthy behaviors to take care of my body*" (Avalos et al., 2005).

Avalos et al. (2005) show the BAS to have good reliability by examining both the internal consistency and test-retest reliability of the measure. Cronbach's alpha was used to examine internal consistency, and this alpha was .94 (Avalos et al., 2005). The corrected item-total correlations had an average of .73, and ranged from .41 to .88 (Avalos et al., 2005). These statistics are indicative of appropriate internal consistency. To demonstrate test-retest reliability, the participants had to complete the BAS on two separate administrations (Avalos et al., 2005). The findings indicate that BAS scores are consistent over a 3-week period as demonstrated by an overall correlation ( $r = .90, p < .001$ ; Avalos et al., 2005). Additionally, its alphas for the first administration (.91) and second administration (.93) remained high (Avalos et al., 2005).

The BAS has acceptable convergent validity as Avalos et al. (2005) demonstrated by examining its associations to similar measures. A large effect size was observed in regards to BAS scores and body esteem, as high BAS scores were clearly related to higher body esteem ( $r = .50, p < .001$ ) and physical condition ( $r = .60, p < .001$ ; Avalos et al., 2005). Additionally, high scores on the BAS were associated with lower weight concern ( $r = .72, p < .001$ ), lower body surveillance ( $r = -.55, p < .001$ ), and lower body shame ( $r = -.73, p < .001$ ; Avalos et al., 2005). Additional evidence for the BAS's convergent validity is provided in that higher BAS scores are linked with a greater tendency to evaluate one's appearance favorably ( $r = .68, p < .001$ ), a decreased likelihood to engage in body preoccupation ( $r = -.79, p < .001$ ), and a decreased likelihood to feel dissatisfied with one's body ( $r = -.73, p < .001$ ; Avalos et al., 2005).

The BAS also has strong associations to self-esteem ( $r = .53, p < .001$ ), optimism ( $r = .50, p < .001$ ), and proactive coping ( $r = .41, p < .001$ ), providing evidence for its association with psychological well-being (Avalos et al., 2005). The BAS proves to have a strong, negative correlation with eating disorder symptomatology ( $r = -.60, p < .001$ ), further providing evidence that high scores on the BAS illustrates positive body image (Avalos et al., 2005). Discriminant validity is presented as BAS scores were only slightly related to impression management ( $r = .14, p < .01$ ; Avalos et al., 2005).

As the BAS was created due to a paucity of instruments available to measure positive aspects of body image, it was of great importance to explore the scale further and investigate its psychometric properties. The evidence suggests that the BAS has appropriate psychometric properties among women, as demonstrated by its reliability and validity (Avalos et al., 2005). Although today's society espouses many reasons for



women to be discontent with their bodies, it is still of interest to assess the appreciation women have for their bodies and under what circumstances this appreciation endures (Avalos et al., 2005).

### **The Young Adult Social Behavior Scale**

The *Young Adult Social Behavior Scale* (YASB) is also examined, as this is the measure that will be used to evaluate relationally and socially aggressive behaviors. The instrument is a 14-item self-report measure that aims to assess both healthy and maladaptive behaviors that individuals use within friendships or relationships (Crothers et al., 2009). The YASB was developed with the purpose of examining both relational and social aggression, as well as indicators of interpersonal maturity, in young adults (Crothers et al., 2009). Raters evaluate themselves utilizing a 5-point Likert scale including such responses from *Always* (1) to *Never* (5). On the YASB, lower scores reflect higher use of relational aggression, social aggression, and interpersonal maturity. Several items included on the YASB are as follows, “*When I am angry with someone, that person is often the last person to know. I will talk to others first,*” “*I contribute to the rumor mill at school or with my friends and family,*” “*I confront people in public to achieve maximum damage,*” and “*I respect my friend’s opinions, even when they are quite different from my own*” (Crothers et al., 2009).

Although some researchers may argue that relational and social aggression are similar constructs, the YASB includes items meant to tap both relationally and socially aggressive behaviors separately from one another (Crothers et al., 2009). The definitions used for these two terms for the purposes of the YASB differ in that relational aggression includes influencing a person within the context of a dyadic relationship, while social

aggression includes intending to harm an individual's social standing within a peer group (Crothers et al., 2009). These definitions differ in the intention of the aggressor, and thus the items on the YASB reflect this important difference (Crothers et al., 2009).

In order to further assess how relational and social aggression are separate constructs, Crothers et al. (2009) conducted a confirmatory factor analysis to test three separate theoretical models of the YASB. Model A, which depicted three separate factors including social aggression, relational aggression, and interpersonal maturity, was the best fit of the three proposed models (Crothers et al., 2009). The Akaike Information Criteria (AIC) was utilized to assess the best fitting model, with lower values representing a good fit (Crothers et al., 2009). The AIC was 164.39 for Model A, 178.78 for Model B, and 268.96 for Model C, providing support that Model A was the best fitting model in the CFA (Crothers et al., 2009). The comparative fit index (CFI) was .98, the Tucker-Lewis index (TLI) was .97, and the root mean square error of approximation (RMSEA) was .02 (Crothers et al., 2009). As values for CFI and TLI of more than .95 suggest a good fitting model, and RMSEA values less than .05 indicate a close fit, these results further support that Model A was superior and that the three constructs are separate from one another (Crothers et al., 2009).

In order to demonstrate convergent and divergent validity, the collected data was compared to a measure of hyperfemininity, the Hyperfemininity Inventory (Crothers et al., 2009). Correlations showed that those with lower scores on relational and social aggression behaviors (which indicates higher usage of these behaviors), scored higher on levels of hyperfemininity (Crothers et al., 2009). Furthermore, the YASB appears to be a

reliable measure as the internal consistency of each factor is reported as exceeding .70 (Kolbert et al., 2012).

Overall, the research indicates that relational and social aggression are related, yet separate constructs (Crothers et al., 2009). Furthermore, CFA proved that the best fitting model was one that differentiated among the constructs of relational aggression, social aggression, and interpersonal maturity, indicating that this measure can appropriately distinguish between two types of aggression that have been linked in the past (Crothers et al., 2009).

## **Research Design**

### **Design**

This study will use a secondary data analysis within a Quasi-Experimental Simple Interrupted Time-Series Design. Although the researchers who initially collected the data made use of an Experimental Design at one site, in which participants were randomly assigned to either an experimental or control group, the data collected from the other two sites did not make use of such control groups. Due to the low number of participants within the control groups at the one site, the data collected from participants in the control groups were eliminated from the current analysis. The control group sample was not large enough from which to draw conclusions; therefore, the present study will analyze and examine pretest and posttest data of all participants who were in the experimental groups, and thus received the intervention.

A Quasi-Experimental Design is appropriate due to the fact that all elements of random assignment have been removed from the dataset, and the cause and effect of an intervention remains in question (McMillian & Schumacher, 2009). More specifically, a

Time Series Design is warranted when the researcher is evaluating several observations over a period of time, and the Interrupted Time Series Design is necessary when the researcher is aware of the point in which the treatment or intervention occurred within the series (Cook & Campbell, 1979).

The objective of the Quasi-Experimental Simple Interrupted Time Series Design for the purposes of this study is to identify and understand any impact the intervention has had on relational aggression, social aggression, and interpersonal maturity (Cook & Campbell, 1979). If this curriculum proves to have an impact on these constructs, then a change in the posttest measures should be evident in comparison to the pretest measures due to the interruption within the series (Cook & Campbell, 1979). Additionally, this research will elucidate the relationships and impact that the feminine ideology and body appreciation have on relational aggression, social aggression, and interpersonal maturity. The researcher will also closely examine whether body appreciation serves as a significant moderator between the variables of feminine ideology and indirect aggression.

### **Validity**

This particular design should yield appropriate internal, external, and construct validity. A potential threat to internal validity may be history of the participants. History threats include uncontrollable events that may affect how the participants respond in the study (McMillan & Schumacher, 2009). Due to the fact that the initial researchers did not utilize control groups at two of the participating sites, it may be difficult to identify whether unrelated events may have caused changes in attitudes between the pretest and posttest measures (McMillian & Schumacher, 2009). However, because *The Goodwill Girls and Boys Curriculum* is an intervention that does not involve lengthy

implementation, it is unlikely that many of the participants would have experienced an event that would greatly influence their responses. Selection threats must be considered, as the sample was derived from specific schools that agreed to implement the intervention. Additionally, the child and parent had to provide permission for the student to participate in the study. For example, this could mean that certain students that could have benefitted from the content of the intervention may have been excluded from the study if they and their parents did not wish for them to participate. Pretesting may serve as an additional threat to internal validity because the simple act of responding to questionnaires or surveys may alter attitudes before the intervention takes place (McMillian & Schumacher, 2009).

Due to the brevity of *The Goodwill Girls and Boys Curriculum*, attrition and maturation should not be considered as serious threats to the study. As the intervention does not last for an extended period of time, the likelihood of losing participants or significant maturation of the subjects is rather low. Furthermore, instrumentation threat is unlikely to occur as the measures used consist of questionnaires. Instrumentation threat is more likely to arise when human observers are gathering the data and make errors in their collection (Cook & Campbell, 1979). Diffusion of intervention should not be considered as a threat to the study, as there was no control groups utilized in this study and all experimental groups received the same information. Experimenter effect threats should be evaluated as low as the researchers were trained in the administration of the intervention, and were not qualitatively evaluating its effectiveness.

