

GIRLSS: A STUDY OF THE EFFECTIVENESS  
OF A MULTI-MODAL INTERVENTION TO  
REDUCE RELATIONAL AGGRESSION

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by

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The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

**GIRLSS: A STUDY OF THE EFFECTIVENESS  
OF A MULTI-MODAL INTERVENTION TO  
REDUCE RELATIONAL AGGRESSION**

presented by Joni Williams Splett

a candidate for the degree of doctor of philosophy of School Psychology

and hereby certify that, in their opinion, it is worthy of acceptance.

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## DEDICATION

I would like to dedicate this work to my grandpa, Glenn Williams, who shared his passion for education with me and so many others. He unconditionally supports and encourages me in everything I pursue, whether it be standing at the final turn when I ran the 400m track race in junior high, making sure I regularly visited the library as an undergraduate student, or anxiously awaiting my doctoral graduation. As I pursue my professional educational career, I hope to continue his legacy and make him as proud of me as I am of him.

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## ABSTRACT

Relational aggression has quickly become a serious issue in schools. In response, school professionals have sought and developed interventions despite a dearth of empirical examination and support. The current study bolsters this area by examining the initial efficacy of GIRLSS, an intervention developed over multiple iterations incorporating the feedback and perspective of involved schools. GIRLSS is a 10-week school-based group counseling, parent training and parent phone consultation intervention based on cognitive behavioral strategies and social learning theory.

The current study used a randomized, pretest-posttest design with assignment to either a GIRLSS intervention group ( $N=22$ ) or a waiting list control group ( $N=12$ ). Results of multiple regression analyses found that participation in the intervention group significantly predicted reduced levels of school counselor-reported relational aggression reported. Participation in the intervention group also significantly predicted increased knowledge of relational aggression and the GIRLSS curriculum. Increased understanding mediated the relationship between teachers' pretest and posttest report of participants' relationally aggressive behaviors. However, no significant effects were found on proposed secondary outcomes or participants' self-report of RA. Limitations of these findings are discussed, including a small sample size, novel referral and recruitment procedures, and the validity of some outcome measures. Future research should seek to improve GIRLSS in collaboration with interested schools and utilize more sophisticated, feasible and valid recruitment and measurement procedures.

## **Chapter 1: Introduction**

Heartbreaking stories of relational aggression have gained growing media attention in recent years and seem to have become an increasingly common part of children's social world (FOXNews.com, 2008; Goldstein, Young, & Boyd, 2008; www.cbc.ca, 2002). The issues have been discussed in many recent mainstream books, websites and even movies (e.g., *Odd Girl Out: The Hidden Culture of Aggression in Girls* by Rachel Simmons, *Reviving Ophelia: Saving the Selves of Adolescent Girls* by Mary Pipher, *The Girls* by Amy Goldman Koss, The Ophelia Project [www.opheliaproject.org](http://www.opheliaproject.org) and Paramount Pictures' *Mean Girls* directed by Mark Waters).

Caring adults and professionals have developed interventions such as counseling groups and classroom lessons to address the increasing incidents of relational aggression (RA; Talbot, 2002). As school professionals continue to address current concerns related to RA, evaluating the effectiveness of potentially effective interventions is a necessary next step to preventing future detrimental effects suffered by students personally and illustrated too frequently in the media (Leff, Power, Manz, Costigan, & Nabors, 2001).

The purpose of the current study is to evaluate the effectiveness of an existing intervention based on previous research aimed at reducing RA. In the introductory chapter, RA is defined, its prevalence and etiology are described, empirically-identified outcomes for victims and aggressors are explained and current intervention methods are noted.

## **Relational Aggression Defined**

As a nonphysical form of aggression, RA is characterized by behaviors that harm others through direct or indirect attacks on relationships rather than direct attacks to physical objects or a person's well-being (Crick, 1995). In this way, RA is more subtle and covert than physical forms of aggression. Whereas physical forms of aggression harm others through physical damage to self or threat of damage, RA harms others through damage to relationships (Crick, Casas, & Mosher, 1997).

Examples of RA include manipulative behaviors such as gossiping, rumor spreading, social alienation, exclusion and rejection (Crick, Casas, & Nelson, 2002). Displays of RA are manifested differently across development, but have been identified in girls as young as 2.5 years of age (Crick, Ostrov, Appleyard, Jansen, & Casas, 2004). In early childhood, RA appears to be direct and unsophisticated, such as telling a peer he/she is not invited to a birthday party. In more sophisticated forms of RA, girls in middle childhood and adolescence participate in malicious gossip and rumor spreading to alienate or retaliate against a peer, engage in the “silent treatment” to socially exclude a peer or punish him/her, and manipulate others to encourage them to reject or avoid another peer (Crick et al., 2004).

## **Prevalence of Relational Aggression**

There are few studies that report the overall prevalence of RA due to difficulties measuring such subtle and covert behaviors. Most of the prevalence research has focused on comparing the prevalence of RA to physical aggression across sex groups (Crick,

Bigbee, & Howes, 1996; Crick & Grotpeter, 1995). However, findings from this line of research have been inconsistent.

While popular media and previous research (Crick & Grotpeter, 1995) suggests that girls are relationally aggressive and boys are physically aggressive, recent research is inconclusive. In fact, some evidence even suggests higher rates of RA among boys than girls (Underwood, 2003). More consistent findings have suggested that the difference between girls and boys is in their proportional use of RA rather than their cumulative use of either relational or physical aggression. In other words, when girls are aggressive, the proportion of their acts of aggression that are relationally aggressive tends to be significantly larger than for boys who tend to use both physical and relational aggression more equally (Putallaz et al., 2007). Past research has also shown that girls tend to be more concerned with social relationships, including closeness and intimacy, than boys (Zahn-Walker & Polanichka, 2004). Thus, it seems logical that the direction and object of most of their displays of aggression is consistent with their social concerns (Crick & Grotpeter, 1995).

### **Etiology of Relational Aggression**

The etiology of RA is influenced by risk factors related to children's attribution style and social information processing skills, as well as family relationships and parenting styles (Yoon, Barton, & Taiariol, 2004). Some of the most promising current research is regarding parental and family risk factors. For example, Casas and colleagues (2006) found that permissive parenting styles and high levels of maternal and paternal

psychologically controlling behaviors were significantly predictive of their preschool daughters' relationally aggressive behaviors.

Similar to physically aggressive children, relationally aggressive children have also been found to have distorted and impaired social information processing skills, including the tendency to make hostile attributions of others' intentions in relationally provocative and ambiguous situations and possess normative beliefs that RA is acceptable and frequent (Crick, 1995; Crick et al., 1996; Crick & Werner, 1998). Related to their social information processing skills, relationally aggressive children also tend to become more emotionally aroused than nonaggressive or physically aggressive children in response to relationally provocative situations (Crick, 1995). Taken together, heightened emotional arousal, normative beliefs about RA and hostile attributions in relationally provocative situations impair the social information processing skills of children who are more likely to behave in relationally aggressive ways than their nonaggressive or physically aggressive peers.

Furthermore, socialization theories provided by Dix (1993) and Dodge (2006) suggest that attachment relationships, parenting styles and other environmental risk factors provide socialization messages to children through modeling behaviors and disciplinary responses. These models suggest that children may learn normative beliefs about RA and hostile attributions from adult models, such as their parents (Dodge, 2006). Parents who have normative beliefs about RA are also less likely to respond to such behaviors in the same punishing way they respond to physically aggressive behaviors

(Werner & Grant, 2009; Werner, Senich, & Przepyszny, 2006). These findings suggest that the development of deficits in children's social information processing skills may be learned from social models (i.e., parents) and resulting relationally aggressive behaviors may be developed and maintained due to parents' poor disciplinary responses. Thus, the role of parenting styles, parents' cognitions, and children's social information processing skills in the etiology of RA provide several opportunities for potentially effective intervention.

### **Detrimental Effects**

Although nonphysical forms of aggression, such as RA, have yet to be as thoroughly examined as physical forms (Coie & Dodge, 1998; Crick & Grotjahn, 1995), the effects of such behaviors are potentially just as detrimental. Researchers have recently argued that the internal and psychological "bruises" from RA can be as or more painful than those from physical aggression (Cappella & Weinstein, 2006). Recent news reports of adolescent suicide, cyberbullying and school violence confirm their argument (FOXNews.com, 2008; Goldstein, Young, & Boyd, 2008; www.cbc.ca, 2002). In a story close to home, a teenage girl in St. Louis, MO committed suicide in 2008 after being the victim of a relationally aggressive cyberbullying attack. The victim's friend and her friend's mother created a fictitious MySpace account of a boy who at first befriended the teenager and then sent her hurtful messages (stcharlesjournal.stltoday.com, 2008).

As this incident illustrates, there are serious negative outcomes of relationally aggressive behaviors. Perpetrators and victims of RA are likely to experience higher

levels of depression, impulsivity, defiance, substance abuse, delinquency, and risky sexual behaviors than their non-relationally aggressive and/or relationally victimized peers (Crick & Bigbee, 1998; Crick & Grotpeter, 1995).

### **Current Interventions to Prevent Relational Aggression**

Most indicated intervention programs for children at risk described in the popular media and literature are school-based group counseling programs. For example, a newspaper article in the New York Times (Talbot, 2002) identified five group counseling intervention programs, such as *Owning Up* and *Girls as Friends, Girls as Foes*, that are being implemented in schools across the country (ranging from Erie, PA to Portland, OR). A recent special issue in *School Psychology Review* identified two interventions at the indicated level including *Making Choices and Strong Families Program* (Fraser, Day, Galinsky, Hodges & Smokowski, 2004) and *Friend to Friend* (Leff et al., 2009; Leff, Waasdorp & Crick, 2010). Both interventions utilized small group approaches in a school-based setting. Group counseling is one of the most widely used mental health interventions in schools (Hoag & Burlingame, 1997; Keys, Bemak, & Lockhart, 1998; Shechtman, 2002). It may arguably be as effective as individual counseling (Hoag & Burlingame, 1997) and considered to be more cost-effective and time-efficient (DeLucia-Waack, 2000). However, as an intervention program alone, group counseling may not be as ecologically-valid as necessary to effectively reduce RA (Leff et al., 2010).

Emerging literature suggests a strong link between family relationships, parenting styles and the development and maintenance of RA being a function of parents' social

modeling and discipline responses (Casas et al., 2006; Werner & Grant, 2009). Therefore, ecologically-valid interventions should consider including family components in addition to school-based group counseling methods. Evidence of combined school and family-based interventions suggests that group counseling is an effective intervention and prevention tool when integrated with other family, social group, and community interventions (Keys et al., 1998). While school-based interventions do not traditionally include strong components of family involvement, the proposed etiology of RA suggests that combining traditional group counseling methods with family-based interventions could be more effective in reducing RA post-treatment and in maintaining reductions over time. In order to answer this question, however, more rigorous empirical evaluations of school-based intervention programs, which include a parent or family component, are necessary (Leff et al., 2001; Shechtman, 2002). Without such rigorous empirical examinations, the effects of the intervention programs are unknown and school-based mental health providers are unable to make more informed programming decisions.

## **Chapter 2: Literature Review**

Interventions to reduce RA are more likely to be effective if adequately informed by the developmental and etiological literature of RA. Additionally, the practice of an intervention should be guided by an empirically informed theory of how change is made in the intervention. In order to develop such a theoretically strong and empirically-informed intervention, a thorough review of related literature is necessary. This literature review will operationalize RA (Yoon et al.), describe its developmental etiology from individual and environmental risk factors to harmful outcomes, and identify potentially effective interventions based on empirically-supported theories such as social learning theory, cognitive behavior therapy and ecological systems theory. The literature review will conclude with a discussion of why the proposed types of interventions are hypothesized to be effective in reducing relationally aggressive behaviors and preventing negative social-emotional outcomes.

### **Definition and Operationalization of Relational Aggression**

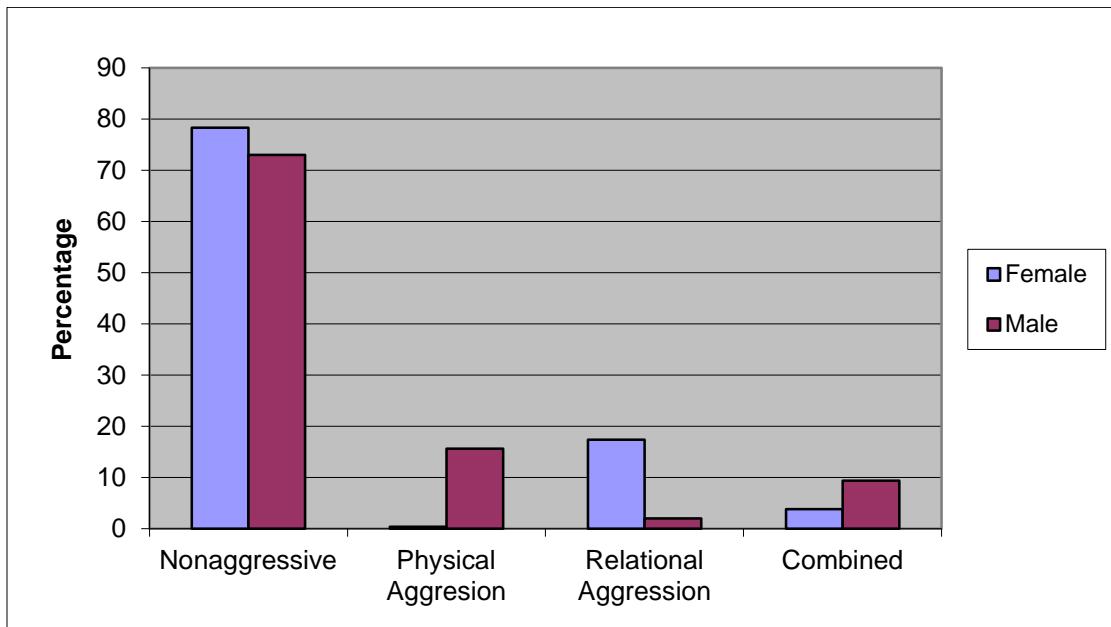
As previously described, RA is more subtle and covert than physical forms of aggression (Crick & Grotjeter, 1995). It is characterized by behaviors that harm relationships with others through both confrontational and nonconfrontational actions (Crick & Grotjeter, 1995). These can include face-to-face name calling or manipulative behaviors to exclude someone (i.e., “You can’t be my friend unless...”) as well as nonconfrontational acts of exclusion, alienation (i.e., silent treatment), gossiping, and rumor spreading (Crick, Casas et al., 2002).