In terms of external validity, a possible threat may include population external validity, in which the researcher must be cautious in how she generalizes the findings to

other individuals (McMillan & Schumacher, 2009). As this population included adolescents, the results may only be generalized to others within a similar age range. Moreover, these particular participants were also selected from three particular faith-based sites, meaning they may answer differently than other adolescents who do not attend such educational settings. Therefore, one must be careful in making generalizing statements regarding the findings of this study. No other serious threats to external validity must be considered before conducting the study.

The current investigation will have sufficient construct validity. This chapter specifically defines the constructs to be measured, and documents the instruments' reliability and validity. Mono-operation bias is limited because although a single intervention is implemented, this intervention is comprised of ten lessons crafted to instill more assertive conflict management styles. Therefore, the intervention should impact the selected constructs from several different approaches. However, the researcher should take caution due to mono-method bias, as the variables will be assessed on single measures in the form of the questionnaires (McMillan & Schumacher, 2009). Because the variables are only measured via surveys, the results should be interpreted based on these specific self-report measures.

## **Variables**

The variables of interest in this study will be obtained from three measures: the *Adolescent Femininity Ideology Scale* (AFIS), the *Body Appreciation Scale* (BAS), and the *Young Adult Social Behavior Scale* (YASB). Data obtained from the AFIS will be used as the independent in this study, as it is hypothesized that femininity ideology impacts a girl's use of aggression. Femininity ideology should be understood as a

construct that links individual girls to social constructions of femininity within their society (Tolman & Porche, 2000). As it has been previously noted that the AFIS is comprised of two scales that measure overall ideology, it may be understood that those who exhibit a more inauthentic sense of self and those who have a more objectified relationship with their body will be viewed as having a stronger femininity ideology.

The variable that will act as the moderator variable, as well as a predictor in some analyses, will be obtained from the BAS. The BAS will be examined as to how it impacts a girl's femininity ideology, and how together these two constructs work to influence her use of relational and social aggression. Higher scores obtained on the BAS will be indicative of higher levels of body appreciation, which points toward more favorable views of the body, greater acceptance of the body in spite of flaws, greater respect of the body by engaging in self-care behaviors, and greater protection of the body by resisting unrealistic body images displayed in society (Avalos et al., 2005).

Lastly, data obtained from the YASB will be utilized as the dependent or outcome variable in the study. The overall goal of the research is to better understand the effect that the internalization of a feminine ideology, body appreciation, and the intervention has on the use of aggression in female adolescents; therefore, the measure for aggression will serve as the dependent variable. The YASB distinguishes between relational aggression and social aggression; therefore, definitions for each should be noted. Relational aggression will be understood as seeking to influence another that they are in a dyadic relationship with (Crothers et al., 2009). In contrast, social aggression includes acts in which an aggressor seeks to harm a victim's social standing (Crothers et al., 2009).

## **Intervention**

The intervention that the participants have experienced is *The Goodwill Girls and Boys Curriculum*, a small-group program aimed to assist both perpetrators and victims of relational and social aggression (Field, Kolbert, Crothers, & Hughes, 2009). The curriculum was developed to support counselors in fostering healthy and assertive conflict management skills within students, and to help adolescents better relate to one another (Field et al., 2009). The group atmosphere of the program was meant to allow for adolescents to safely listen to their peers, and learn from each other within a supportive environment (Field et al., 2009). The material presented in the group instructs participants on positive friendship behaviors, as well as adaptive conflict resolution skills (Field et al., 2009).

*The Goodwill Girls and Boys Curriculum* includes ten, 40- minute sessions developed for adolescent females; however, the curriculum may also be adapted for adolescent male students as well. The curriculum is also flexible in that the program may be administered within a shorter or longer time period as needed to appropriately accommodate for the specific school schedule (Field et al., 2009). The program sessions are presented sequentially and follow the typical components of group development (Field et al., 2009). The curriculum was designed to be a “closed” group, meaning that new members are not added into the group after the curriculum begins (Field et al., 2009). The belief behind the idea of a “closed” group is that this type of atmosphere will foster greater levels of safety and security when discussing such personal matters as personal conflicts, aggression, and friendships (Field et al., 2009). The specific details of each session are appropriately listed within the curriculum. Each lesson includes the



following: an introductory activity, a specific activity or assignment (necessary worksheets are often provided), specific points of discussion for the counselor to bring to the group, and a concluding activity. This specific curriculum was administered to all participants in the current study after they were administered the pretest measures, but before they were administered the posttest measures.

### **Procedure**

Because an existing dataset was utilized for the purposes of this study, specific procedures in which the data was collected by the initial researchers does not need to be reiterated in detail. However, it should be noted that the initial investigators gained approval from the principals of the participants' schools, and they required both parent consent as well as student assent in order for the student to participate in the study. The researchers ensured confidentiality of the participants' identities, and these procedures were outlined for the participants and their guardians. When I received the data, all information was already de-identified, further ensuring complete confidentiality. The curriculum began once all consent forms were signed and returned to the investigators. Those students who opted not to participate in the curriculum were offered a study hall during the period in which the curriculum took place.

### **Data Analysis**

Now, the paper will turn towards a more in-depth examination of the research questions, along with its accompanying hypotheses, and the statistical analyses that will be used to answer these questions. The previously mentioned research questions are reiterated below, and a discussion of the appropriate analyses follows.

1. **Research Question:** Does the internalization of the feminine ideology impact adolescent girls' use of indirect aggression?
  1. **Hypothesis:** Adolescent girls who internalize conventional feminine ideologies are more likely to exhibit greater levels of indirect aggression than those who are more gender atypical.
2. **Research Question:** Does body appreciation impact adolescent girls' use of indirect aggression?
  2. **Hypothesis:** Adolescent girls who exhibit lower levels of body appreciation are more likely to exhibit aggressive behaviors than those with higher levels of body appreciation.
3. **Research Question:** Are adolescent girls' levels of interpersonal maturity impacted by such constructs as the internalization of feminine ideology or body appreciation?
  - 3a. **Hypothesis:** Adolescent girls subscribing more deeply to the traditional feminine ideology will report lower levels of interpersonal maturity than those who do not internalize the feminine ideology as strongly.
  - 3b. **Hypothesis:** Adolescent girls reporting higher levels of body appreciation will exhibit greater levels of interpersonal maturity than those reporting lower levels of body appreciation.
4. **Research Question:** Does *The Goodwill Girls and Boys Curriculum* influence the self-reported rates of indirect aggression and interpersonal maturity in adolescent girls?
  - 4a. **Hypothesis:** Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report reduced rates of relational aggression on a post-test

- measure in comparison to a pre-test measure collected before implementation of the program.
- 4b. **Hypothesis:** Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report reduced rates of social aggression on a post-test measure in comparison to a pre-test measure collected before implementation of the program.
- 4c. **Hypothesis:** Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report greater levels of interpersonal maturity on a post-test measure in comparison to a pre-test measure collected before implementation of the program.
5. **Research Question:** Does body appreciation moderate the relationship between feminine ideology and indirect aggression in adolescent girls?
5. **Hypothesis:** Adolescent girls who have lower levels of body appreciation will report internalizing more traditional feminine ideologies, which will be related to elevated rates of aggressive behaviors.

### **Structural Equation Modeling**

In order to answer research questions 1 – 3, structural equation modeling (SEM) will be employed. SEM was deemed appropriate in clarifying the causal pathways between feminine ideology and body appreciation with relational aggression, social aggression, and interpersonal maturity because this analysis approximates the overall fit of a hypothesized model (Mertler & Vannatta, 2010). Because the constructs of feminine ideology, body appreciation, and indirect aggression were hypothesized to have a specific

causal relationship, SEM appears to be an appropriate analysis in understanding these hypothesized relationships.

### **Regression Discontinuity**

Research question 4 will be analyzed utilizing a regression discontinuity (RD) analysis. This type of analysis is a quasi-experimental design with the crucial feature of determining the impact of a treatment or intervention has on an outcome variable (Hahn, Todd, & Van Der Klaauw, 2001). This analysis was introduced by Thistlethwaite and Campbell (1960) as a means by which to assess social programs. Thistlethwaite and Campbell (1960) claim that their proposed analysis “seems to provide a persuasive test of the presence or absence of experimental effects” (p. 316). The RD analysis allows for an evaluation within a non-experimental setting whereby the impact of the intervention is gauged in reference to certain “forcing variables” exceeding a specified cutoff point (Lee & Lemieux, 2010). For these reason, among others, RD will be employed by the researcher to evaluate the effects of the intervention on the outcome variables of relational and social aggression as well as interpersonal maturity.

This type of analysis has enjoyed more recent, widespread attention due to several factors. The fact that it does not employ random assignment, which has frequently been cited as the gold standard in empirical evaluation studies (Jacob, Zhu, Somers, & Bloom, 2012). For many reasons, especially within the field of education, random assignment is not always possible or practical (Jacob et al., 2012). Schools may not elect to participate in random assignment studies, as these methods may seem as unfair since certain students are immediately exposed to a potentially beneficial program while others are excluded (Jacob et al., 2012). This happens to be the case in this particular study, as students and

parents were given the choice to participate in *The Goodwill Girls and Boys Curriculum*, and random assignment was not employed. Additionally, the assumptions that must be met for this particular analysis are considered mild in comparison to those required for other non-experimental analyses (Lee & Lemieux, 2010). Researchers are also finding that the causal inferences obtained from RD analyses have more credibility than inferences obtained from other approaches (Lee & Lemieux, 2010). Lee and Lemieux (2010) assert that RD designs serve as “a highly credible and transparent way of estimating program effects” (p. 282). It is apparent that a review of the RD literature declares this approach to be a particularly strong form of analysis for many economic and educational situations (Jacob et al., 2012; Lee & Lemieux, 2010; Thistlethwaite & Campbell, 1960).