## **Relational Aggression across Sex Groups**

Although there are few studies that report the overall prevalence of RA, there is data comparing the prevalence of RA and physical aggression across sex groups (Crick & Grotpeter, 1995). Sex group comparisons of relational and physical aggression have found that boys are more likely to engage in physical aggression and girls are more likely to engage in RA. Interestingly, however, when RA as well as physical aggression are assessed, girls have been found to be equally as aggressive as boys (Crick & Grotpeter, 1995). As reported in Figure 1, about 70 percent of both boys and girls in grades three through six were reported to be nonaggressive through self-report and peer sociometric nomination measures. Interestingly, however, the remaining 30 percent of both boys and girls identified as aggressive were not equally distributed across the two forms of aggression assessed. Consistent with more recent research (McKnight & Putallaz, 2005; Office of Juvenile Justice and Delinquency Prevention, 2008), girls were more likely to exhibit RA (17.4 percent of girls and 2.0 percent of boys) while boys were more likely to exhibit physical forms of aggression (15.6 percent of boys and 0.4 percent of girls; Crick & Grotpeter, 1995).

Based on previous, gender-specific research, it is not surprising to find that girls are more likely to exhibit relationally aggressive behaviors than more overt, physical forms. Girls have been found to be more concerned with social relationships, closeness, intimacy, popularity, and social status than boys (Letendre, 2007; Moretti, Dasilva, & Holland, 2004; Zahn-Walker & Polanichka, 2004). Consequently, the direction and

object of their displays of aggression are consistent with their social concerns. RA is most commonly linked to the social context, primarily because popularity, social status, and relationships are more salient to girls than most boys.



*Figure 1.* Prevalence of RA across sex groups and type of aggression.

### **Relational Aggression across Development**

Acts of RA have been identified in girls as young as 2.5 years of age (Crick et al., 2004). Furthermore, research has found that rates of RA are higher in girls than boys beginning in early childhood and continuing into adolescence (Crick et al., 2004). However, acts of RA are manifested differently across developmental time periods.

**Early childhood.** Relationally aggressive behaviors in early childhood appear less sophisticated and more obvious than in middle childhood and adolescence (Crick et al., 1999). During the preschool years, children are still developing social skills and may

not yet understand socially or cognitively how to act aggressively without being confrontational or physical (Loeber & Hay, 1997; Selman, 1976). Some have even argued that children less than eight years old are incapable of nonconfrontational forms of RA because their perspective taking and theory of mind skills are not yet fully developed (Bjorkqvist, Osterman, & Kaukiainen, 1992). However, confrontational forms of RA have been observed during early childhood and may be more typical of such behaviors during this developmental period because of their directness and lack of social complexity (Crick et al., 1999). RA during the preschool years centers on children's preferred activities rather than targeting relationship bonds and tends to be enacted immediately after a trigger problem (Crick et al., 1999). For example, many preschool children prefer to play with certain toys. When child A takes the toy away from child B, child B's anger expressed through RA is most commonly directed at getting the preferred toy back immediately (e.g., telling child A, "You can't sit with me at lunch if you don't give me my toy back."). Unsophisticated expressions of RA could include telling another child that she is not invited to a birthday party or cannot play with a group of friends at recess if she doesn't give the toy back.

**Middle childhood.** During middle childhood relationally aggressive behaviors become more sophisticated, complex and prevalent. In more sophisticated forms of RA, children in middle childhood spread malicious rumors, engage in harmful gossip to alienate a peer, enact the "silent treatment" and manipulate others to reject or avoid a peer (Crick et al., 2004). These behaviors reflect changes in children's social and cognitive

development. Their memory and language abilities improve into middle childhood and their ability to take another's perspective (e.g., theory of mind) is developed (Loeber & Hay, 1997; Selman, 1976). At the same time, their peer groups are becoming more salient and the need to be accepted and included in personal friendships is increasing (Maccoby, 1990). These changes appear to facilitate and motivate changes in children's relationally aggressive behaviors. For example, an increase in such behaviors aimed at same-sex relationships mirrors the increased importance such peer social relationships have for children during this time period (Crick et al., 1999).

Relationally aggressive behaviors during middle childhood are also more likely to be covert and less confrontational than in early childhood, although confrontational behaviors of RA still occur. Such behaviors tend to be enacted in retaliation of past events rather than immediate responses and delivered indirectly via interactions with other peer group members. Aggressive behaviors that are indirect and delayed necessitate strong theory of mind capabilities such as perspective taking and self-regulatory abilities that enable a child to wait a period of time before retaliating. The onset of nonconfrontational and delayed aggressive behaviors in middle childhood may therefore be developmentally-associated with improvements in children's perspective taking and delayed gratification skills (Crick et al., 1999).

**Adolescence and adulthood.** While relationally aggressive behaviors during adolescence and adulthood continue to be more covert and nonconfrontational than during early childhood, they are also more likely to be targeted at opposite-sex

relationships than during middle childhood. This shift in the target of relationally aggressive behaviors is consistent with changes to adolescent peer group structures and increased interest in opposite-sex relationships (Maccoby, 1990).

Taken together, the developmental progression of relationally aggressive behaviors seems to be dependent upon cognitive, regulatory and language development as well as developing interests in social interactions within same and opposite-sex relationships. When cognitive, regulatory and language abilities are not yet developed and children are less interested in social interactions than obtaining objects, RA behaviors appear to be less sophisticated, more confrontational, immediate and less covert (Crick et al., 1999). Beginning in middle childhood and continuing into adolescence and adulthood when children's cognitive, memory and language abilities are further developed, their relationally aggressive behaviors become more sophisticated, more covert, nonconfrontational, and less immediate.

### **Negative Outcomes for Aggressors and Victims**

It is important to identify and understand the effects of RA on the well-being of victims and aggressors in order to justify the need for effective intervention. In the case of RA, this is particularly important because the effects are not as obvious as those related to physical forms of aggression (i.e., broken bones, physical bruises). Rather, the effects of RA are more internal and psychological (i.e., depression, anxiety, suicidal ideation). Despite the physical differences, however, many researchers have argued that the “bruises” from RA can be as or more painful than those from physical aggression

(Cappella & Weinstein, 2006). Many children and adolescents, especially girls, agree with these researchers.

In a qualitative study, Crick, Bigbee, and Howes (1996) asked boys and girls, ages nine to thirteen, two questions intended to identify their perception of normative angry behavior in their peer groups and behavior intended to harm others. Results suggested that within girls' peer groups only, relationally aggressive behaviors were perceived by both boys and girls to be normative behaviors that were harmful to others. The same was not true for boys' peer groups (Crick et al., 1996). A similar study was conducted with college-age students, and results also suggested that RA was a more harmful, aggressive behavior in female peer groups than in male peer groups (Crick et al., 1999). In Galen and Underwood's (1997) study of children and adolescents' perceptions of physical and nonphysical aggression, girls were more likely to perceive relationally aggressive acts in social relationships to be more hurtful than boys in the same sample. These studies indicate that there are negative and harmful outcomes associated with being involved in relationally aggressive behaviors, particularly for females and female peer groups (Crick et al., 1999; Galen & Underwood, 1997)

Research has just begun to associate RA in girls with the harmful outcomes suggested by participants in studies by Crick and colleagues (1999) and Galen and Underwood (1997). Girls who engage in relationally aggressive behaviors are more likely than those who do not to be depressed and lonely, delinquent, engage in risky sexual behavior, and be in poor and/or violent romantic relationships (Crick & Bigbee, 1998;

Prinstein, Boergers, & Vernberg, 2001). Relationally aggressive girls are also at risk of being rejected by their peers. In fact, during early childhood and early elementary school periods, relationally aggressive girls appear to experience rates of peer rejection and isolation equivalent to those of their physically aggressive male counterparts (Crick et al., 1997). From middle childhood through college age periods, relationally aggressive girls are more likely to be both highly liked and highly disliked by their peers (i.e., controversial peer status; Crick & Grotjahn, 1995; Lease, Kennedy, & Axelrod, 2002; Werner & Crick, 1996).

The consequences of relationally aggressive behavior throughout childhood and adolescence are not only significant for the female aggressor, but also have long-term implications for the social and psychological adjustment of the victim. Most of the research identifying outcomes for victims of RA has been conducted with female targets within same-sex relationships. Some of the outcomes identified include being overly submissive, having low self-restraint, and elevated internalizing problems, such as loneliness, depression and social anxiety (Crick & Grotjahn, 1995; Prinstein et al., 2001). Female victims of RA are also at increased risk to experience disruptive behavior problems, peer rejection, social avoidance, substance abuse and suicidal ideation (Craig, 1998; Crick & Bigbee, 1998). Social support from close friends and families appear to buffer effects of being a victim (Prinstein et al., 2001).

Elevated levels of externalizing and internalizing behavior problems, along with increased risk for peer rejection, isolation, and social avoidance puts RA perpetrators and

victims at risk for failing to achieve important developmental tasks during middle childhood and adolescence, such as forming and maintaining intimate and close relationships with peers (Crick & Bigbee, 1998; Prinstein et al., 2001). The consequences of such an outcome for later relationship-building stages are also an important consideration since developmentally appropriate peer relationships are the precursor and foundation for later dating and marriage relationships (Parker & Gottman, 1989). Taken together, it seems there is sufficient evidence to conclude that at elevated levels of RA, the outcomes for both the perpetrators and victims are detrimental to their psychological well-being. Although RA is not a psychiatric diagnosis, and some may argue that it is normative behavior for teenage girls (Chesney-Lind, Morash, & Irwin, 2007), the literature reviewed here has empirically identified clinically diagnosable concerns (e.g., depression, anxiety, substance abuse and suicidal ideation) that are potential outcomes of untreated RA. If left untreated, RA is likely to result in the need for more intensive and costly services (i.e., individual therapy, inpatient treatment) with less potential for success. Therefore, in order to prevent these negative outcomes, it is critically important to identify methods of effectively preventing and/or intervening early with RA; therefore reducing the potential for clinically concerning psychological outcomes.

### **Risk Factors Associated with Relational Aggression**

Understanding variables that may have led to the development of RA or put children at greater risk of exhibiting relationally aggressive behaviors is the best method of identifying malleable factors that should be targeted for intervention purposes. While

there has not been as much research exploring the etiology of RA as has been conducted regarding physical aggression, it seems there are some commonalities even at this early stage of the RA literature. Risk factors including family relationships and attachment, parenting styles, and children's social information processing skills are common to both relational and physical aggression (Dodge & Petit, 2003; Yoon et al., 2004).

**Social information processing deficits.** Previous research around the development and effective intervention for physical and overt forms of aggression has found deficits in aggressive children's social information processes (Crick & Dodge, 1994). The social information processing (SIP) theory of aggression posits that the ability of a person to process a sequence of social cues impacts their behavioral response. Crick and Dodge's (1994; see Figure 2) SIP model includes a six-step sequence, including: 1) encoding environmental cues, 2) interpreting cues accurately, 3) clarifying or selecting social goals, 4) generating potential behavioral responses, 5) evaluating potential responses, and 6) enacting a behavioral response. Prosocial children tend to have no difficulties in appropriately processing this sequence and selecting an appropriate prosocial response. On the other hand, aggressive children have been found to become so emotionally aroused at the beginning of an ambiguous interaction that their processing abilities in the early stages of the sequence are distorted and deficient (Dodge & Petit, 2003). This distortion impacts their processing abilities at each step of the sequence leading to impaired execution at later stages (e.g., selection and enactment of aggressive behaviors at steps five and six; Crick & Dodge, 1994) . As a result of the emotional

arousal, aggressive children are more likely to misinterpret social cues and attribute hostile intentions to others in the setting than nonaggressive children (steps one and two; Dodge, 1986).

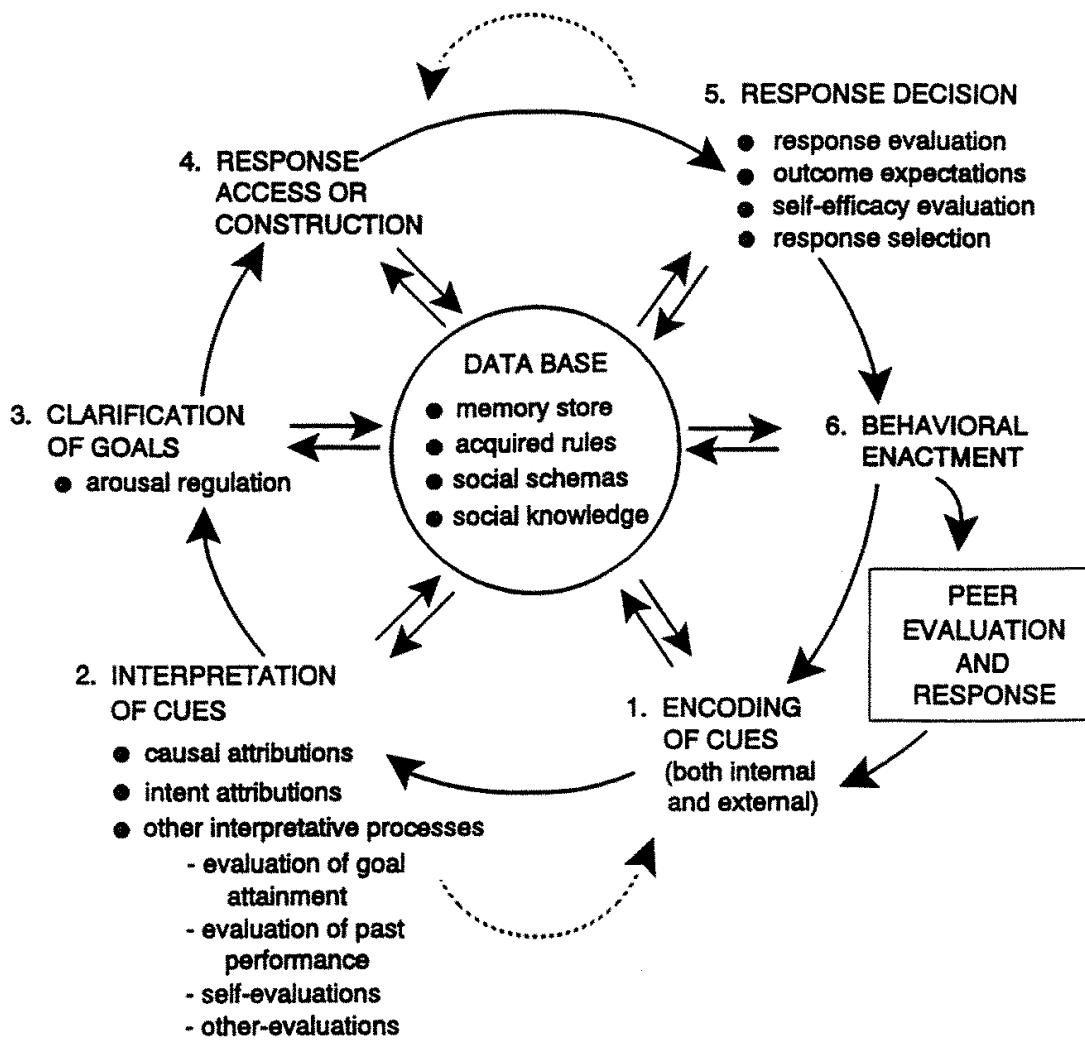


Figure 2. Crick and Dodge's (1994) social information processing model of children's social adjustment.