For the purposes of this study, the intervention will be evaluated in terms of self-reported indirect aggression and interpersonal maturity, which will serve as the outcome variables. Because pre-test scores of indirect aggression were obtained prior to the implementation of the intervention, these pre-test scores will serve as a predictor within the study. The post-test scores of indirect aggression that were gathered after the conclusion of the curriculum will serve as the outcome. Using the RD analysis will allow for the researcher to examine any discontinuity of the distribution of the outcome variable at a certain cutoff value (Imbens & Lemieux, 2008). If this discontinuity is observed, this can be taken as evidence of a casual impact of the intervention (Imbens & Lemieux, 2008).

RD analyses are distinguished into two distinct groups, the sharp design or the fuzzy design (Jacob et al., 2012). This study will make use of the sharp design, meaning

the researcher expects to observe a “sharp” discontinuity or difference on the outcome variable as a result of a strict cutoff point on the forcing variable (Lee & Lemieux, 2010). Furthermore, the researcher is searching for the discontinuity in the expectation of the outcome variable to detect the overall, average effect of the intervention (Imbens & Lemieux, 2008).

It is important to graph the data first by calculating the average estimate of the outcome variable over a set of bins, which are equivalent intervals of the forcing variable (Imbens & Lemieux, 2008; Jacob et al., 2012). Then, the intervention effect must be estimated by performing linear regressions on either side of the cutoff value (Imbens & Lemieux, 2008).

### **Moderation**

Research question 5 will be evaluated using a moderation analysis. A moderation analysis allows the researcher to examine the combined effect of two predictor variables on an outcome variable (Field, 2013). Within the moderation analysis, the researcher will examine the interaction effect, which illustrates how the two variables work in conjunction to impact the outcome variable (Field, 2013). For the purposes of this study, feminine ideology will serve as the predictor variable, body appreciation will serve as the moderator variable, and indirect aggression will serve as the outcome variable. If a significant interaction is present, it is said that moderation has occurred (Field, 2013). Therefore, the researcher has hypothesized that the construct of body appreciation impacts the strength of the relationship between feminine ideology and indirect aggression.

**Assumptions.** Several assumptions will be evaluated before the primary statistical analyses are performed, including the assessment of outliers, normality, linearity, multicollinearity, and homoscedasticity. Graphical representations will be utilized in order to examine for any outliers that could represent extreme cases and bias the output. The assumption of normality ensures that all observations included within the dataset are distributed normally (Mertler & Vannatta, 2010). It also must be determined that linearity has occurred between the variables, meaning that the variables have a linear relationship (Mertler & Vannatta, 2010). Multicollinearity includes the analysis of correlations between the predictor variables, such that any ‘high’ correlation could indicate that two variables are not providing unique contributions to the analysis (Field, 2013). Field (2013) indicates that a ‘high’ correlation should be evaluated at a correlation of .80 or higher. Lastly, the assumption of homoscedasticity examines the variability in scores (Mertler & Vannatta, 2010). An evaluation of these assumptions did not reveal any significant implications.

**Power analysis.** An essential component of any statistical analysis includes first assessing the statistical power. A statistical power analysis illustrates how well the selected design of the study will accurately display valid effects as opposed to differences observed due to chance (Schochet, 2008). When employing a regression discontinuity analysis, it is advised that researchers calculate the minimum detectable effect (MDE) size (Schochet, 2008). The MDE is representative of the smallest impacts of the intervention that can be identified with a high probability (Schochet, 2008). These minimum detectable effects are meant to appropriately illustrate the average difference due to the implementation of a program (Schochet, 2008).

This particular type of power analysis applies to several frequently used cluster designs within the education field (Schochet, 2008). These cluster designs identify “units” which are assigned to a single experimental or control group, and commonly used “units” in schools may include individual students, classrooms, school buildings, or school districts (Schochet, 2008). Therefore, the students utilized in the study may be nested within larger units, such as a classroom or a school (Schochet, 2008). However, for the purposes of this study, the individual students will serve as the “units” of assignment while the site or school effects are fixed. This means that the students who serve as participants for the study are obtained from schools that the researchers specifically selected, and the students are then directly assigned to a research group (Schochet, 2008). Because these sites were purposively selected, it is important to recognize that the results may only be interpreted within the context of each particular school (Schochet, 2008).

The *PowerUp!* tool was utilized in order to conduct the following power analysis. *PowerUp!* was created with the MDE framework in mind, and makes use of the MDE formula within several different experimental and quasi-experimental designs to estimate either the MDE or the minimum required sample size needed to achieve an appropriate amount of statistical power (Dong & Maynard, 2013). The program covers 21 differing designs, and requests the user to select the appropriate design within the program before entering the relevant information (Dong & Maynard, 2013). Several of the most essential pieces of information requested include the minimum relevant size impact, the significance level, and the power level, among others (Dong & Maynard, 2013). Researcher-supplied specifications will allow the program to calculate the minimum size



of true impact that may be detected, given the design of the study, the sample size, and the allocation to experimental versus control groups (Dong & Maynard, 2013).

Therefore, a statistical power analysis was performed using the *PowerUp!* program in order to determine the MDE. The power analysis was conducted on a sample of adolescent female students, comparing pre-test scores to post-test scores on a measure of relational aggression, social aggression, and interpersonal maturity. The design effect in this study was 1.56, which was obtained by calculating the variance inflation factor. With an  $\alpha = 0.05$ , a power-level = 0.80, and a total sample size of 45 students, an MDE of 0.896 was obtained for the current analysis. An MDE of 0.2 to 0.4 is typically used within educational settings (Lee & Munk, 2008). The calculated MDE for this study is much larger than what is typically used; therefore, it should be noted that the statistical power will be considered low due to the small sample size.

### **Summary**

This chapter has included all of the essential components to execute the current study. This study will make use of a secondary data analysis and a Quasi-Experimental Simple Interrupted Time-Series design using data obtained from surveys collected from adolescent female students. The completed questionnaires will be used to analyze the variables of gender ideology, body image, and indirect aggression to better understand the research questions. The three scales used have been thoroughly investigated, and have been shown to have excellent psychometric properties; thus, they are appropriate measures for the desired constructs. In order to understand how these three variables influence one another, a regression discontinuity analysis and several standard regression analyses will be completed to illuminate how the predictor variables and/or their

interaction work to predict values of the outcome variable due to the implementation of an intervention. In the next chapter, the results of the analyses will be examined and discussed in order to answer the proposed research questions.

## Chapter IV

### RESULTS

The intent of this chapter is to review the results of the statistical analyses carried out in order to provide answers to the research questions. The author answers the five proposed research questions in order to contribute to the sparse literature base regarding feminine ideology, body appreciation, and indirect aggression in adolescent girls. Additionally, these results will illuminate the efficacy of a curriculum aiming to reduce indirect aggression, and promote adaptive conflict management styles. The impact of *The Goodwill Girls and Boys Curriculum* has not yet been established within the literature base, and the current study will provide information and implications regarding its success. Lastly, these results will allow for an examination as to the possible moderating relationship of body appreciation between feminine ideology and indirect aggression.

After conducting a comprehensive literature review regarding feminine ideology, body image, and aggression in adolescent girls, the author proposed research questions and hypotheses regarding these constructs and their relationships to one another. The presented results will be utilized to answer these research questions, thus bolstering the limited research within this area and offering implications on possible factors that could reduce aggression within the adolescent female population.

#### **Descriptive Statistics**

For the purposes of this study, data collected from forty-five valid participants were utilized in the following analyses. Table 1 displays the ages of the valid subjects at the time of the pre-test, which will be referenced as “time 1,” and at the time of the post-

test, which will be referenced as “time 2.” As one can view below, all participants were not available at the time of the post-test, resulting in missing data.

Table 1

*Age Descriptive Statistics*

		Frequency	Percentage (%)
Time 1	8-9 years old	1	2.2
	10-11 years old	11	24.4
	12-13 years old	5	11.1
	14-15 years old	21	46.7
	16-17 years old	6	13.3
	18-19 years old	1	2.2
	Total	45	100
Time 2	8-9 years old	1	3.6
	10-11 years old	10	35.7
	12-13 years old	1	3.6
	14-15 years old	12	42.9
	16-17 years old	4	14.3
	Total	28	100

Table 2 provides information regarding the racial composition of the sample.

Nearly 76% of the participants described themselves as Caucasian, almost 18% described themselves as African-American, 2.2% reported as Asian Pacific Islander, 2.2% reported as Biracial, and 2.2% indicated “other.”

Table 2

*Race*

	Frequency	Valid Percent
African American	8	17.8
Asian Pacific Islander	1	2.2
Caucasian	34	75.6
Biracial	1	2.2
Other	1	2.2
Total	45	100.0

The descriptive statistics for feminine ideology, body appreciation, indirect aggression, and interpersonal maturity may be found in Table 3. The Inauthentic Self in Relationships subscale (isrs) and the Objectified Relationship with Body subscale (orbs) items refer to feminine ideology, the bas items refers to body appreciation, and RA, IM, and SA items refer to the measure of indirect aggression and interpersonal maturity.

Table 3

*Descriptive Statistics for the Constructs*

	N	Minimum	Maximum	Mean	SD
isrs.1	45	1.40	5.10	3.52	0.66
isrs.2	26	1.70	5.00	3.70	0.66
orbs.1	41	2.00	4.50	3.38	0.59
orbs.2	27	2.00	3.90	3.16	0.52
bas.1	45	2.31	5.00	4.16	0.68
bas.2	27	1.69	5.00	4.19	0.73
RA.1	44	2.40	4.80	3.98	0.53
RA.2	27	3.20	5.00	4.21	0.48
IM.1	45	1.00	4.25	2.36	0.89
IM.2	27	1.00	4.25	2.13	0.75
SA.1	44	3.00	5.00	4.28	0.49
SA.2	27	3.40	5.00	4.44	0.49

*Note.* isrs = Inauthentic Self in Relationships subscale; orbs = Objectified Relationship with Body subscale; bas = Body Appreciation Scale; RA = relational aggression; IM = interpersonal maturity; SA = social aggression. 1 denotes data collected on each measure at the time of the pre-test; 2 denotes data collected on each measure at the time of the post-test.

### Primary Statistical Analyses

#### Statistical Methodology for Research Questions 1 - 3

Research questions 1, 2, and 3 were evaluated with structural equation modeling (SEM). Structural equation modeling is an appropriate technique by which to answer these research questions as it provides a researcher the ability to assess the fit of the proposed model and theory behind it (Mertler & Vannatta, 2010). Several indices were

examined to assess the overall fit of the hypothesized model: the chi-square ( $\chi^2$ ), the comparative fit index (CFI), the Tucker-Lewis index (TLI), the chi-square adjusted by its degrees of freedom (CMIN/DF), and the root mean square error of approximation (RMSEA). A good-fitting model would have a  $\chi^2$  that is insignificant ( $p > 0.05$ ), CFI  $\geq 0.95$ , TLI  $\geq 0.95$ , CMIN/DF  $< 3.00$ , and RMSEA  $\leq 0.08$  (Hooper, Coughlan, & Mullen, 2008; Iacobucci, 2010). It should be noted that the chi-square statistic is sensitive to sample size; therefore, the CMIN/DF has been recommended as a more appropriate indicator of model fit (Iacobucci, 2010). Given that this study is based on a very small sample size, the chi-square statistic should be interpreted with caution.

A diagram of the researcher’s proposed model is depicted in Figure 1. The fit indices for the model are displayed in Table 4, and indicate a poor fit. This suggests that the data collected from this particular sample of adolescents do not appropriately fit the hypothesized model. Due to sample size constraints, only the predictor and outcomes variables from time 1 were utilized for the purposes of research questions 1 – 3.

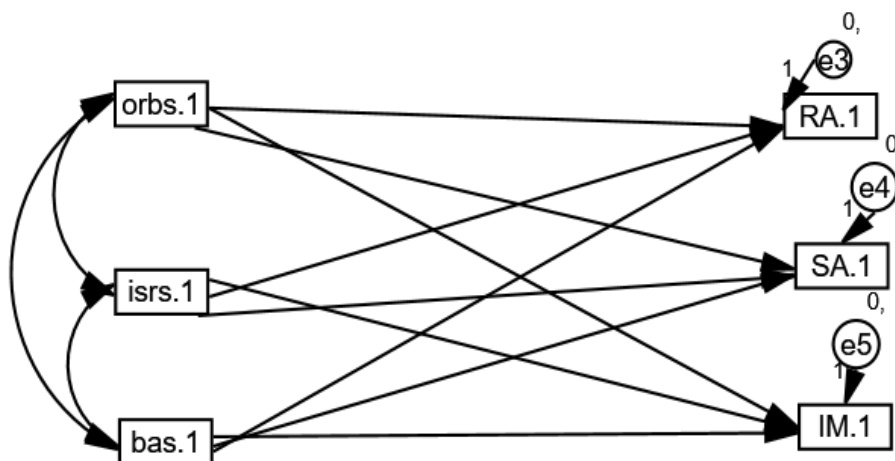


Figure 1. Path diagram for Research Questions 1 – 3.

Table 4

*Estimates from SEM Model for Research Questions 1, 2, and 3*

			B	S.E.	P	b
RA.1	<---	orbs.1	-0.26	0.15	0.09	-0.30
RA.1	<---	isrs.1	0.07	0.12	0.57	0.08
SA.1	<---	orbs.1	<b>-0.37</b>	<b>0.14</b>	<b>0.01</b>	<b>-0.47</b>
SA.1	<---	isrs.1	0.17	0.10	0.11	0.22
RA.1	<---	bas.1	0.13	0.13	0.31	0.17
SA.1	<---	bas.1	0.00	0.12	0.99	0.00
IM.1	<---	orbs.1	-0.04	0.28	0.90	-0.03
IM.1	<---	isrs.1	0.13	0.21	0.52	0.10
IM.1	<---	bas.1	-0.25	0.24	0.29	-0.19

*Note.*  $\chi^2(3)=14.92$ ,  $p=0.002$ , CFI=0.58, TLI=-1.98, RMSEA=0.28, CMIN/DF=5.0. isrs = Inauthentic Self in Relationships subscale; orbs = Objectified Relationship with Body subscale; bas = Body Appreciation Scale; RA = relational aggression; IM = interpersonal maturity; SA = social aggression. 1 denotes data collected on each measure at the time of the pre-test.

### Research Question 1

Research question 1 reads as follows: “Does the internalization of the feminine ideology impact adolescent girls' use of indirect aggression?”

**Hypothesis 1.** The author’s proposed hypothesis for research question 1 states: “Adolescent girls who internalize conventional feminine ideologies are more likely to exhibit greater levels of indirect aggression than those who are more gender atypical.”

**Results for Research Question 1.** The two subscales on the AFIS, the Objectified Relationship with Body subscale (orbs) and the Inauthentic Self in Relationships subscale (isrs), were utilized as predictors, and two constructs on the YASB, relational aggression (RA) and social aggression (SA), were examined as outcome variables. Therefore, the paths from orbs.1 and isrs.1 to RA.1 and SA.1 will be analyzed in answering this question. The statistical estimate, or regression coefficients, for these paths may be viewed within Table 4. A significant path was found from the

Objectified Relationship with Body subscale to the construct of social aggression (beta = -0.47,  $p = 0.01$ ). More specifically, the analysis reveals that those participants reporting lower ratings on the Objectified Relationship with Body subscale of the AFIS tended to rate themselves higher on the YASB items relating to social aggression. Lower scores on the two subscales within the AFIS indicate lower levels of femininity while higher scores on the YASB items indicates lower rates of aggression; therefore, these results reveal that those who rated themselves as engaging in less stereotypically ‘feminine’ behaviors tended to report engaging in fewer acts of social aggression. In contrast, significant paths could not be derived between the Inauthentic Self in Relationships subscale of the AFIS and either form of indirect aggression as indicated on the YASB. Although these findings partially support the hypothesis in that subjects who rated themselves as more gender atypical on the Objectified Relationship with Body subscale of the AFIS also indicated more infrequent utilization of social aggression, it should be noted that this was found within a poor-fitting model and the result should be interpreted with caution.

## **Research Question 2**

Research question 2 states: “Does body appreciation impact adolescent girls' use of indirect aggression?”

**Hypothesis 2.** The hypothesis corresponding to this question included: “Adolescent girls who exhibit lower levels of body appreciation are more likely to exhibit aggressive behaviors than those with higher levels of body appreciation.”

**Results for Research Question 2.** Responses from the Body Appreciation Scale (bas) were employed as predictors, while relational aggression (RA) and social aggression (SA) scores were again scrutinized as outcome variables. The Body



Appreciation Scale provides a global indicator of body appreciation, with higher scores indicating higher levels of body appreciation and lower scores indicating reduced appreciation for the body. Paths leading from bas.1 to RA.1 and SA.1 were examined (Table 4) to gain greater insight as to research question 2. Neither the path from the Body Appreciation Scale to relational aggression nor the path from the Body Appreciation Scale to social aggression was found to be statistically significant. The statistical analyses performed in relation to body appreciation and indirect aggression suggest that this hypothesis is not supported within this sample.

### **Research Question 3**

In research question 3, the researcher asked: “Are adolescent girls' levels of interpersonal maturity impacted by such constructs as the internalization of feminine ideology or body appreciation?”

**Hypothesis 3a.** The author proposed two hypotheses for this question. The first hypothesis reads: “Adolescent girls subscribing more deeply to the traditional feminine ideology will report lower levels of interpersonal maturity than those who do not internalize the feminine ideology as strongly.”

**Hypothesis 3b.** The second hypothesis includes: “Adolescent girls reporting higher levels of body appreciation will exhibit greater levels of interpersonal maturity than those reporting lower levels of body appreciation.”