In research with relationally aggressive children, as opposed to only physically aggressive children, the SIP model has also been found to be applicable (Crick, Grotjeter, & Bigbee, 2002). Leff and colleagues (2003), as well as Crick (1995), found that relationally aggressive children in third through sixth grades tend to attribute hostile intent attributions to peers in contexts that are ambiguous, negative and/or relationally provocative more often than their non-relationally aggressive peers (i.e., step two). In other words, when confronted with situations of conflict within a relationship, relationally aggressive children are more likely to perceive the conflict as including hostile slights than their peers when such an attribution may or may not be accurate.

Furthermore, previous research has found that girls evaluate relationally aggressive responses to relational conflict situations more positively than boys (Crick & Werner, 1998) and that children who engage in relationally aggressive behaviors (both boys and girls) are more likely to endorse normative beliefs about RA than PA or physically aggressive and nonaggressive peers (i.e., step 5; Werner & Nixon, 2005). According to the SIP model, normative beliefs coupled with positive evaluations of relationally aggressive behaviors should lead children to be more likely to enact such a behavioral response, which is exactly what Xie and colleagues (2002) found. Using a sample of 475 children from the Carolina Longitudinal Study (Cairns & Cairns, 1994), Xie and colleagues (2002) found that relationally aggressive children tended to respond more negatively to relationally provocative events than events including physical or indirect aggression. Taken together, these findings provide evidence that the SIP model

may also explain processing difficulties that lead to relationally aggressive behaviors and put children with such deficits at risk of being relationally aggressive.

Interventions that target deficits in the SIP sequence of aggressive children through a cognitive behavioral approach, including attribution re-training, have been proven effective for physical and overt forms of aggression (Brain Power Program, Hudley & Graham, 1993; Anger Coping Program, Lochman, 1992). Similarly, empirical evidence is starting to emerge for cognitive behavioral intervention programs that address RA (*Friend to Friend*, Leff et al., 2007). In these interventions, children are taught to recognize their feelings and physiological arousal, evaluate the intentions of others, and plan a prosocial response (Leff et al., 2007).

**Parenting and attachment styles.** Parenting and attachment styles have been identified as risk factors for many different social-psychological concerns (Thompson, 2000), including antisocial behavior and conduct problems (Patterson, DeBaryshe, & Ramsey, 1990), disruptive behavior problems (Greenberg, Speltz, & DeKlyen, 1993), internalizing behavior problems (Aunola & Nurmi, 2005), and substance use (Baumrind, 1991). Interestingly, parenting and attachment styles have also been empirically identified as risk factors for the development of RA (Casas et al., 2006; Pettit, Laird, Dodge, Bates, & Ciss, 2001; Werner & Grant, 2009; Werner et al., 2006). Emerging evidence suggests that relationally aggressive children's deficit in social information processing could at least be a partial result of poor parenting and attachment styles that fail to help children develop more prosocial processing models, including benign

attributions and normative beliefs that any form of aggressive behavior is unacceptable (Dodge, 2006; Werner et al., 2006).

Attachment styles are differentiated based on the security of the relationship formed between a child and his/her caregiver or attachment figure. In a parent-child attachment relationship, parents who respond to their child's needs in a warm, nurturing fashion are likely to develop a secure attachment with their child; whereas parents who are unable to recognize their child's needs and respond in a less effective, more coercive or intolerant manner, are likely to develop an insecure attachment with their child (Bowlby, 1973). Unfortunately, insecure attachment style between parents and children during early childhood have been found to predict both physical and relational aggression (Casas et al., 2006; Dodge & Petit, 2003). Some research suggests that different types of insecure attachments better predict the most common function and target of children's aggressive behavior (Moretti et al., 2004). For example, preoccupied attachment is a type of insecure attachment characterized by intermittent and unpredictable reinforcement of attachment needs within attachment relationships (e.g., parent-child relationships). For children with preoccupied attachments, Moretti and his colleagues (2004) suggest that the function of their aggressive behaviors is an attempt to obtain attention from an attachment figure and maintain engagement. Thus, the targets of such behaviors are most likely limited to attachment partners (e.g., parents, romantic partners, or close friends). Dismissing attachment, on the other hand, is characterized by little to no attachment responses from caregivers, resulting many times in a lack of interest in close, personal

relationships with anyone. The function of aggressive behaviors of individuals with dismissing attachments is therefore rarely interpersonal. Rather, most aggressive behaviors of individuals with dismissing attachments are enacted to achieve instrumental goals (e.g., obtain a desired possession) and can be targeted at anyone regardless if they are known or not (Moretti et al., 2004).

In light of these differences, Moretti and colleagues (2004) suggest that the type of aggressive behaviors can be predicted based on children's attachment styles. In other words RA is more likely enacted by individuals with preoccupied attachment styles, and physical forms of aggression are more likely enacted by individuals with dismissing attachment styles. Interestingly, the gender distribution across forms of insecure attachments is not equal. In fact, girls are disproportionately overrepresented in the preoccupied attachment pattern and boys in the dismissing attachment pattern (Bartholomew & Horwitz, 1991; Moretti et al., 2004). Given that girls are also more likely to engage in relationally aggressive behaviors within the context of interpersonal relationships than boys (Crick & Grotpeier, 1995), this finding makes sense. It provides further support for Moretti and colleagues' (2004) theory of the relationship between attachment style and the function and target of aggressive behaviors.

The influence of parenting styles on child development has also been documented in regards to many constructs over the past 40 years, such as academic success, personality, adjustment problems, and aggression (Weiss & Schwarz, 1998). Physical aggression is most commonly linked to authoritarian parenting, which includes harsh

discipline and, many times, corporal punishment (Dodge & Petit, 2003). On the other hand, RA in girls has been linked to maternal permissive parenting and paternal authoritarian parenting styles, as well as psychologically controlling behaviors such as love withdrawal and guilt induction (Aunola & Nurmi, 2005; Casas et al., 2006).

Permissive parenting is characterized by a warm and nurturing relationship without demands or boundaries placed on the child by the parent. Parents characterized as being permissive may feel as though they are meeting their child's needs, but their lack of structure, rules, and boundaries is likely to lead to risky and aggressive behaviors in childhood and adolescence (Baumrind, 1967).

Parental psychological control is characterized by manipulations and exploitations of parent-child relationships that infringe upon children's psychological and emotional development (Barber, 1996). Examples of such behaviors may include withdrawal of love (e.g., avoiding child when he/she has disappointed parent), erratic emotional behavior (e.g., displaying unpredictable or inappropriate emotions in front of child), guilt induction (e.g., making child feel guilty for how hard parent has to work to feed him/her), and invalidating feelings (e.g., trying to change children's feelings because they are perceived to be incorrect).

Interestingly, some behaviors characterized as psychologically controlling mirror relationally aggressive strategies that relationally aggressive children employ in their peer relationships. For example, love withdrawal is an often cited example of psychological control, which is similar to examples cited by numerous children and adolescents where

friends withdraw their friendship based on rumors, embarrassment, or the persuasion of other peers (Casas et al., 2006; Nelson & Crick, 2002). Research by Grotpeier (1997; as cited in Casas et al., 2006) found that girls who were relationally aggressive with their peers were also the targets of their parents' relationally aggressive behaviors such as love withdrawal. Similar findings have been noted in other cultures, such as with Russian and Chinese preschoolers (Hart, Nelson, Robinson, Olsen, & McNeilly-Choque, 1998; Nelson, Hart, Yang, Olsen, & Jin, 2006; Olsen et al., 2002), where maternal and paternal coercion and lack of responsiveness were positively correlated with children identified as relationally aggressive. Other behaviors, such as parents' high levels of desire for exclusivity with child and jealousy of the child, poor management of sibling conflicts, maternal negativity toward the child, family negative expressiveness, maternal depression, and marital discord where the child is the peacemaker, have also been strongly linked to relationally aggressive behaviors in children (Crick et al., 1999; Park et al., 2005; Updegraff, Thayer, Whiteman, Denning, & McHale, 2005).

**Parental cognitions and responses to RA.** Parents' beliefs about and responses to aggression are an important socializing mechanism for children who are learning what behaviors their parents and environment consider normative and acceptable. In order to understand how parents' beliefs about RA may influence their children's beliefs, social-information processing, and aggressive behaviors, it is important to consider two empirically-supported socialization models (e.g., Dix, 1993; Dodge, 2006).

**Parental influence on children's SIP and attribution style.** In his analysis of how children develop hostile attribution biases, Dodge (2006) draws from literature in the fields of ethnology, neuroscience, and social, personality and developmental psychology to outline the socialization process re-illustrated in Figure 3. Based on science from these fields, Dodge (2006) argues that humans are born aggressive with hostile attribution biases as a matter of not being able to fully interpret all social cues in a provocative or threatening situation. Through life experiences, children are socialized to make benign or neutral attributions which result in less aggressive and more prosocial behaviors. Individual differences in children's benign or hostile attributions are a function of 1) neurological tendencies and responses (e.g., impulsivity) and 2) hostile or benign schemas of provocative situations (Dodge, 2006). Schemas are developed over many early life experiences that are stored in memory and mediate the relationship between the life experiences and behavior responses (e.g., aggression).

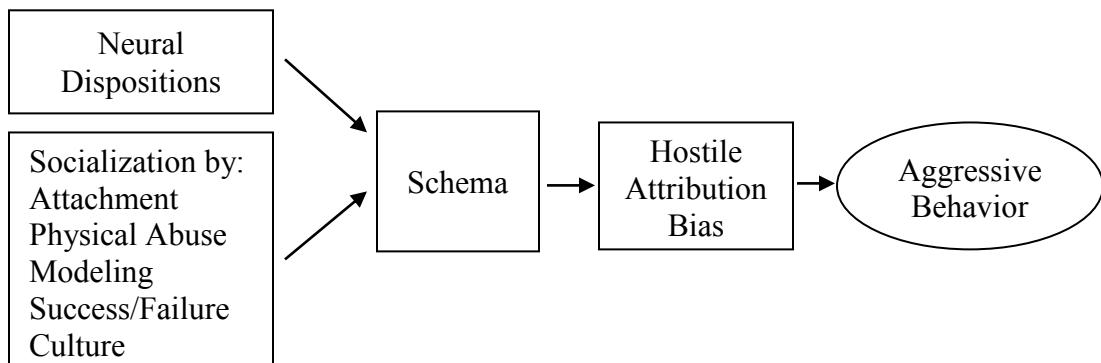


Figure 3. Dodge (2006) model of the development of hostile attribution biases.

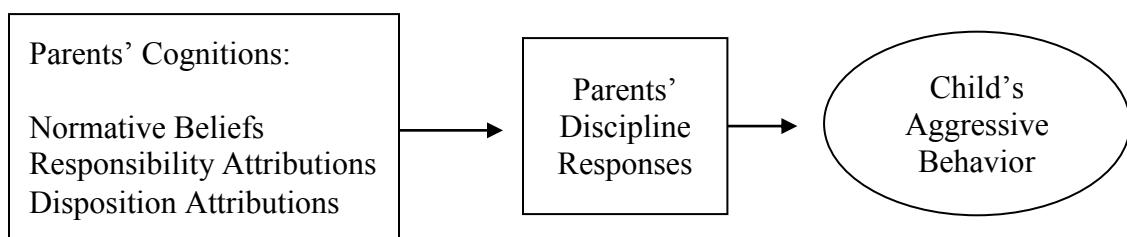
For children with benign attribution styles and schemas, these life experiences tend to include a secure attachment relationship with a parent or caregiver, adult models

of a benign attribution style, success experiences in important developmental tasks and experiences in a culture that values cooperation. Life experiences that tend to develop hostile schemas and attribution styles include physical abuse, adult and peer models with hostile attribution styles, failure in important developmental tasks and rearing in a culture that values self-defense and retaliation (Dodge, 2006). Related to the SIP model, when children with hostile schemas access their schemas in a provocative situation they are more likely to make hostile attributions to others in the situation and experience emotional arousal during the first three steps of the SIP sequence. This attribution and emotional arousal impairs their ability to identify and evaluate appropriate behavioral response options in the final three steps of the SIP sequence (Crick & Dodge, 1994). Thus, life experiences that tend to develop hostile schemas and attribution styles seem to be risk factors for impaired SIP and therefore, a risk factor for acting relationally aggressive in relationally provocative situations.

Evidence from a correlational study of mother and daughters' attribution styles and behavioral interventions provide initial support to Dodge's (2006) model (MacBrayer, Milich, & Hundley, 2003). In this study, mothers' attributions about the intentions of others in overtly provocative situations significantly correlated with the daughters' intent attributions but not their sons'. Mothers' behavioral intentions of responding to overtly and relationally provocative situations were also significantly correlated with their daughters' behavioral intentions. Furthermore, mothers of clinically-diagnosed aggressive children (boys and girls) were more likely than a non-clinical

comparison group of mothers to make hostile attributions in relationally and overtly provocative situations (MacBrayer et al., 2003). Although these findings provide initial evidence that mothers' modeling of a hostile attribution bias may influence their daughter's attribution style, conclusive causal interpretations cannot be made due to the correlational nature of the analysis.