**Results for Research Question 3.** For this question, ratings collected on the Objectified Relationship with Body subscale (orbs), the Inauthentic Self in Relationships subscale (isrs), and the Body Appreciation Scale (bas) were used as predictors, and a third construct from the YASB, interpersonal maturity (IM), was assessed as the outcome

variable. The paths from orbs.1, isrs.1, and bas.1 to IM.1 were evaluated in answering this question (Table 4). The analyses found that none of these paths held statistical significance. It should be noted that the paths from the Objectified Relationship with Body subscale and the Body Appreciation Scale to interpersonal maturity were negative, signifying that those who rated themselves lower on the Objectified Relationship with Body subscale and the Body Appreciation Scale rated themselves higher on the interpersonal maturity items of the YASB. The author proposed two hypotheses for this question. Hypothesis 3a did not earn support as a significant result could not be obtained, and the pattern of scores collected did not point towards a supported hypothesis, either. Additionally, a significant result could not be found to prove hypothesis 3b correct, and the pattern of ratings collected indicated that those reporting themselves as having lower levels of appreciation for their bodies also rated themselves as exhibiting lower levels of interpersonal maturity.

#### **Statistical Methodology for Research Question 4**

A regression discontinuity (RD) analysis was performed to answer research question 4, as through this question, the researcher aimed to examine the effect of an intervention. The regression discontinuity analysis calls for the grouping of participants in order to assess the overall impact of the intervention. The median score of the measures at time 1 was used in building these groups, in which group 1 were subjects rating themselves at or below the median and group 2 were those rating themselves above the median. These will further be referred to as the “group designation” or “group label” within the resulting models. The regression discontinuity analysis will be applied to all constructs captured by the YASB, including relational aggression, social

aggression, and interpersonal maturity. The same statistical procedures will be performed for all three constructs.

#### **Research Question 4**

Research question 4 states: “Does *The Goodwill Girls and Boys Curriculum* influence the self-reported rates of indirect aggression and interpersonal maturity in adolescent girls?”

**Hypothesis 4a.** The hypothesis made for this question was: “Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report reduced rates of relational aggression on a post-test measure in comparison to a pre-test measure collected before implementation of the program.”

**Hypothesis 4b.** The second hypothesis made in response to this research question read as follows: “Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report reduced rates of social aggression on a post-test measure in comparison to a pre-test measure collected before implementation of the program.”

**Hypothesis 4c.** The final hypothesis created for this research question included: “Adolescent girls exposed to *The Goodwill Girls and Boys Curriculum* will report greater levels of interpersonal maturity on a post-test measure in comparison to a pre-test measure collected before implementation of the program.”

**Relational aggression.** For relational aggression (RA), the median score was 4.1 at time 1. Twenty-two subjects were included within both group 1 and group 2. Figure 2 illustrates the scatterplot created to assess the construct of relational aggression by group label. The “precut” values refer to the median value subtracted from the time 1 score relating to the particular construct in question. Therefore, the precutRA value indicated

along the x-axis in the following scatterplot is the median value subtracted from the time 1 relational aggression score.

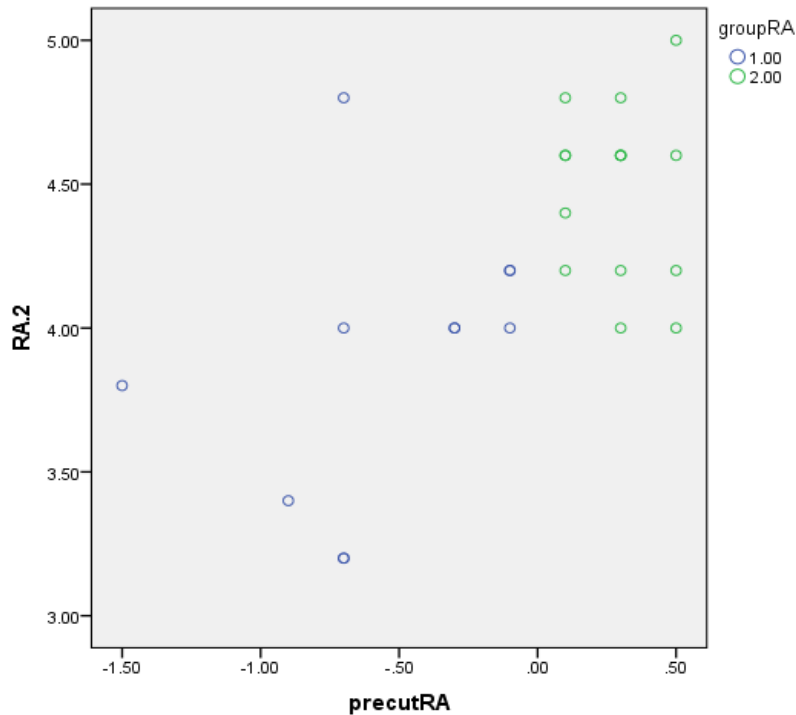


Figure 2. Scatterplot of relational aggression by group (above or below the median).

The next step in the RD analysis calls for the addition of an interaction term within the analysis to further assess for statistical significance. This term is generated by multiplying the precut variable by the group designation variable. For this specific model, the interaction term was created using group designation and the precutRA variable. A univariate general linear model was then completed using relational aggression at time 2 as the outcome variable, and the precutRA variable, group designation, and the interaction term as the predictor variables (Table 5). The results of the univariate general linear model indicate that the interaction term did not yield statistical significance. When an interaction is not significant, this suggests that the two

groups do not significantly differ and the slopes of the regression line for these two groups are not vastly different from one another.

Table 5

*Regression Output from RD with Relational Aggression*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	3.67	.44	8.27	0.00	2.75	4.59
precutRA	.93	.86	1.09	.29	-.85	2.71
groupRA	.43	.29	1.51	.15	-.16	1.03
interactRA	-.56	.70	-.79	.44	-2.01	.90

When an interaction term is not statistically significant, the researcher may drop the term from the analysis in order to observe the individual impact of each group. However, the groupRA variable did not reach statistical significance despite the removal of the interaction term (Table 6).

Table 6

*Regression Output from RD with Relational Aggression Without an Interaction Term*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	3.70	.44	8.46	0.00	2.80	4.61
precutRA	.29	.26	1.11	.28	-.25	.82
groupRA	.35	.26	1.32	.20	-.20	.89

At this time, separate regression analyses were completed by the groupRA designation for the purpose of assessing the regression lines (Table 7). Participants below the median prior to the intervention (participants in group 1) reported an increase in relational aggression ratings, while participants above the median prior to the intervention (participants in group 2) reported a decrease in their relational aggression

ratings. These results do not lend support to hypothesis 4a relating to relational aggression.

Table 7

*Group Comparison for Relational Aggression*

groupRA	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1.00	1	(Constant)	4.10	.24		17.11	0.00
		precutRA	.38	.35	.34	1.08	.31
2.00	1	(Constant)	4.53	.17		26.80	0.00
		precutRA	-.18	.52	-.10	-.34	.74

**Social aggression.** The median score for the construct of social aggression (SA) at time 1 was found to be 4.2. Twenty-three subjects were included in group 1, and 21 participants were included in group 2. Figure 3 provides a visual representation for social aggression by group label. The precutSA values were derived, and displayed on the scatterplot below.

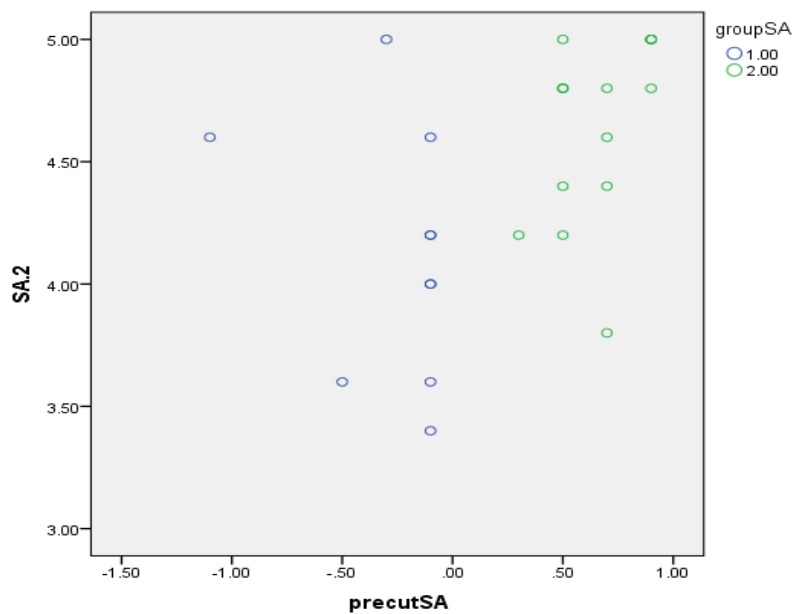


Figure 3. Scatterplot of social aggression by group.

The interaction term for this model was generated with the precutSA variable and groupSA variable. The social aggression ratings at time 2 were utilized as the outcome variable and precutSA, group, and the interaction term were included as predictor variables when running the univariate general linear model (Table 8). Like the previous findings for relational aggression, the interaction term for the social aggression model was not statistically significant.