***Influence of parents' attributions on their discipline response.*** Dix (1993) proposes an interactional model of how parents' beliefs about negative behaviors and attributions of disposition to their child influence and are influenced by their child's behavior. Specifically, Dix's (1993) model suggests that parents' cognitions about aggressive behaviors (e.g., normative beliefs) influence their discipline responses which in turn influence children's behavior (see Figure 4). The model also suggests that the parents who tend to make negative disposition attributions (e.g., parents think their child should have known better, intended to misbehave, could have controlled him/herself and is responsible) experience negative emotional arousal (e.g., anger, frustration) and prefer more controlling and forceful disciplinary responses than those who do not make negative attributions about their child's disposition (Dix, 1993).

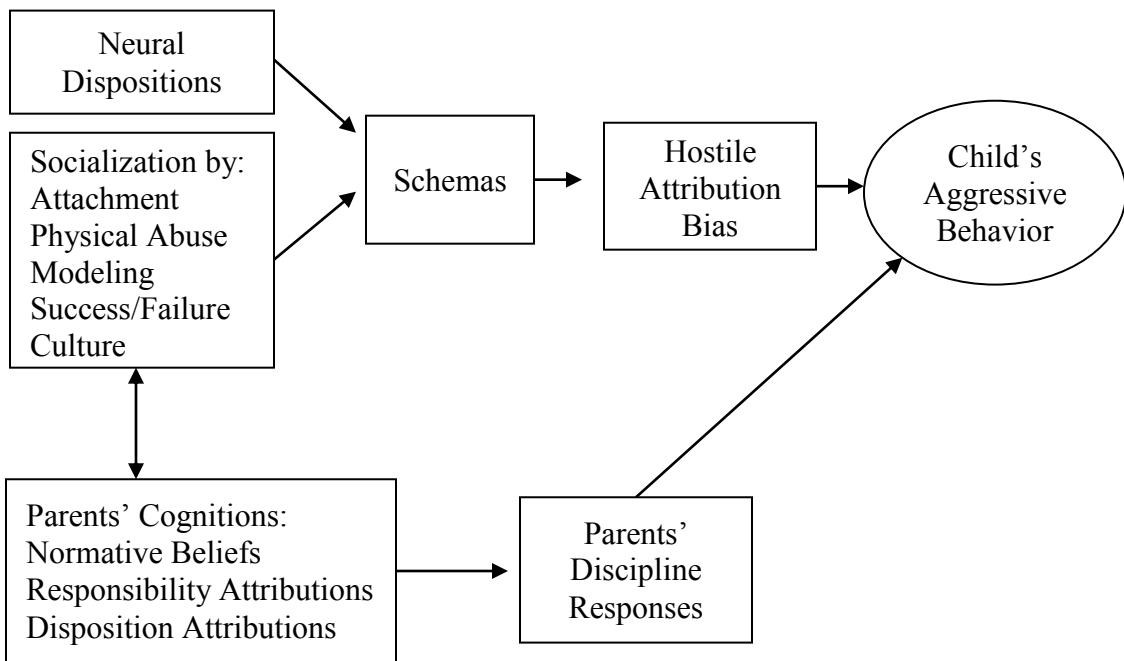


*Figure 4.* Dix (1993) model of the relationship between parents' cognitions, discipline responses and children's behavior.

In the context of parents' cognitions about RA, attributions about relationally aggressive behaviors and response to RA versus physical aggression, Werner and Grant (2009) found significant differences. Mothers of fourth and fifth graders viewed RA as more acceptable than physical aggression and evaluated relationally aggressive behaviors more positively than physically aggressive behaviors. In a previous study, Werner and colleagues (2006) also found that the affective responses to relational and physical aggression by mothers of preschoolers were significantly different. They found that mothers were less upset and expressed less anger and sadness in response to children's relationally aggressive behaviors. Mothers have also been found to perceive RA to occur significantly more frequently than physical aggression and assign less responsibility to children engaging in relationally aggressive behaviors than children engaging in physically aggressive behaviors (Werner & Grant, 2009). Finally, mothers are also less likely to use power assertive or stern disciplinary responses to relationally aggressive behaviors than physical aggression (Werner & Grant, 2009). Werner and Grant (2009) conceptualize power assertion and sternness on a continuum with harsh and coercive discipline, and distracting and ignoring misbehaviors on the extremes. Werner and Grant (2009) suggest that there is an optimal level of these two responses such that children learn the socialization message that targeted behaviors are wrong but within a caring and nurturing (non-coercive) relationship.

In a path analysis, Werner and Grant (2009) also found that mothers' responsibility attributions and cognitive beliefs of the acceptability of RA significantly

predicted their disciplinary response of power assertion, which also significantly predicted teacher-rated prosocial behavior and peer acceptance of their daughters. While daughters' RA was not significantly predicted by mothers' disciplinary responses, the relationship was in the proposed direction (i.e., higher levels of maternal power assertion predicting lower levels of daughter's RA). This evidence provides initial support of Dix's (1993) model for the development and maintenance of RA. In this analysis, the evidence from Werner and her colleagues (2006; 2009) suggests that RA is developed over early experiences where parents' low responsibility attributions and cognitive beliefs that RA is more acceptable than physical aggression lead them to enact ineffective disciplinary responses (e.g., low sternness and power assertion) or a non-response. Furthermore, parents' response, or non-response, may contribute to the maintenance of relationally aggressive behaviors in their children who failed to develop benign attribution styles through prosocial socialization processes suggested in Dodge's (2006) model. Therefore, it seems that the two models reviewed may be better conceptualized as combined models, as illustrated in Figure 5.



*Figure 5.* Combined risk model (Dix, 1993; Dodge, 2006).

### **Intervention Theory**

In order to prevent the negative outcomes for relationally aggressive girls and their victims, it is necessary to identify effective interventions. This should be done by first understanding the developmental etiology of RA and then designing interventions to target malleable risk factors, such as children's SIP deficits, parents' cognitions about RA and responses to their daughter's relationally aggressive behaviors. Given that the previous section reviewed the developmental etiology of RA, the next step is to identify empirically-informed intervention practices that target the identified risk factors. To do this, the following section will describe the practices and findings of empirically-evaluated interventions for related constructs (e.g., physical aggression and externalizing

behaviors) that have targeted similar risk factors. Recommendations and initial findings from the existing intervention literature for RA will also be presented.

**Child intervention to improve SIP.** In the reduction of physical aggression and anger problems, cognitive behavior therapy, including attribution re-training and goal setting, has been found to be an effective component of evidence-based interventions, (Hudley & Graham, 1993; Lochman, 1992). In studies of the effectiveness of his *Anger Coping Program* for preadolescent boys, Lochman (1992) has found immediate, seven month follow-up and three year follow-up effects. When compared to untreated aggressive boys, aggressive boys who received the cognitive behavioral intervention, which includes parent training, displayed significantly less parent-reported aggressive behaviors, lower rates of observer's time-sampling of disruptive classroom behavior, and higher levels of self-esteem immediately following treatment (Lochman, Burch, Curry, & Lampron, 1984). Seven months later, treated boys displayed significantly higher levels of on-task classroom behavior and lower levels of passive, off-task behavior when compared to the untreated control group (Lochman & Lampron, 1988). Finally, at a three year follow-up, boys who received the intervention exhibited lower levels of substance use and maintained increases in self-esteem and problem-solving skills. Importantly, following intervention boys in the intervention group displayed aggressive behaviors in the same range as a nonaggressive comparison group indicating clinical significance for the intervention's effects (Lochman, 1992).

The child-centered cognitive behavioral intervention of the *Anger Coping Program* is influenced by Crick and Dodge's (1994) SIP model reviewed previously and targets deficits and distortions in the SIP skills of aggressive children (Lochman, Barry, & Pardini, 2003). Specifically, the intervention targets heightened emotional arousal that may interfere with prosocial SIP through emotional awareness and relaxation training. Hostile attribution biases that may occur in the first two steps of the SIP model are targeted through perspective taking instruction. Impaired planning of a prosocial response (i.e., steps four through six of SIP model) is addressed through social problem solving and social skills enhancement training (Lochman et al., 2003). Although the *Anger Coping Program* is not designed to address RA, the program's targeted risk factors (i.e., SIP deficits) are similar to those that have been identified in the RA literature (Crick & Werner, 1998).

The *Friend 2 Friend Program* (F2F; Leff et al., 2007) is also influenced by Crick and Dodge's (1994) SIP model in that a component of the intervention is aimed at retraining relationally aggressive girls in their attribution styles. The attribution retraining component of the program includes psychological arousal awareness and calming strategies, practice in more accurately evaluating the intentions of others, and practice in generating and evaluating response options. *F2F* is a classroom-based and small group counseling program implemented with third through fifth grade students. Classrooms with at least two peer-nominated relationally aggressive girls are included in the classroom-based instruction while small group sessions with identified relationally

aggressive girls are conducted during lunch time. Initial evidence suggests that relationally aggressive girls in the treatment classrooms and small group counseling exhibited greater decreases in teacher-reported RA immediately following treatment compared to relationally aggressive girls in the control condition (Leff et al., 2009). Girls in the treatment condition also exhibited greater reductions in hostile attributions on a validated measure of RA and ambiguous vignettes following treatment compared to girls in the control condition (Leff et al., 2009).

Evidence from the evaluation of the *Anger Coping Program* and the *F2F* program suggest that similar group-based interventions may be effective in reducing relationally aggressive behaviors. However, evidence also exists that RA begins to emerge at heightened levels during preadolescence (e.g., age 11; Bjorkqvist, Lagerspetz, & Kaukiainen, 1992) and cognitive behavioral interventions are more effective with children assumed to be in the formal operational stage of cognitive development (e.g., age 11 and beyond; Durlak, Fuhrman, & Lampman, 1991). In a meta-analytic review of cognitive behavioral interventions for maladjusted children, Durlak and colleagues (1991) found that the effect size of effective interventions was two times greater for children presumed to be in the formal operational stage than those at less advanced stages (e.g., ages five to 11). Based on this evidence, it may be that interventions targeting relationally aggressive girls in preadolescence and beyond will be the most effective in improving their social information processing skills and reducing relationally aggressive behaviors.

**Parent intervention.** There is strong empirical evidence suggesting that parental cognitions and behaviors contribute to the development and maintenance of problem behaviors such as impulsivity, inattention, defiance, disruptiveness, anger, aggression and antisocial behaviors (Burke, Pardini, & Loeber, 2008). As reviewed previously, research has also shown that maternal cognitions about RA and discipline responses to relationally aggressive behaviors relate to their daughters' levels of teacher-rated RA and predict prosocial behavior (Werner & Grant, 2009). These findings suggest that interventions only targeting *child* processes and deficits may not be effective in generalizing and maintaining behavioral changes because the new behavior will not be expected or reinforced by parents. Thus, parent training programs that target parents' cognitions and behavioral responses to RA may be necessary in effectively reducing girls' relationally aggressive behaviors across multiple settings and over time (Werner & Grant, 2009).

Evidence-based parent training programs that target externalizing behavior problems most generally target parents' behavior management practices, rather than their cognitions about the problem and social information processes. For example, the *Anger Coping Program* reviewed previously includes a parent training component that trains parents in effective behavior management principles such as attending and rewarding appropriate child behaviors, giving effective instructions, using time-out as a removal of reinforcement, and token economies (Lochman et al., 2003).

The *Teen Triple-P* program is part of the evidence-based *Triple P* series of parent training programs, which targets conduct problems in toddlers, preschoolers and primary

school-aged children (Sanders, 1999; Sanders, Markie-Dadds, Tully, & Bor, 2000). The *Teen Triple P* program targets parents whose children are transitioning from preadolescence to the teenage years and into high school, which is around the same age that RA begins to emerge at heightened levels (Bjorkqvist, Lagerspetz et al., 1992). *Teen Triple P* teaches parents developmentally-appropriate behavior management strategies such as parental monitoring, attending to and reinforcing desired behavior, providing engaging activities to spend time with youth, providing logical consequences to unmet requests, and setting up behavior contracts for more resistant problem behaviors (Ralph & Sanders, 2003). Following four sessions of the *Teen Triple P* parenting program, parents reported significant reductions in the frequency of conflict with their teenager and disagreement with their partner over parenting issues (Ralph & Sanders, 2003). Evidence from these parent training programs suggest that effective interventions for reducing relationally aggressive behaviors should provide instruction and an opportunity for parents to learn more effective behavior management strategies.

Furthermore, evidence from literature specific to RA indicates that an effective parent training program should also include instruction to alter parents' normative beliefs and cognitions about RA and their attributions of responsibility in relationally aggressive situations involving their children (Werner & Grant, 2009; Werner et al., 2006). According to findings from Werner and Grant's (2009) study, mothers may be less inclined to respond with actions that punish (e.g., power assertion or sternness) relationally aggressive behaviors due to their normative beliefs about such behaviors. RA

may differ from other problem behaviors in this finding because fewer mothers believe that physical aggression and antisocial behavior is normative or acceptable. Thus, their ineffective parenting practices for managing physical aggression are more a result of not *knowing* more effective strategies and less about not *believing* they need to respond to the behavior. With regards to managing RA, the opposite may be true.

The model illustrated in Figure 5 suggests that because of mothers' normative beliefs about RA, interventions of parent training must also include components that address these maladaptive normative belief patterns and attributions. For example, mothers may perceive RA as more normative than physical aggression because it occurs more frequently in friendship groups and relational contexts than physical aggression. However, parents' cognitions about the acceptability of RA may be changed by providing information about the detrimental and longitudinal outcomes associated with RA. Providing strategies and resources to help parents develop better disciplinary responses to RA and socialization messages may help parents reduce their daughters' relationally aggressive behaviors and hostile attribution styles. Such practices have been recommended in previous literature (Werner & Grant, 2009).

### **Research Questions and Hypotheses**

In light of the research reviewed on the need for an intervention to reduce RA and prevent secondary negative outcomes, as well as the research on what may comprise an effective intervention, the proposed study aims to answer the following research questions:

1. Is a school-based group counseling and parent training intervention for relationally aggressive girls in grades six to eight effective in reducing their relationally aggressive behaviors?
2. Is a school-based group counseling and parent training intervention for relationally aggressive girls in grades six to eight effective in reducing secondary negative outcomes (i.e., depression, loneliness, peer rejection and impulsivity)?
3. If a school-based group counseling and parent training intervention for relationally aggressive girls in grades six to eight is effective in reducing RA, what are the mechanisms of change?

Based on the review of literature identifying the risk factors and pathways to development of RA, as well as findings from related interventions and recommendations of developmental researchers, it is hypothesized that an effective intervention for reducing RA in girls should include the following components, 1) school-based group counseling curriculum that incorporates cognitive behavior therapy, attribution retraining, and goal setting and 2) cognitive behavior and behavior management training for parents (see Intervention Model in Figure 6). It is also hypothesized those receiving intervention will exhibit significantly lower secondary negative outcomes including depression, loneliness, peer rejection and impulsivity following intervention when compared to a waitlist, control group.

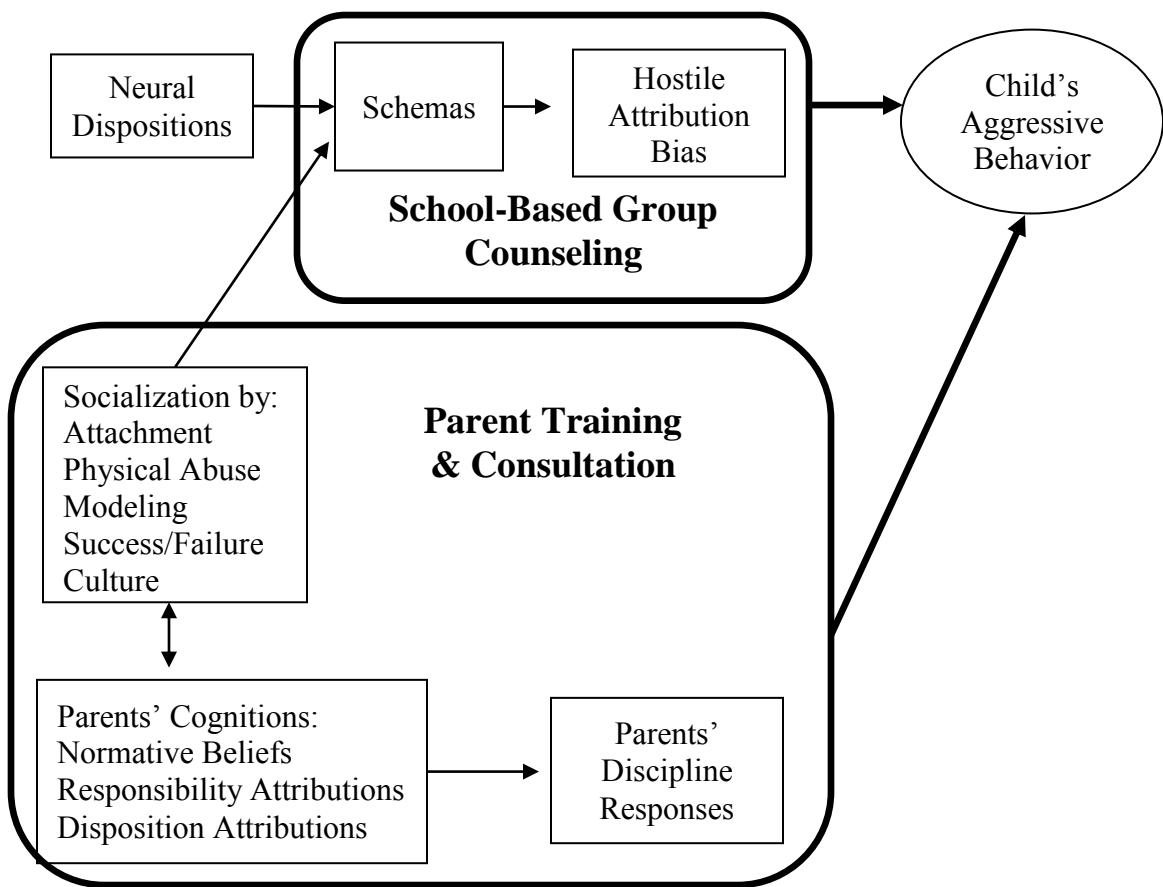


Figure 6. Multi-modal intervention model to reduce relational aggression.

## **Chapter 3: Methods**

### **Research Design**

A randomized controlled design including intervention and waiting list control groups with measurement at pretest and posttest was used in this pilot study (Kazdin, 1998). The study began in January 2010 and final data collection was completed in February 2011. A 10-week intervention was implemented four times during the course of two distinct time periods between January 2010 and February 2011, including January 2010 through March 2010 and October 2010 through January 2011. Participants randomized to the waitlist control group during the first implementation period (i.e., January 2010 through March 2010) were included in the intervention group during the October 2010 through January 2011 implementation. However, participants randomized to the waitlist control group during the October 2010 through January 2011 implementation period received intervention between February 2011 and March 2011, but were not included in the current study's intervention group due to limited time and funding. Students from two middle schools representing rural (Southern Boone Middle School, Southern Boone School District) and suburban (Lange Middle School, Columbia Public School District) communities in a Midwestern state participated in the study (see Appendix A for letters of support). The number of students recruited for participation, final sample sizes and demographic data are reported in the following section.

### **Participants**

Through the referral procedure, described below, a total of 92 (45 at Southern Boone Middle School and 47 at Lange Middle School) female students were identified as eligible for the study and targeted for recruitment. A total of 33 female students in grades 6 to 8 and their families enrolled in the study and were randomized to an intervention or waitlist control condition. The participants ranged in age from 12 years 3 months to 15 years 2 months at pretest. Eligible participants were identified through a teacher-school counselor nomination procedure described in the following section. However, in order to prevent duplication of services and introduction of additional known variables or stressors associated with the target population, female students who were already receiving outside psychological services, known by school staff to be pregnant, receiving special education services due to cognitive or developmental delays, and/or wards of the state were excluded from the study.

A demographic comparison of all participants who enrolled in the study across treatment groups (Control and Intervention columns) and study completion (Completed and Withdrawn columns) is provided below in Table 1. As illustrated, intervention and control participants were similar across the distribution of grade level, participant and caregiver's race, and household compositions. Differences are noted in participant's age and free/reduced lunch status where control participants tended to be younger than intervention participants and paid full price for their lunch at school.

Following enrollment, six of the 33 participants voluntarily withdrew from the study. Five of the six participants who did not complete the study were in the intervention group and withdrew prior to the third group counseling session. The sixth

participant who withdrew was randomized to the waitlist control group during the initial recruitment period (January 2010) and decided not to participate in the intervention group before the intervention began in October 2010. Participants who withdrew cited conflict with important coursework and discomfort in the counseling group as reasons for withdrawing. Demographic data in Table 1 suggests that participants who completed the study are similar to participants who withdrew in age, grade level, participant and caregiver's race, free/reduced lunch status and household composition.

Table 1

*Demographic Comparison of Enrolled Participants across Treatment Group and Intervention Completion Status*

	Enrolled Participants	Control	Intervention	Completed	Withdrawn
<b>Participant's Age*</b>					
12:0- 12:11	57.6% (19)	75.0% (9)	37% (10)	63.0% (17)	33.3% (2)
13:0-13:11	33.3% (11)	25% (3)	48% (13)	29.6% (8)	50.0% (3)
14:0-14:11	6.1% (2)	0	11.1% (3)	3.7% (1)	16.7% (1)
15:0-15:5	3.0% (1)	0	3.8% (1)	3.7% (1)	0
<b>Participant's Grade Level*</b>					
6	9.1% (3)	25% (3)	0	11.1% (3)	0
7	78.8% (26)	75% (9)	74.1% (20)	77.8% (21)	83.3% (5)
8	12.1% (4)	0	25.9% (7)	11.1% (3)	16.7% (1)

Participant's Race					
White	57.6% (19)	66.7% (8)	63% (17)	55.6% (15)	66.7% (4)
African American	15.1% (5)	8.3% (1)	14.8% (4)	18.5% (5)	
Multiracial	9.1% (3)	8.3% (1)	7.4% (2)	11.1% (3)	
Unknown	18.2% (6)	16.7% (2)	14.8% (4)	14.8% (4)	33.3% (2)
Caregiver's Race					
White	63.6% (21)	75% (9)	66.7% (18)	63.0% (17)	66.7% (4)
African American	15.2% (5)	8.3% (10)	14.8% (4)	18.5% (5)	
Latino	3.0% (1)	0	3.7% (1)	3.7% (1)	
Unknown	18.2% (6)	16.7% (2)	14.8% (4)	14.8% (4)	33.3% (2)
Free/Reduced Lunch Status					
Free or Reduced	39.4% (13)	25% (3)	40.7% (11)	40.7% (11)	33.3% (2)
Full Price	42.4% (14)	58.3% (7)	44.4% (12)	44.5% (12)	33.3% (2)
Unknown	18.2% (6)	16.7% (2)	14.8% (4)	14.8% (4)	33.3% (2)
Household Composition					
Biological Parents (& siblings)	24.2% (8)	33.3% (4)	25.9% (7)	22.2% (6)	33.3% (2)
Biological mom only (& siblings)	24.2% (8)	8.3% (1)	22.2% (6)	25.9% (7)	16.7% (1)
Shared custody	6.1% (2)	8.3% (1)	7.4% (2)	3.7% (1)	16.7% (1)

Blended Family	21.2% (7)	33.3% (4)	22.2% (6)	25.9% (7)	0
Adopted or Foster Parents	6.1% (2)	0	7.4% (2)	7.4% (2)	0
Unknown	18.2% (6)	16.7% (2)	14.8% (4)	14.8% (4)	33.3% (2)

\*Participants' age and grade level at the time of their enrollment in the study is reported

in the Enrolled Participants, Completed and Withdrew columns. Participants' age and grade level at the beginning of the intervention or control period are reported in the Intervention and Control columns, respectively.

Table 2 provides a comparison of relationally aggressive behavior problems and parent involvement across participants who enrolled in the study as rated by school counselors through the teacher-school counselor nomination procedure described in the next section. Parent involvement was ranked from one (poor and/or negative involvement) to three (positive and sufficient involvement). This data suggests that the involvement of intervention participants' caregivers as rated by their school counselor does not seem to differ greatly from the involvement of control participants' caregivers. Similarly, the caregiver involvement of participants who completed the study does not seem to differ greatly from the caregiver involvement of enrolled participants who withdrew.

Severity of relationally aggressive behaviors demonstrated by referred students was also rated by school counselors from 1 (somewhat relationally aggressive) to 3 (very relationally aggressive) and is displayed in Table 2. A comparison of participants randomized to the intervention and control groups indicates that more control participants

were rated as a 2 (relationally aggressive) by their school counselors while more intervention participants were rated as a 3 (very relationally aggressive). This trend is similar to other trends across pretest levels of RA that are discussed more below as well as in the Discussion chapter. A comparison across participants who completed the study and those who withdrew also appears unbalanced. Five of six participants who withdrew were rated as very relationally aggressive by their school counselors whereas participants who completed the study were rated nearly equally across the ratings of relationally aggressive and very relationally aggressive. This suggests that participants rated as very relational aggressive may have been more likely to withdraw from the study than those rated as relationally aggressive by their school counselors.

Table 2

*Comparison of Parent Involvement and Severity of RA Rankings of Enrolled Participants across Treatment Group and Intervention Completion Status*

Enrolled Participants	Control	Intervention	Completed	Withdraw
<b>Parent Involvement Ranking</b>				
1 (Poor Involvement)	3.0% (1)	0	3.7% (1)	3.7% (1)
2 (Some Involvement)	21.2% (7)	25.0% (3)	22.2% (6)	18.5% (5)
3 (Good Involvement)	69.7% (23)	66.7% (8)	70.4% (19)	74.1% (20)
Unknown	6.1% (2)	8.3% (1)	3.7% (1)	16.7% (1)
<b>Severity of RA Ranking</b>				

1 (Somewhat Relationally Aggressive)	6.1% (2)	8.3% (1)	3.7% (1)	7.4% (2)	0
2 (Relationally Aggressive)	33.3% (11)	58.3% (7)	37.0% (10)	40.7% (11)	0
3 (Very Relationally Aggressive)	57.6% (19)	33.3% (4)	55.6% (15)	51.9% (14)	83.3% (5)
Unknown	3.0% (1)	0	3.7% (1)	0	16.7% (1)

### Test of Randomization

In order to determine the success of randomization, paired sample t-tests were conducted with each pretest measure of relationally aggressive behaviors as well as school counselors' rankings of parent involvement. Results, reported in Table 3, indicate there are no significant differences between control and intervention participants' relationally aggressive behaviors and parent involvement at pretest. Relationally aggressive behaviors were reported by participants (Self-Report of RA), school counselors and teachers on a scale of 1 (never) to 5 (all the time; see Appendices B and C). It is important to note that levels of RA tended to be higher in the intervention group than control group across all three pretest measures. This difference however is not statistically significant. Additionally, levels of parent involvement as rated by school counselors were not significantly different across treatment groups.

Table 3

*Pretest levels of RA and Parent Involvement across Treatment Groups*

	Control Mean	Intervention Mean	T	dF	p
Pretest Self Report of RA (CSBS-S)	1.80 (0.72)	1.92 (0.73)	-0.47	37	0.64
Pretest School Counselor Report of RA (CSBS-T)	3.07 (1.26)	3.24 (1.15)	-0.38	34	0.71
Pretest Teacher Report of RA (CSBS-T)	2.87 (1.17)	3.23 (1.23)	-0.87	37	0.39
Severity of RA Ranking	2.18 (0.60)	2.52 (0.58)	-1.581	34	0.12
Parenting Involvement Ranking	2.73 (0.47)	2.69 (0.55)	0.184	35	0.86

Note. \*p<.05, \*\*p<.01. Standard Deviations appear in parentheses below means.