Table 8

*Regression Output from RD with Social Aggression*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	3.88	.50	7.69	.00	2.83	4.92
precutSA	-1.78	1.00	-1.77	.09	-3.86	.30
groupSA	.12	.41	.29	.78	-.73	.97
interactSA	1.30	.69	1.90	.07	-.12	2.72

Furthermore, the removal of the interaction term did not produce a significant result for the groupSA variable (Table 9).

Table 9

*Regression Output from RD with Social Aggression Without an Interaction Term*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	3.60	.51	7.07	.00	2.55	4.65
precutSA	.02	.35	.06	.96	-.71	.75
groupSA	.52	.37	1.43	.17	-.24	1.29

Table 10 provides the output for separate regression analyses by group designation. Subjects in group 1 indicated a decrease in social aggression scores, while

subjects in group 2 reported an increase in their social aggression scores. Hypothesis 4b has not been proven given the statistical findings.

Table 10

*Group Comparison for Social Aggression*

groupSA	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1.00	1	(Constant)	4.00	.21		18.73	.00
		precutSA	-.47	.53	-.30	-.89	.40
2.00	1	(Constant)	4.11	.30		13.49	.00
		precutSA	.83	.44	.45	1.87	.08

**Interpersonal maturity.** Interpersonal maturity (IM) was also examined utilizing the RD analysis. The median score obtained for this construct at time 1 was 2.0. Group 1 was comprised of 23 participants while group 2 was comprised of 22 participants. Figure 4 offers the scatterplot for this model. The precutIM values were derived in the same fashion as the precutRA and precutSA variables, and were essential for the subsequent analyses.



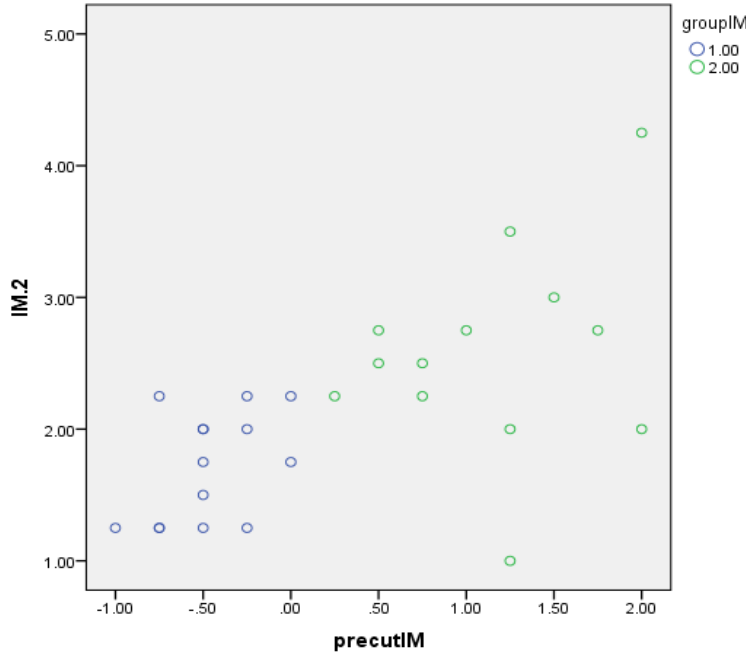


Figure 4. Scatterplot of interpersonal maturity by group.

The precutIM and group status variables were used to produce an interaction term for this model. The univariate general linear model was used with interpersonal maturity at time 2 as the outcome variable, and the precutIM, group and the interaction term as predictor variables (Table 11). Once again, this model did not yield a statistically significant interaction.

Table 11

*Regression Output from RD with Interpersonal Maturity*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.85	.74	2.51	.02	.32	3.38
precutIM	.91	1.20	.76	.45	-1.57	3.39
groupIM	.16	.50	.31	.76	-.88	1.19
interactIM	-.28	.66	-.42	.68	-1.63	1.08

The groupIM variable could not reach statistical significance, even when the interaction term was eliminated from the analysis (Table 12).

Table 12

*Regression Output from RD with Interpersonal Maturity Without an Interaction Term*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.72	.66	2.62	.02	.36	3.08
precutIM	.42	.27	1.58	.13	-.13	.97
groupIM	.19	.49	.39	.70	-.81	1.19

Table 13 provides the results of separate regression analyses conducted by the groupIM status. A greater increase in interpersonal maturity scores was obtained by participants in group 1 versus participants in group 2. The collected findings do not offer support for hypothesis 4c.

Table 13

*Group Comparison for Interpersonal Maturity*

groupIM	Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
			B	Std. Error	Beta			
1.00	1	(Constant)	2.01	.20			10.11	.00
		precutIM	.64	.37	.45		1.74	.11
2.00	1	(Constant)	2.17	.50			4.35	.00
		precutIM	.36	.39	.27		.91	.38

**Statistical Methodology for Research Question 5**

Research question 5 was evaluated using a moderation analysis, or using regression models that included interaction terms. Put simply, moderation is an interaction effect, whereby two variables work together to produce an effect on an

outcome variable (Field, 2013). This means that a dependent variable is being predicted from the inclusion of an independent variable, a moderator variable, and the interaction of these two variables (Field, 2013). The interaction term is essential in signifying whether a moderation has taken place (Field, 2013). Therefore, a variable is considered to moderate the relationship if it impacts the strength or the form of the relationship between a predictor and an outcome variable (MacKinnon, 2011).

### **Research Question 5**

Research question 5 states: “Does body appreciation moderate the relationship between feminine ideology and indirect aggression in adolescent girls?”

**Hypothesis 5.** The hypothesis for this question included the following: “Adolescent girls who have lower levels of body appreciation will report internalizing more traditional feminine ideologies, which will be related to elevated rates of aggressive behaviors.”

**Results for Research Question 5.** While indirect aggression served as the dependent variable for this research question, the independent variable was identified as subtypes of feminine ideology while the moderator variable was body appreciation. The independent, dependent, and moderator variables were all entered into the model. Four separate models were required in order to provide the most information relating to the relationships between the variables. The four models included one for each indirect aggression style, both relational aggression and social aggression, modeled on two subtypes of feminine ideology, the Inauthentic Self in Relationships subscale and the Objectified Relationship with Body subscale. Moderation has occurred if the model produces a significant interaction term and a significant change in  $r^2$ .

The results from the four separate moderation models are presented in Table 14. The moderation analysis did not find any significant interactions, nor did any changes in  $r^2$  yield statistical significance. These analyses reveal that body appreciation does not act as a moderator between feminine ideology and indirect aggression within this specific sample of adolescent girls.

Table 14

*Estimates from Moderation Models*

Outcome		coeff	se	t	p	R <sup>2</sup> change	p
RA	constant	3.84	3.52	1.09	0.28	0.001	0.85
	bas.1	0.19	0.81	0.24	0.81		
	orbs.1	-0.01	0.92	-0.01	0.99		
	int_1	-0.04	0.22	-0.20	0.85		
RA	constant	4.18	2.75	1.52	0.14	0.006	0.61
	bas.1	-0.04	0.62	-0.06	0.95		
	isrs.1	-0.40	0.79	-0.51	0.62		
	int_1	0.09	0.18	0.52	0.61		
SA	constant	5.78	3.17	1.83	0.08	0.00	0.92
	bas.1	-0.11	0.74	-0.14	0.89		
	orbs.1	-0.39	0.85	-0.45	0.65		
	int_1	0.02	0.20	0.09	0.92		
SA	constant	0.53	2.54	0.21	0.84	0.03	0.29
	bas.1	0.80	0.57	1.38	0.17		
	isrs.1	0.86	0.72	1.19	0.24		
	int_1	-0.18	0.16	-1.08	0.29		

*Note.* isrs = Inauthentic Self in Relationships subscale; orbs = Objectified Relationship with Body subscale; bas = Body Appreciation Scale; RA = relational aggression; IM = interpersonal maturity; SA = social aggression. int\_1 is the interaction term between the moderator and the independent variable created for each model. 1 denotes data collected on each measure at the time of the pre-test.

### Additional Analyses

Additional regression analyses were completed as an attempt to see if the large age range of the participants contributed to any changes within the relational aggression, social aggression, or interpersonal maturity scores. In order to evaluate the impact of age on these three outcome variables, linear regression analyses were conducted using age as the predictor variable. The participants' age did not appear to have a statistically significant impact on the change in relational aggression scores,  $R^2 = .12$ ,  $R^2_{\text{adj}} = .08$ ,  $F(1, 24) = 3.10$ ,  $p = .09$ . Age, however, proved to significantly impact changes in scores relating to social aggression,  $R^2 = .15$ ,  $R^2_{\text{adj}} = .12$ ,  $F(1, 24) = 4.33$ ,  $p = .048$ . The effect size was 0.39, indicating a moderate effect. However, age did not serve as a statistically significant predictor of changes in scores on the interpersonal maturity items,  $R^2 = .06$ ,  $R^2_{\text{adj}} = .02$ ,  $F(1, 25) = 1.63$ ,  $p = .21$ .