## Procedures

**Teacher-school counselor nomination procedure.** Participants were referred through a teacher-school counselor nomination procedure that included ratings for RA and family involvement. The researcher met with teachers during regularly scheduled team meetings to provide an overview of the study and ask for student referrals. Teachers were provided with a description of RA adapted from an existing measure of RA (Children's Social Behavior Scale- Teacher Report; Crick, 1996) and a list of female students on their class rosters. A list of exclusionary criteria was also provided, including suspected drug use, involvement with juvenile authorities, behavioral patterns of significant physical aggression, and significant social-emotional and/or health concerns beyond the scope of the intervention. Teachers identified students who met the provided description by highlighting student names on the rosters. A list of all students highlighted was compiled and provided to the school counselor, who then ranked the students in order of levels of RA and family involvement on a three-point scale with three

indicating high levels of RA and high family involvement. School counselors based their rankings on frequency of referrals for relationally aggressive concerns and frequency of contact with the student's family. Ratings for family involvement were included to allow the researchers to recruit relationally aggressive participants as well as engaged caregivers. Recruiting families more involved with their child's education was hypothesized to increase the likelihood that the caregivers would attend parent training workshops and respond to phone consultation calls. Given the study's pilot nature, it was important to maximize involvement in the intervention.

The teacher-school counselor nomination procedure was developed in collaboration with school counselors over the course of two iterations of intervention. Previous empirical literature has used and suggested a peer-nomination procedure utilizing measures such as the Children's Social Behavior Scale- Peer Report (CSBS-P; Crick & Grotpeter, 1995) to identify relationally aggressive girls (e.g., those most nominated by peers for engaging in relationally aggressive behaviors). Peer nomination is suggested because of the covert nature of RA indicating that peers may have more insight into children who are relationally aggressive than adults who are generally less privy to such interactions. However, there are also significant ethical and practical concerns to be considered (Young, Boye & Nelson, 2006). Eliciting peer nominations for a negative behavior such as RA may put students at risk when confidentiality is broken, victims fear retribution for reporting who bullies them, or aggressors feel rejected or criticized after word spreads that they were nominated by several of their peers (Young et al., 2006). Practically, implementing a peer nomination procedure in a school setting is

difficult due to the time such methods take away from students' learning and requirement of parental consent. According to personal interviews with school counselors involved with previous iterations of GIRLSS, the recommended peer nomination procedures were not deemed practical or feasible for practitioners to implement in this real world setting (R. LeCure and A. Olvera, personal communication, October 7, 2009).

Ethical, practical and transportability issues are important considerations when designing and testing an intervention. In this case, the peer nomination procedure did not seem feasible and went against feedback from school personnel. The teacher-school counselor nomination procedure is more likely to be used in this practice setting. Its use in the current study allowed for a more thorough evaluation of the effectiveness of the intervention with a population most likely to receive the intervention in a real world setting.

**Recruitment and informed consent.** Students were recruited based on the school counselor's rankings of RA and family involvement with priority given to RA rankings. More specifically, the referral lists from the teacher-school counselor nomination procedure were re-organized based on the school counselor's rankings in the following order 1) very relationally aggressive and good parent involvement, 2) very relationally aggressive and some parent involvement, 3) relationally aggressive and good parent involvement, 4) relationally aggressive and some parent involvement, 5) very relationally aggressive and poor parent involvement, 6) relationally aggressive poor parent involvement, 7) somewhat relationally aggressive and good parent involvement, 8)

somewhat relationally aggressive and some parent involvement, 9) somewhat relationally aggressive and poor parent involvement, and 10) unknown.

Flyers and phone calls from school counselors were used to recruit participants. During Spring 2010 recruitment at Southern Boone Middle School, flyers describing the study and intervention were mailed home to all referred students. The school counselor also called caregivers of referred students to describe the study and obtain verbal assent to be contacted by the researcher. Phone calls were made in the order of the re-organized teacher-school counselor nomination list such that female students with the highest levels of RA and family involvement were targeted first for recruitment. During Fall 2010 recruitment at Lange Middle School, only phone calls were made by the school counselor to the caregivers of referred students starting from the top of the re-organized nomination list. The flyers were not sent home because of significant negative feedback from caregivers who received the flyer during Spring 2010 recruitment and the preferences of the school district.

Once verbal assent was granted, the researcher contacted the caregiver by phone to provide additional information about the study and schedule a home visit for interested families (see Appendix D). During the home visit, the researcher explained the consent and assent forms to the caregiver(s) and youth and answered any questions. When the informed consent and youth assent forms were signed (see Appendices E and F), the researcher administered the pretest measures. The school counselor and researcher stopped calling caregivers of referred students once the recruitment targets were met during each trial. During the Spring 2010 trial, the recruitment target was 14, including

seven intervention and seven waitlist control participants. The recruitment target for the Fall 2010 trial was 19, including 14 intervention and five control participants in addition to the seven intervention participants from the Spring 2010 waiting list control group.

**Randomization.** Once the recruitment targets were met and parental consent and youth assent were obtained from all enrolled participants during each recruitment cycle, participants were randomly assigned to an intervention or waitlist control condition using a random number generator (<http://www.random.org>).

**Data collection.** Data regarding relationally aggressive behaviors, internalizing problems, externalizing problems, emotional symptoms, and mechanisms of change (attribution styles, normative beliefs about RA, and parenting practices and styles) was collected prior to the intervention (pretest) and immediately following conclusion of the intervention (posttest). Pretest data was collected within four weeks of the beginning of the intervention and posttest data was collected two to six weeks following conclusion of the intervention. For participants in the Spring 2010 intervention group, data was also collected six months following posttest (delayed posttest).

Data was collected from student participants, caregivers, teachers and school counselors at each data collection time point. Measures for caregivers were completed during home visits. Measures for student participants were completed during home visits or at their school during school hours, based on the scheduling preference of their caregiver. Caregivers received a five dollar gift certificate to a local restaurant each time they completed data collection. Teacher and school counselor measures were distributed in their work mailboxes and collected by the school counselor. Teacher reporters were

identified during the referral process by asking grade-level teaching teams to designate one teacher on their team as a reporter for each student referred. Identified teachers were those who had the most contact with the student and purported to have a neutral perspective of the student. Teachers and school counselors were not monetarily compensated for their time completing the measures. However, treats were provided by the researcher to all teachers in the teacher's lounge during each round of data collection to show appreciation.

### **Intervention Development and Design**

The current study is an initial test of efficacy of the GIRLSS (*Growing Interpersonal Relationships through Learning and Systemic Supports*) intervention. GIRLSS is a 10-week intervention including school-based group counseling (*Learning*), and parent training and consultation (*Systemic Supports*). As described below, it was developed over multiple iterations and is designed to target the empirically-identified risk factors related to RA described previously in Chapter 2 (see Figure 6).

In the following sections, a description of the iterative development and clinical nature of GIRLSS, as well as the training and supervision of graduate clinicians who implemented the intervention, is provided. Each component of GIRLSS is also described including its theoretical basis, lesson topics and key activities. Data regarding implementation fidelity and social validity of each intervention component is also presented.

**Iterative development and clinical nature of GIRLSS.** The development of GIRLSS began in Spring 2009 with a small group (N=5) of 9<sup>th</sup> grade students at Southern

Boone High School. During this iteration, only a counseling group was implemented and the curriculum was based primarily on *Relational Aggression in Girls*, a curriculum developed by Kupovits (2008) and published by Youthlight, Inc. Following this iteration, anecdotal feedback from group members and school counselors was sought and merged with insight from the group leaders to make modifications and add components to the intervention model. In Fall 2010, the parent workshops and some phone consultation was added to the model. Two intervention groups were implemented across the Southern Boone High School and Middle School. For this iteration, the reliance on the Kupovits (2008) curriculum was reduced significantly in the group counseling curriculum. Again, feedback from participants and school counselors was merged with insight from group leaders to inform modifications to the intervention curricula.

Modifications were finalized in December 2009 and the same manualized curricula for both the student and caregiver components were implemented throughout the current study, including Spring 2010 and Fall 2010. Although there was a need to implement GIRLSS in the same manner across all intervention groups, this was always balanced with the clinical concerns and needs of participants and caregivers. Few alterations in the manualized curriculum were necessary to better met the clinical needs of participants and caregivers. Those that did occur are described in the Implementation Integrity sections of each intervention component.

**GIRLSS co-leaders and supervisors.** All intervention groups were led by at least two graduate clinicians enrolled in practicum at the MU Assessment and Consultation Clinic (n=6) or the School Counseling Practicum at Stephens College (n=1)

and completing advanced degrees in the fields of School Psychology, Counseling Psychology, School Counseling or Community Counseling Psychology. Graduate clinicians participated in three to four hours of initial training before each intervention group began as well as 1.5 hours of weekly training and supervision during the course of the intervention. Training and weekly supervision meetings were conducted by the primary researcher; however, all graduate clinicians, including the primary researcher, also received direct supervision by Dr. Connie Brooks, Licensed Psychologist. Training included a review of the theoretical basis of GIRLSS and associated key activities (e.g., Thoughts-Feelings-Action role-plays), intervention components and necessary clinical skills. Graduate clinicians read related literature, watched videotapes of key activities, and role-played specific clinical skills during the initial training phase.

To prepare for weekly supervision meetings, graduate clinicians identified questions and concerns from the previous counseling session and read upcoming lesson plans. For most sessions, graduate clinicians also watched short clips of key activities included in the upcoming lesson plan from previous groups. During weekly supervision meetings, graduate clinicians and the primary researcher reviewed the previous sessions and made plans for addressing concerns during the next session. Preparation for the upcoming session included reviewing the lesson plan, responding to questions and concerns, and role-playing key activities and/or difficult discussions. Graduate clinicians were also responsible for preparing for and delivering counseling sessions and parent workshops, writing weekly progress notes, completing fidelity checklists, bringing

necessary materials to sessions and workshops (e.g., video camera and tripod, session handouts and snacks), and completing assigned parent consultation phone calls.

### **GIRLSS Group Counseling**

The group counseling component of the GIRLSS intervention included a 10-week curriculum that drew from principles of cognitive behavior theory and attribution retraining. The curriculum (see Appendix G) was delivered weekly during school hours for one hour and 10 minutes outside of core classes by trained graduate clinicians from the MU Assessment and Consultation Clinic's (MU ACC) Interdisciplinary Child and Family (ICF) Practicum. It is designed to target steps of the SIP sequence (Crick & Dodge, 1994), including helping participants identify provocative and ambiguous situations (i.e., step one), reduce attribution biases (i.e., step two), recognize and regulating emotional response (i.e., step three), increase the number of appropriate behavioral response options identified (i.e., step four), and increase awareness of relationally aggressive behaviors and immediate negative outcomes (i.e., step five). By targeting these factors in the SIP sequence, the curriculum was intended to reduce relationally aggressive behaviors and increase prosocial behaviors.

The group counseling curriculum includes topics such as awareness of RA; defining normative beliefs about RA; identifying thoughts, feelings and actions associated with RA; identifying physiological signs of emotional arousal; using self-talk strategies to reframe hostile thoughts and negative self-talk statements; training in empathy and perspective taking; practicing assertiveness skills; and goal setting to help participants reduce relationally aggressive behaviors and improve their friendships.

These topics were taught through the use of interactive discussions, media-based examples, role-plays, journaling and weekly goal setting. The curriculum assigned weekly journal prompts that were reviewed at the beginning of each session and included weekly goal setting related to each session. Participants were encouraged to make their goals specific, achievable and measurable and were asked to check-in with their goal partner (i.e., their school counselor) prior to coming to group each week. The school counselors served as participants' goal partners by staying updated on the progress of the group (e.g., weekly topics), helping participants operationalize their goals, processing participants' successes and challenges to meeting their goals each week, and helping participants practice strategies learned in the group to overcome challenges to meeting their goals.

In order to promote prosocial behaviors and meaningful participation during the counseling group, a clearly designed and intentionally delivered behavior management program was employed based on the recommendation of previous research (Fisher & Chamberlain, 2000; Rhule, 2005). Prosocial behaviors were reinforced and encouraged through a strictly followed group contingency system wherein participants earned marbles for following rules (e.g., arriving on time, listening to others), contributing (e.g., sharing ideas or asking questions) and completing assigned work (e.g., checking in with their goal mentor, completing journal prompt). Each session participants set a goal for the number of marbles they thought they could earn and they earned a reward during the fifth and tenth sessions if they achieved their marble goal each session leading up to the reward session. Clear and consistent behavior management strategies have been

employed successfully in previous interventions with deviant youth, including multidimensional treatment foster care (Fisher & Chamberlain, 2000) and the Family-Home Program used by Boys and Girls Town (Handwerk, Field, & Friman, 2000).

In a group setting with adolescent girls who are not only relationally aggressive but also likely have low self-esteem and internalizing behavior problems, it is import to prevent both peer reinforcement of aggressive behaviors and rumination (Dishion, McCord & Bank, 1999; Rose, 2002). Previous research suggests several strategies for preventing deviancy training and co-rumination, including involving parents, providing continuous training, supervision and evaluation of intervention staff, and decreasing opportunities for peer reinforcement of problematic behaviors during group (Fisher & Chamberlain, 2000; Handwerk et al., 2000; Henggeler & Sheidow, 2003; Rhule, 2005). The involvement of parents to encourage increased and improved supervision and monitoring is described in the following section *GIRLSS Parent Training and Consultation*. The previous section *GIRLSS co-leaders and supervisors* described the training and supervision of GIRLSS staff including close monitoring and discussion of participant group member behaviors during supervision meetings.

To reduce opportunities for peer reinforcement each session sought to limit participants' down time. This included providing brief activities and/or discussions as participants arrived, posting and reviewing the agenda for each session, group leaders monitoring small group activities, and being organized (e.g., having all materials ready for upcoming activities before each session). Following previous research suggesting cognitive-behavioral, structured groups are more effective in reducing the potential for

deviancy training and long-term outcomes for antisocial youth than process groups, the GIRLSS group counseling component included a clearly outlined curriculum with process discussions that were structured and closely monitored by group co-leaders (Hardwerk et al., 2000; Rhule, 2005). Specific rules of the group also limited opportunities for peer reinforcement of problem behaviors. For example, participants were not allowed to share details of personal stories or use the names of real people in their examples during the group. If they wanted help with a problem they could discuss it individually with a group leader before or after the group, but since the group time was so structured there was not enough time for personal problems nor was it an appropriate forum to share all details.

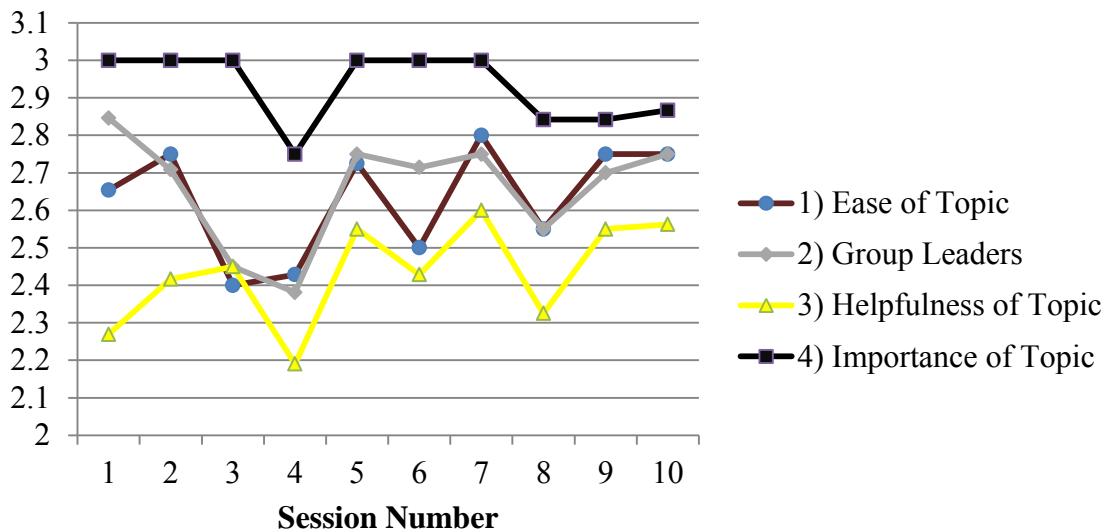
**Dosage.** Attendance to each of the 10 group counseling sessions was tracked by co-leaders at the beginning of each session and confirmed through review of progress notes written for each group member following each session. Forty-one percent of participants, or nine of 22, attended all 10 group counseling sessions. Most participants attended at least nine of 10 sessions (82 percent of participants).

**Implementation Integrity.** The degree to which each session was implemented as intended was monitored through self-reported fidelity checks and supervisor evaluations. Graduate clinicians co-leading the group counseling sessions completed a fidelity checklist following the session and videotaped the session. Supervisors reviewed more than 60 percent of the videotaped sessions and completed the same fidelity checklist to ensure reliable reporting (see Appendix H for fidelity checklists). Fidelity checklist items included questions regarding implementation of the behavior management

system, review and assignment of journal homework, review of goal progress and setting new goals, and followed content of each lesson (e.g., implemented specific lesson plan activities). Based on findings from similar interventions (Leff et al., 2009), acceptable levels of fidelity in the current study were set at or above 80 percent for all intervention components. A review of these checklists for the counseling groups indicated that 92.5 percent of sessions were implemented with fidelity (at or above 80 percent implementation). Those sessions below the acceptable fidelity threshold included one session cut short due to a school-wide assembly and two sessions altered due to participants' resistance and clinical needs.

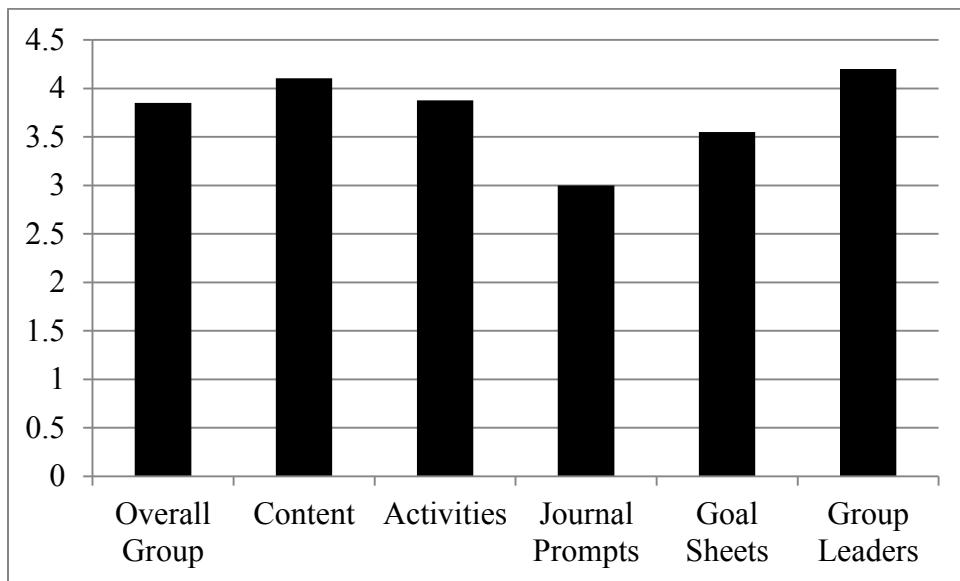
**Social Validity.** Feedback from participants regarding usefulness and quality of the session was collected following each session using four multiple choice questions (Appendix I), including: 1) I think what the group leaders were teaching us was...(3=easy to figure out, 2=pretty easy, 1=hard), 2) I think the group leaders did a good job leading our group (3=totally agree, 2=agree somewhat, 1=disagree), 3) I think what I learned today was...(3=very helpful, 2=helpful, 1=not helpful), and 4) I think that what we talked about as a group was... (3=important and worth talking about, 1=Not worth talking about). Data from the weekly feedback forms is graphed in Figure 7 and indicates that participants generally thought the session topics were fairly easy to figure out and important. Participants also felt the group leaders did a good job during most sessions. However, participants' perception of the group topic dropped during sessions four and eight indicating that participants felt the topics were harder to understand, less helpful and less important than other session topics. Session four included a lengthy discussion

structured by a motivational interviewing technique that elicited the pros and cons of being relationally aggressive and the pros and cons of changing relationally aggressive behaviors. The data presented in Figure 7 indicates that this session may have been particularly problematic and unacceptable to participants. Further, participants' perception of the group leaders dropped during sessions two thru four. From the data, it seems that participants began and ended the group with positive feelings towards the group leaders, but following the first session their perception dropped as they continued to build rapport and establish norms in the group. As the group built trust and moved into the working stages, the group leaders were again viewed more positively by participants in sessions five through 10. Session eight was mostly discussion and some individual work that may have been difficult for some participants. The individual work asked participants to apply several strategies related to the thoughts, feelings and actions sequence to a personal situation. The handout and activity were confusing to many participants likely leading some to feel the session's topic was less helpful or less accessible as other sessions.



*Figure 7.* Average session social validity ratings.

Summative evaluation (Appendix J) data regarding the acceptability of all 10 weeks was also collected. Each question was rated on a 5-point scale with 5 being excellent and 1 being poor. As illustrated in Figure 8, participants' responses indicated good to very good perceptions of the overall group, content, activities and group leaders. Interestingly, participants rated the journal prompts and goal sheets lower than other areas. However, group leaders reported anecdotally that few participants completed these homework tasks prior to the following session.



*Figure 8.* Average summative group evaluation ratings.

### **GIRLSS Parent Training and Consultation**

Two parent training workshops were offered during the middle of the group counseling intervention, and parents were contacted by phone biweekly throughout the intervention to provide consultation. The workshops included activities to: 1) improve parents' awareness of and normative beliefs about RA and associated negative outcomes; 2) teach and support implementation of techniques and disciplinary responses to reduce parental reinforcement of RA (e.g., non-response or ineffective responses); 3) model appropriate behavior monitoring and supervision; and 4) provide information about what child participants were learning through the group counseling curriculum along with ideas of how to support their learning at home. Activities included in the workshop were didactic lectures; interactive process discussions; media-examples; self-evaluation of knowledge, beliefs and disciplinary responses; and role-plays (see Appendix K for parent workshop curriculum).

In addition to the parent training workshops, family consultants called each family biweekly to introduce the intervention, provide information about the group counseling curriculum and how it could be supplemented at home, remind parents about the parent training workshops, process discussions of what was learned from the workshops, and problem solve to help parents implement strategies learned (see Appendix L for outlines of the parent phone consultation curriculum). The parent training workshops and consultation phone calls were conducted by trained graduate clinicians. Similar to the group counseling curriculum, the graduate clinicians delivered the parent training workshops and consultation phone calls under the supervision of the researcher and a licensed psychologist.

**Dosage.** Attendance to each of the workshops and contact for each consultation phone call was documented by GIRLSS group co-leaders. Sixty-four percent of student participants were represented by at least one caregiver at one or more workshops and 41 percent attended both. With regards to parent consultation, four phone calls were scheduled and outlined for each caregiver resulting in a total of 88 expected phone calls (4 calls per caregiver x 22 participants). Co-leaders called caregivers no more than 2 times for each scheduled phone call and left messages following the second attempt. Sixty-three of the 88 (71.6 percent) scheduled phone calls were completed.

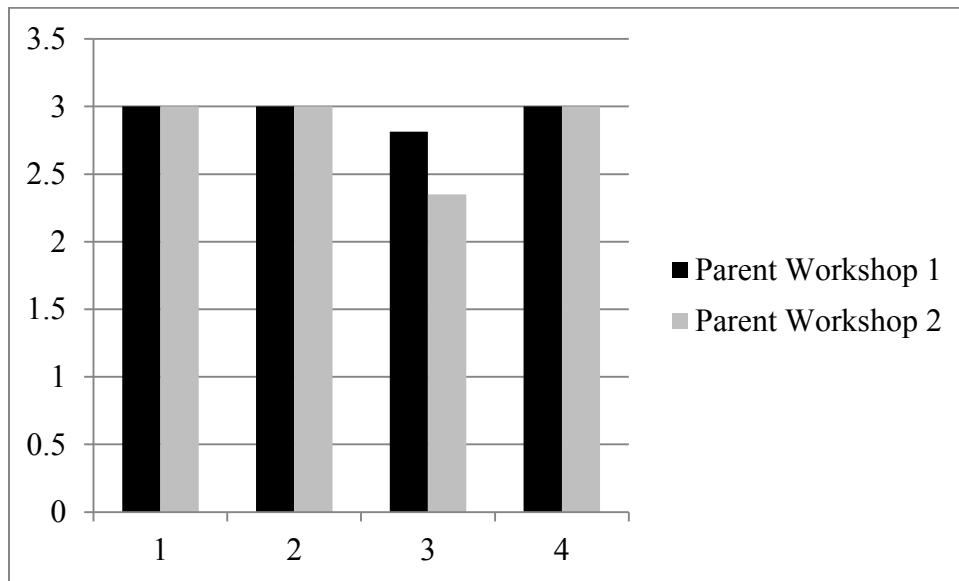
**Implementation Integrity.** The degree to which each workshop was implemented as intended was monitored through self-reported fidelity checks and supervisor evaluations. Graduate clinicians co-leading the workshops completed a fidelity checklist following the workshop and videotaped the meeting. Supervisors

reviewed each video recording (100 percent) and completed the same fidelity checklist to ensure reliable reporting (see Appendix M for fidelity checklists). Items on the fidelity checklist for the parent training workshops included questions regarding specific components of the lesson plan, provision of refreshments and handouts, note taking and summarization for group, role-playing and positive reinforcement strategies. As stated previously the threshold of acceptable fidelity was set at or above 80 percent based on reports of similar interventions (Leff et al., 2009). Approximately 88 percent of workshops, or seven out of eight, were implemented with fidelity. The one workshop not implemented as designed was only attended by two caregivers and was therefore altered to meet their needs and the context. For example, role-plays of caregivers reinforcing strategies from the group were supposed to be presented by group leaders first and then by asking for volunteers from the attending caregivers. However, because of the low attendance and potential for isolation by asking for volunteers, only the first role-play was demonstrated by group leaders and the remaining role-plays were discussed in terms of the strategy being reinforced and personal examples.

The implementation integrity of the parent consultation phone calls was monitored through self-report checklists completed by group co-leaders following each completed call. The fidelity checklists for these phone calls included items to ensure that content from the group counseling session was conveyed to caregivers, reminders about upcoming parent workshops were given, generalization strategies for home were discussed, and parents were able to ask questions and express concerns (see Appendix L). Eighty-nine percent of the completed consultation phone calls, or 56 out of 63, were

completed with fidelity. During the remaining phone calls, group co-leaders forgot to remind caregivers about upcoming parent workshops and/or inform the caregiver of when they would be contacted again.

**Social Validity.** Feedback from caregivers regarding the usefulness and quality of each workshop was collected using the same four multiple choice questions asked following each group counseling session (see Appendix I). As shown in Figure 9, caregivers thought the material was easy to figure out and important across both workshops. Caregivers also thought the group leaders did a good job leading each workshop. With regards to the helpfulness of the workshop topics, caregivers rated workshop one in the very helpful range and workshop two in the helpful range.



*Figure 9.* Average parent training workshop ratings.

## Measures

Outcome measures evaluated the effectiveness of the intervention in reducing primary (i.e., research question one) and secondary outcomes (i.e., research question two).

**Primary measures.** *Relationally aggressive behaviors.* Measures were administered to participants as well as their teachers and school counselors to assess participants' levels of relationally aggressive behaviors. The *Children's Social Behavior Scale- Self* (CSBS-S; Crick & Grotjeter, 1995) and *Teacher report* (CSBS-T; Crick, 1996) measured three behavioral domains, including RA, overt aggression and prosocial behaviors. The CSBS-S included 15 items distributed across six subscales, including RA, physical aggression, verbal aggression, prosocial behaviors, inclusion and loneliness. Items were rated on a five-point frequency scale of 1 (never) to 5 (all the time; see Appendix B). The CSBS-S took 10 to 15 minutes for participants to complete and has shown high levels of internal consistency and reliability (i.e., Cronbach's alpha ranged from .66 to .82 for each subscale, with .73 for the RA subscale; Crick & Grotjeter, 1995). Previous research has also found that teacher-identified, overtly aggressive children reported higher levels of physical aggression on the CSBS-S relative to their peers (Crick & Grotjeter, 1995). This finding supports the construct validity of the CSBS-S.