Lastly, multiple regression analyses were conducted including the predictor of age along with the items relating to feminine ideology and body appreciation. The three constructs captured on responses on the YASB served as the outcome variables for this series of regressions. Regression results examining the variables of age, feminine ideology (isrs and orbs), and body appreciation (bas) as predictors did not significantly predict the change in relational aggression scores,  $R^2 = .13$ ,  $R^2_{\text{adj}} = -0.05$ ,  $F(4, 20) = 0.71$ ,  $p = .59$ . Likewise, the results utilizing these same predictors on changes in social aggression did not yield statistically significant findings,  $R^2 = .27$ ,  $R^2_{\text{adj}} = .13$ ,  $F(4, 20) = 1.86$ ,  $p = .16$ . Lastly, a multiple regression examining the impact of these predictors on interpersonal maturity did not find statistically significant implications,  $R^2 = .13$ ,  $R^2_{\text{adj}} = -0.03$ ,  $F(4, 21) = 0.81$ ,  $p = .53$ . These additional analyses indicate that the inclusion of

age within the three regression models did not assist in the discovery of statistically significant findings.

### **Summary**

This chapter detailed the statistical analyses conducted to answer the research questions relating to feminine ideology, body appreciation, and indirect aggression. Structural equation modeling was employed for research questions 1 – 3, and RD analyses were conducted for research question 4 in order to evaluate the impact of an intervention on a sample of adolescent girls. Additionally, a moderation analysis was utilized for research question 5 for the purposes of clarifying whether the construct of body appreciation served as a moderating variable between feminine ideology and indirect aggression. Although only one statistically significant result was found in examining these research questions, there are several implications that can be taken from these analyses. The following chapter will offer a thorough discussion of the findings, as well as the limitations of the current study and a call for further research within this area.

## Chapter V

### DISCUSSION

The objective of this chapter is to discuss the results of the statistical analyses in light of the proposed research questions and in conjunction with the existing literature within the area of indirect aggression in the adolescent female population. The results will be reviewed in a manner by which the research questions may be answered, and implications and conclusions will be drawn from the findings. Additionally, the limitations imposed by the restraints of this study will be fully described as to provide a context by which the results may be interpreted. The importance of the current study will be emphasized, and a description of further research within the related area will be detailed.

#### **Summary of Results**

Five separate research questions were posed by which the statistical analyses provided insight. The sample included forty-five female participants with ages ranging from 8 – 19 years-of-age. The participants predominantly described their race as Caucasian, with almost 76% of the sample using this descriptor. Nearly 18% of the sample described themselves as African American, and a very small percentage reported themselves as Asian Pacific Islander, Biracial, and Other. Data were obtained on both pre- and post-test measures of feminine ideology, body appreciation, and indirect aggression. It should be noted that more data were collected on the pre-test measures in comparison to the post-test measures; therefore, many of the analyses focused on the relationship between the variables at the time of the pre-test.

## **Findings for Research Question 1**

The first research question aimed to investigate whether the internalization of the feminine ideology impacted adolescent girls' use of indirect aggression. A significant impact or association was found between a subtype of feminine ideology, a girl's objectified relationship with her body (orbs), to one type of indirect aggression, social aggression. The results revealed that participants rating themselves lower on the Objectified Relationship with Body subscale tended to rate themselves higher on measures of social aggression. Therefore, participants who rated themselves as having a weaker internalization of a subtype of feminine ideology indicated more infrequent use of socially aggressive tactics. This result should be interpreted with caution as to how it is generalized to the wider population, as it was derived from a poor-fitting model.

A significant effect was not detected between an adolescent's objectified relationship with her body and her use of relational aggression. In regards to the second subtype of feminine ideology assessed, inauthentic self in relationships, this was not found to have an impact on either form of indirect aggression. This means that within this sample of girls, their tendency to either act authentically or compromise themselves within their relationships with others did not significantly impact their use of indirect aggression.

Given these findings, the author's proposed hypothesis of observing greater levels of indirect aggression in adolescent girls who internalize conventional feminine ideologies more strongly is not fully supported. This sample endorsed that the way they relate to their bodies influences their utilization of social aggression within their peer group. Interestingly, the participants did not support the notion that the way in which



they purport themselves within the peer group impacts their use of social or relational aggression.

### **Findings for Research Question 2**

Research question 2 targeted the impact of body appreciation on a girl's use of indirect aggression. The results do not point towards a statistically significant impact of a girl's reported levels of body appreciation (bas) with either form of indirect aggression. The hypothesis formulated for this research question was therefore not supported by the findings given that the author had hypothesized that participants reporting greater levels of body appreciation would also report utilizing lower levels of relational and social aggression.

### **Findings for Research Question 3**

The third research question assessed the impact that an internalization of feminine ideology and feelings of body appreciation would have on the construct of interpersonal maturity, a third construct captured by the YASB. Although no significant findings were detected, an analysis of the response pattern indicates that the observed impact from the Objectified Relationship with Body subscale and the Body Appreciation Scale to interpersonal maturity was negative. This reveals that participants rating themselves as having both a weaker internalization of the feminine ideology and lower levels of body appreciation also rated themselves as having lower levels of interpersonal maturity.

The hypotheses relating to this research question stated that participants subscribing more deeply to the feminine ideology would report lower levels of interpersonal maturity, and subjects with higher levels of body appreciation would

display greater levels of interpersonal maturity. The author's hypotheses regarding this research question were not supported within this study.

#### **Findings for Research Question 4**

The purpose of research question 4 was to evaluate the effectiveness of *The Goodwill Girls and Boys Curriculum*. This question specifically questioned the impact this intervention would have on adolescent girls' self-reported ratings of indirect aggression and interpersonal maturity. The analyses did not reveal any statistically significant differences; however, some response patterns seemed apparent and may be examined to inform future research.

In terms of relational aggression, participants who initially reported more frequent use of relational aggression indicated a reduction in these tactics following the intervention. Additionally, subjects who initially reported lower rates of relational aggression later reported higher rates of relational aggression following the intervention. The hypothesis that estimated that the implementation of the intervention would reduce rates of relational aggression was not supported by statistically significant results.

Similarly, the impact of the intervention was not significantly tied to a reduction in the self-reported ratings of social aggression. An examination of the trends in ratings on a measure of social aggression from pre-test to post-test indicates that those participants reporting a higher use of social aggression at the time of the pre-test showed an increase in their use of social aggression at the time of the post-test. In contrast to those findings, participants reporting more infrequent use of social aggression at the time of the pre-test indicated a reduction in their use of social aggression at post-test. The hypothesis regarding how social aggression would be impacted as a result of the

intervention was not endorsed by this sample, as a significant reduction in rates of social aggression was not achieved.

The implementation of the intervention did not find a significant impact on reported rates of interpersonal maturity. Those subjects reporting higher levels of interpersonal maturity at the time of the pre-test exhibited a greater reduction in their utilization of interpersonal maturity than those who had initially reported lower levels of interpersonal maturity. Therefore, the hypothesis proposed that hoped to observe an increase in levels of interpersonal maturity following the intervention was not supported.

### **Findings for Research Question 5**

In the final research question, the researcher investigated the possible moderating effect of body appreciation on feminine ideology and indirect aggression. The analyses did not reveal statistically significant evidence of a moderation between any of the hypothesized models. Therefore, the hypothesis by which the researcher had believed that body appreciation may act as a moderator variable between these two constructs did not prove noteworthy given the ratings of this sample.

### **Conclusions**

The purpose of this study was to examine the relationship between the constructs of feminine ideology, body appreciation, and indirect aggression in a sample of adolescent girls in order to further contribute to the research base on possible contributors to ‘girl bullying.’ Although bullying remains a prominent issue within the adolescent population, instances of relational and social aggression (due to their covert nature) are not as well documented as overt forms of bullying. Furthermore, girl bullying remains as

a problem that many do not fully understand, and therefore have difficulty proving effective interventions.

The tactics by which girls select in handling disputes with their friends may be understood through social learning theory. Social learning theorists posit that children learn gender-appropriate behaviors through a variety of techniques, including modeling, reinforcement, and punishment (Pressley & McCormick, 2007). Therefore, young girls quickly understand that it is not acceptable, as purported by traditional gender norms, to use more overtly aggressive techniques when in conflict with a female friend, as their male peers may. In simpler terms, physical aggression is not viewed by society as “feminine” behavior, and this is ingrained within the female adolescent population from a young age. In contrast, adolescent girls may come to realize that by utilizing relationally and socially aggressive tactics, they can control or manipulate the friend group in a way that is viewed as more acceptable by society.

Additionally, gender socialization only further solidifies traditional gender roles. Adolescents will typically segregate themselves into same-sex peer groups, and due to the increased amount of time spent with these same-sex peers, this may further propel the means by which adolescent girls feel they can express themselves. In this way, girls may more closely align their behaviors and activities with those espoused by the peer group, which may lead adolescent girls to more strongly align themselves with the traditional feminine ideology. It should be understood that body image is also embedded within the adolescent population both by society and the peer group. Many girls during the adolescent years will internalize unrealistic body ideals, and adolescents frequently make use of social comparisons in which they compare their bodies to those of their peers

(Jones, 2004). Because of these factors, many girls may feel dissatisfied with their bodies as they strive to reach these unrealistic goals, and this may impact the strength at which they internalize the feminine ideology. Therefore, friendship groups may have a strong impact on both the way that adolescent girls relate to their femininity and their bodies, which could result in such maladaptive conflict management styles as relational and social aggression.

Thus, the current study aimed to examine the relationships between these important constructs within the adolescent female population as to better understand how the feminine ideology and positive body image may increase or decrease indirect aggression. This study specifically examined the feminine ideology, body appreciation, and indirect aggression experienced by a small group of adolescent girls attending faith-based school settings. Although the current study did not yield many statistically significant findings, several findings may be evaluated within the context of the limited literature base.

An examination of the impact that the internalization of the feminine ideology has on the use of indirect aggression revealed a significant association between responses on a feminine ideology subscale relating to a girl's objectified relationship with her body and social aggression. Specifically, the results revealed that those who indicated a weaker internalization of the feminine ideology in regards to the way they relate to their bodies reported more infrequent use of social aggression. Although these results were found within a poor-fitting statistical model, these results prove promising in that they align with social learning theory. Specifically, adolescent girls within this sample who have not been taught or socialized to internalize their femininity to a stronger degree also

have not reported the use of more traditionally gender appropriate way of handling conflict. In other words, adolescent girls who would not describe themselves as adhering to traditional feminine norms, as indicated by their responses on a measure of feminine ideology, also do not report high levels of use of strictly “feminine” aggression styles as social aggression.

The findings of this study, however, did not support lower use of relational aggression within adolescents espousing a weaker internalization of femininity, as found in the research conducted by Crothers, Field, and Kolbert (2005). While these researchers found adolescent girls identifying a stronger and more traditional feminine ideology to utilize relational aggression at a higher rate, this study could not replicate their findings specifically in relation to relational aggression. However, the fact that the current study found that a weaker internalization of femininity is significantly related to lower use of social aggression is similar in that both studies identify a linkage between self-reported femininity and indirect forms of aggression. It should be noted that the 2005 study conducted by Crothers, Field, and Kolbert included a definition of relational aggression that also encompassed socially aggressive tactics. The current study instead separated the two constructs of relational aggression and social aggression as measured on the YASB, which may have had an effect on the obtained results.

Perhaps the current study only revealed significant implications regarding the internalization of the feminine ideology and social aggression due to the social context within which the particular subscale subscribes. The Objectified Relationship with Body subscale of the feminine ideology measure correlates to the way in which a girl evaluates her body, which is closely tied to her understanding of and compliance with socially

accepted norms. Objectifying one's body is an act that occurs intentionally, in which the individual is assessing the body, and this may have stronger implications for the usage of social aggression in that this type of indirect aggression also operates under intentional conditions. When utilizing social aggression, an individual must intentionally manipulate the peer group in order to attain some goal. In this way, this particular subtype of femininity and indirect aggression may have a stronger relationship due to the acceptance of sociocultural expectations and the intent with which both operate.

The hypothesis linking higher levels of body appreciation to lower levels of indirect aggression was made after reviewing the literature regarding self-evaluations of the body and its association to aggression. For example, Reulbach et al. (2013) found that children describing themselves as both underweight and overweight reported more frequent use of bullying behaviors. In contrast, children describing their bodies as "just the right size" indicated a lower use of aggression (Reulbach et al., 2013). Given the fact that body image has much to do with how an adolescent girl views herself, it was postulated that those who held a more positive view of her body would refrain from engaging in aggressive behaviors. Although the author was hopeful see this trend within the current study, the results do not support a significant relationship or association between body appreciation and relational or social aggression.

Another purpose of the current study was to evaluate the impact of *The Goodwill Girls and Boys Curriculum* on self-reported rates of relational and social aggression. This research will add to the limited research base on the effectiveness of this curriculum; however, a significant impact of the intervention could not be detected within the current study. This may be due to a number of limitations that are discussed in the next section

of the paper; therefore, future research should be conducted in which the intervention is implemented and monitored within a larger sample of adolescent girls.

Due to the limited literature documenting the effects of body image on the feminine ideology, the final research question was developed to evaluate the possibility that body appreciation may serve as a moderating variable between the feminine ideology and indirect forms of aggression within the adolescent female population. Swami and Abbasnejad (2010) completed one of the only studies that could be found assessing the association between feminine ideology and body appreciation. These researchers found that those who subscribed to a more traditional feminine ideology were more likely to exhibit lower levels of body appreciation (Swami & Abbasnejad, 2010). Although these researchers examined a group of undergraduate students rather than an adolescent population, the author believed that more research was necessary within this area and had hoped to reveal similar findings in an adolescent sample. However, a significant moderation effect could not be found utilizing the current sample. Although Swami and Abbasnejad (2010) found a weak association between these two constructs, it proves a linkage between these constructs. Additionally, the Swami and Abbasnejad (2010) study had a larger sample size than what was used in the current study. Therefore, these moderation results should be interpreted with caution and further research is required in order to better examine the possible relationships between these variables, as well as their associations with indirect aggression.



## **Limitations**

The presented results and findings should be evaluated in light of the study's limitations. Many of the limitations encountered throughout the study are related to the particular dataset used to analyze the constructs of interest.

Perhaps the largest threat to this study was its low statistical power due to the small sample size. In order to implement *The Goodwill Girls and Boys Curriculum*, not only must the school agree to implement the intervention, but also both parent consent and student assent must be obtained. Such preconditions render it difficult to implement an intervention that reaches a wider population.

Another limitation to the study was the number of students who provided pre-test data but were not available at the time of the post-test. Attrition reduced the impact of the study, as the already small sample size became more limited as more students dropped out or were not present for the administration of the post-test measures. This resulted in a large amount of missing data within the dataset. Therefore, researchers must use their clinical judgment when generalizing the present findings to other adolescents.

Several cautions should be noted in regards to group composition and selection threats. The sample utilized in this study was homogeneous in that all students attended faith-based educational settings. These types of educational environments may have a different culture in comparison to more traditional school settings; therefore, the intervention should be implemented within a variety of educational settings in order to obtain findings that may be more widely generalized. In contrast, the participants within this study were quite heterogeneous in that they notably ranged in age.

Additionally, selection threat may have hindered the researcher from seeing greater results, as parents of more aggressive adolescents may not have provided consent for their child to participate in the study. On the other hand, parents of students who do not typically and consistently engage in relationally and socially aggressive behaviors may have permitted their child to partake in the intervention more as a preventative measure. Therefore, it is difficult to conclude whether the adolescents who would most benefit from the curriculum were included within the study. Research has shown that the group dynamic is essential to ensure success, and that interventions typically yield greater results when the groups of students include both aggressive students as well as prosocial peers (Leff et al., 2010; Young et al., 2006). It is difficult to ascertain whether this balance was struck for this implementation of the intervention. For these reasons, researchers should interpret the findings within the context of the current sample, and take caution when generalizing to more diverse populations.

Lastly, a control group was only utilized at one of the school settings by which data was obtained. Because control groups were not created at the other educational sites, this single control group was eliminated from the current study, as it did not contain enough participants for the researcher to draw conclusions. Although it may be difficult to create control groups in the schools by which a useful intervention is being implemented, it only bolsters the impact found on the experimental groups, and the more frequent use of control groups should be considered for future implementations of *The Goodwill Girls and Boys Curriculum*.

## Future Research

Due to the limited research base regarding this topic area, further research is necessary in order to better understand the relationships and interactions between feminine ideology, body appreciation, and indirect aggression. Although this study will only further add to the documented research conducted in this area of adolescent development, the limitations imposed by the dataset hindered this study from obtaining many statistically significant findings, and cannot be widely generalized to the adolescent female population.

Future studies should aim to include a larger sample size, and make every effort to collect post-test data from the participants that were exposed to the curriculum. Researchers should attempt to work with a more diverse sample so that future findings may hold stronger implications. Furthermore, stronger evidence for the effectiveness of *The Goodwill Girls and Boys Curriculum* could be attained by utilizing control groups. Participants placed in the control groups should be offered the opportunity to participate in the implementation following the collection of the post-test measures to ensure that all who participate in the study have the chance to learn vital conflict management styles.

When possible, the sample should include a heterogeneous group of individuals. More specifically, the groups should include both students who exhibit relationally and socially aggressive behaviors as well as peers who typically engage in positive conflict management styles. This may be accomplished by having teachers and administrators nominate students who they believe would greatly benefit from the curriculum. Due to the covert nature of indirect aggression, it may even prove more fruitful to include a peer-nomination process in which students anonymously suggest other students who they feel

require the intervention. In this way, those students who engage in more aggressive behaviors can be targeted and assessed for meaningful change.

Additionally, the sample of students utilized for the purposes of this study included those with a wide age-range. In terms of studying body image and body appreciation, it must be understood that children and adolescents of differing ages will have varying outlooks on these constructs. For example, students in elementary school likely have very different opinions, views, and perceptions of their bodies in comparison to high school students. Therefore, it would be more advantageous to study the differing views of body objectification and body appreciation within more stringent and well-defined age groups in order to obtain a more comprehensive understanding of the development of body image.

### **Summary**

Although many significant findings could not be detected within the current sample, the results will only contribute to the limited research within the areas of the feminine ideology, body appreciation, and indirect aggression. As bullying continues to be viewed as a prominent issue within today's schools, it is imperative that more research be conducted that targets aggression in its many forms, including both relational and social aggression. This study addressed several research questions, and the findings were connected to the most relevant research in these areas. Additionally, the effectiveness of an important curriculum was evaluated in order to gain greater insight as to its impact. Due to this study's stated limitations, further research is warranted in order to better understand the constructs of interest as well as their interactions. Researchers should aim to appropriately implement interventions that target aggression in the adolescent

population in an effort to educate today's youth and create a more kind, caring, and assertive generation.

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