The CSBS-T included 13 items distributed across three subscales, including RA, physical aggression and prosocial behavior (see Appendix C). Items on the CSBS-T were rated on a five-point frequency scale of 1 (never true) to 5 (almost always true). It took 10 minutes for teachers and school-based staff to complete and has been shown to be internally reliable (i.e., Cronbach's alpha equal to .94, .94, and .93 for the RA, overt

aggression and prosocial behavior, respectively). The CSBS-T has also been shown to correlate significantly with peer reports of boys ( $r = .57$ ,  $p < .001$ ) and girls ( $r = .63$ ,  $p < .001$ ) who were peer-nominated and/or teacher identified as relationally aggressive (Crick, 1996). Crick and Grotpeter (1995) report that all of the CSBS scales have been found to be internally reliable (i.e., Cronbach's alpha ranging from .82 to .89 for RA and .94 to .97 for overt aggression) and have high test-retest reliability over a four week period (i.e.,  $r = .82$  for the RA scale and  $r = .90$  for the overt aggression scale). The CSBS-S and CSBS-T (teacher and school counselor forms) were used to test the study's first hypothesis. Intervention status was expected to significantly predict posttest levels of self, teacher and school counselor-reported RA as measured by the CSBS-S and CSBS-T. Specifically, it was hypothesized that status in the intervention group would significantly predict lower posttest levels of RA than the control group.

***Knowledge of relational aggression and GIRLSS.*** The *Revised Relational Aggression Knowledge and Belief Scale-Student* (Revised RAKBS-S) and *Parent* (Revised RAKBS-P) measured participants' and parents' knowledge about RA and the GIRLSS curriculum (see Appendix N). It was based on a clinical evaluation of the *Relational Aggression in Girls* curriculum created by Kupkovits (2008) but modified based on the specific curriculum content of the GIRLSS group counseling and parent training intervention. The Revised RAKBS-S and Revised RAKBS-P both include 42 multiple choice questions requiring participants approximately 20 minutes and parents approximately 15 minutes to complete. No data on the reliability or validity of this measure is available as this was the first time it was used for research purposes. Due to

the current study's small sample size, there is not yet enough data to analyze the psychometric properties of the Revised RAKBS-S or Revised RAKBS-P. It was hypothesized that intervention status would significantly predict posttest knowledge of RA and the GIRLSS curriculum as measured by the Revised RAKBS-S and Revised RAKBS-P. Specifically, it was hypothesized that participation in the intervention would lead to increased knowledge of RA and the GIRLSS curriculum.

**Secondary measures. *Externalizing and internalizing behavior problems.*** The *Behavior Assessment System for Children-2<sup>nd</sup> Edition* (BASC-II; Reynolds & Kamphaus, 2004) is a multidimensional assessment system of both adaptive and maladaptive behaviors. It includes self (for adolescents ages 12 to 21), parent and teacher-report forms. The BASC-II self-report form for adolescents (ages 12 to 21) has 176 items divided across two measurement scales, including true/false and the same four-point frequency scale used in the teacher and parent reports. Reliability on the self-report form was acceptable across composite scores, with alphas ranging from .83 to .96 in the general sample and gender-specific female sample. Test-retest reliability coefficients were also acceptable for the self-report across all composite scales used in the current study. The following composite scales from the BASC-II self-report measure were used: Internalizing Problems, Inattention/Hyperactivity, and Emotional Symptoms Index.

The BASC-II parent report has 130 items rated on a four-point frequency scale ranging from 0 (never) to 3 (always). Reliability on the parent-report form was high across all composite scores, with alphas ranging from .90 to .95 in the general sample and gender-specific female sample. Test-retest reliability was acceptable across all composite

scales used in the current study (Reynolds & Kamphaus, 2004). The following composite scores from the BASC-II parent report were used: Externalizing Problems, Internalizing Problems, and Behavioral Symptoms Index.

The BASC-II teacher report was comprised of 148 items also rated on a four-point frequency scale. Reliability on the teacher-report form was high across composite scores, with alphas ranging from .90 to .97 in the general sample and gender-specific female sample. Test-retest reliability coefficients were also high for the teacher report, ranging from .84 to .92 across the composite scales (Reynolds & Kamphaus, 2004). The following composite scores from the BASC-II parent report were used: Externalizing Problems, Internalizing Problems, and Behavioral Symptoms Index.

All report forms have also shown acceptable levels of construct and convergent validity. Composite and individual scale scores have shown acceptable levels of correlation with scores from related behavioral rating assessments, such as the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2001) and the Conner's system of rating attention-related concerns (Conners, 1997). The teacher, parent and child-report forms of the BASC-II have also been shown to discriminate between specific clinical groups such as children with Attention Deficit/Hyperactivity Disorder, Bipolar Disorder and Depression (Reynolds & Kamphaus, 2004).

Composite scales from the BASC-II self, parent and teacher reports stated previously were used to test the study's second hypothesis. Intervention status was expected to significantly predict posttest levels of self, parent, teacher and school

counselor-reported levels of internalizing behavior problems, externalizing behavior problems, inattention/hyperactivity, emotional symptoms and behavioral symptoms as measured by BASC-II. Specifically, it was hypothesized that status in the intervention group would significantly predict lower posttest levels than the control group.

**Mediators of change.** Dependent mediator variables of parent and youth factors were assessed to explore mechanisms of change in the intervention, including participants' knowledge and beliefs about RA, participants' attribution styles, parents' knowledge and beliefs about RA, parents' responses to relationally aggressive behaviors, and parents' behavior management and supervision strategies. The following measures were used to test the study's third hypothesis.

**Attribution style.** The *Cartoon-based Hostile Attribution Scenarios* (HAB; Leff et al., 2006) was used to measure youth's attribution style (see Appendix O). The HAB measure included cartoon and written depictions of four relational and physically provocative situations with a series of five questions following each situation. The questions assessed participants' interpretations of the situations, including attributions to specific characters and emotional reactions to the situation (e.g., not upset at all, a little upset, and very upset; Leff et al., 2006). Past research has found the HAB to have high internal consistency, with Cronbach's alpha greater than .8 and high test-retest reliability (>.80; Leff et al., 2006). It was developed for urban African-American girls in grades three to four but has been used previously as a clinical tool in previous iterations of the intervention with 6<sup>th</sup> to 10<sup>th</sup> grade female students in a rural school district. Participants

in these previous groups reported that the cartoons were relevant and questions appropriately worded. The HAB took participants 10 to 15 minutes to complete.

Decreases in levels of hostile attributions and emotional reactions from pretest to posttest as measured by the HAB were expected to partially mediate any significant relationship between intervention status and posttest levels of RA

***Parents' normative beliefs and response to relational aggression.*** The *Parents' Responses to Children's Behavior* (PRCB; Werner & Grant, 2009) was used to measure parental cognitions about RA, as well as responsibility attributions and discipline responses to hypothetical displays of various forms of child aggression (see Appendix P). The PRCB included eight stories with nine questions about each story, totaling 72 items. The eight stories depicted aggressive acts that fell into the following domains: reactive aggression, proactive aggression, RA, physical aggression and verbal aggression. The 72 items were distributed across nine scales, five of which were used in the current study, including knowledge, deviation from expectations, blame, stability, normative and power assertion. Each of the 72 items was rated on a 7-point Likert scale with response options specific to each item. The PRCB takes approximately 20 minutes to complete. Previous research (Werner & Grant, 2009) has found the internal consistency of the PRCB to be acceptable (Cronbach's alpha ranging from .70 to .89 for all item subscales).

Increases in parents' self-reported expectations, blame, normative beliefs and power assertion in response to hypothetical situations illustrating RA from pretest to posttest on the PRCB were expected to partially mediate any significant relationship observed between intervention status and posttest levels of RA.

***Parenting styles and behavior management technique.*** The *Alabama Parenting Questionnaire- Parent and Child-report Forms* (APQ-P and APQ-C; Frick, Christian, & Wootton, 1999; Shelton, Frick, & Wootton, 1996) was used to measure parenting practices and behavior management strategies. Two assessment formats of the APQ were used, including parent and child global report forms (see Appendices Q and R, respectively). Both the APQ-C and APQ-P included 42 items distributed across six scales and took approximately 15 to 20 minutes to complete. Only four of the six scales were utilized in the current study, including Parental Involvement (10 items), Positive Parenting (6 items), Poor Monitoring/Supervision (9 items) and Inconsistent Discipline (6 items). The two scales not included (Corporal Punishment and Other Discipline Strategies) were excluded due to their irrelevance to the current study and poor psychometric properties (i.e., Cronbach's alpha below .50 across reporters and age groups). Items were rated on a 5-point Likert scale (1=never to 5=always) to represent the "typical" frequency with which the parenting behavior was exhibited in the home. On the APQ-C, all items, except those related to parental involvement, were worded to refer to parenting in general within the family (e.g., "How often are you out with friends your parents do not know?"). Parental involvement questions were stated first in relation to the child's mother and repeated once to refer to the child's father, if there was a father figure in the home. The APQ-C and APQ-P have been used in research and intervention studies with children ages six to 17 (Frick et al., 1999; Kamon, Budney, & Stanger, 2005). Frick and colleagues (1999) demonstrated acceptable levels of internal consistency (above .70) across most scales for both parent and adolescent-report forms.

Some scales on the adolescent form, however, fell below .70. The internal consistency of Poor Monitoring/Supervision and Inconsistent Discipline fell between .43 and .61 on the adolescent-report form.

The APQ has good criterion validity as it has been shown to discriminate between children who met clinical criteria for behavior disorders and those not meeting criteria (Frick et al., 1999; Shelton et al., 1996). The APQ has also demonstrated good divergent validity with low scale intercorrelations within reporters (i.e., 0.19 for the parent-report form and 0.16 for the child-report form; Shelton et al., 1996). Results of a convergent validity analysis found significant correlations between the parent and child reports on the Parental Involvement (mother) and Positive Parenting scales (i.e., correlations ranging from .23 to .25; Shelton et al., 1996).

Increases in parent and youth-reported parental involvement and positive parenting from pretest to posttest as measured by the APQ-P and APQ-C, respectively, were expected to partially mediate the significant relationship between intervention status and posttest levels of RA. Decreases in poor monitoring/supervision and inconsistent discipline from pretest to posttest as reported by parent and youth participants on the APQ-P and APQ-C, respectively, were expected to partially mediate any significant relationship between intervention status and posttest levels of RA.

## **Data Analyses**

**Primary and secondary outcome analyses.** Primary and secondary outcomes were analyzed using multiple regression methods to determine the variance in posttest outcome measures that was attributable to differences in group intervention status when

controlling for pretest levels ( $R^2$ ). One advantage of using hierarchical regression is the inclusion of the standardized beta statistic ( $\beta$ ), which indicates the amount of change in standard deviation units in posttest measures as it relates to changes in group intervention status. For example, a standardized beta of -1, where posttest self-reported RA is the dependent variable and group intervention status is the independent variable, indicates that as posttest self-reported levels of RA decrease one standard deviation unit, group intervention status increases when controlling for pretest self-reported levels of RA. Since the control group was coded as 0 and intervention group as 1, an increase in group intervention status and a negative standardized beta would support the study's first hypothesis (i.e., following the intervention, GIRLSS participants would report significantly lower levels of RA than those in the control group when controlling for pretest levels of RA). Further, the use of a standardized beta allows for comparison across outcome measures and reporters because all outcomes are reported in standard deviation units and all standard deviations are reported. Thus, posttest levels of RA as reported by participants, teachers and school counselors can be easily compared as to the size of change and effect across reporters. Prior to conducting this analysis, the researcher ensured that the data met the assumptions of multiple regression, including normality, linearity, homogeneity of variance, and independence of observations.

**Mediation analysis.** In order to identify variables that partially mediated any observed intervention effects, procedures recommended by James and colleagues (2006) were followed. These procedures are based on those first promoted by Baron and Kenny

(1986). The significance of any observed partial mediation was tested using the Sobel test (Sobel, 1982).

The James and colleagues (2006) procedures include two regression equations.

$$1) \ m = b_{mx}x + e_1$$

$$2) \ y = b_{yx.m}x + b_{ym.x}m + e_1$$

In equation one, it was hypothesized that intervention status ( $x$ ) would significantly predict the mediator variable ( $m$ ) in the desired direction (e.g., maladaptive behaviors decreased as intervention status increased and prosocial behaviors increased as intervention status increased). In equation two, it was hypothesized that intervention status ( $x$ ) and the mediator variable ( $m$ ) would significantly predict posttest levels of RA ( $y$ ) when controlling for pretest levels of RA. Partial mediation is indicated when all three parameter estimates ( $b$ ) are statistically significant.

The significance of any observed partial mediation effect was also tested as recommended by Baron and Kenny (1986) and James and colleagues (2006) by using the Sobel test (Sobel, 1982). The Sobel test calculator at the following website <http://quantpsy.org/sobel/sobel.htm> was used to estimate the Sobel test statistic ( $z'$ ), standard error (SE) and significance level ( $p$ ).

**Effect size.** Given the power limitations of this pilot study, finding significant group differences was difficult using the multiple regression methods. In a similar pilot study evaluating the effects of an intervention for RA, Leff and colleagues (2007) reported effect sizes rather than tests of statistical significance with limited power because of a small sample size and unequal comparison groups. Therefore, effect sizes

using Cohen's d (Cohen, 1988) were calculated based on change scores between pretest and posttest for all statistically significant multiple regression analyses in order to help fully understand the potential of GIRLSS and provide guidance in future trials.

## **Chapter 4: Results**

In this chapter, statistical results of the study are reported. The chapter begins by describing the process for examining the accuracy of data entry, testing the randomness of missing data, and ensuring the assumptions of multivariate analysis were met. The final results are then presented across primary and secondary outcomes. Mediation and effect size analyses are also reported and described for all statistically significant effects.

### **Data Cleaning and Assumptions Testing**

The accuracy of data entry was examined by reviewing the reasonableness of means, standard deviations and ranges for all variables. A missing values analysis was also conducted to test the randomness of missing data. Missing data resulted from data collection errors and caregivers' inability or unwillingness to complete posttest measures. As a result, three cases are missing all posttest data provided by caregivers, three cases are missing all pretest data provided by the school counselor, and one case is missing data related to the school counselor's posttest report of RA, as measured by the CSBS-T. The missing values analysis found that no variable in the current study is missing in more than 9 percent of available cases. Further, statistical analyses comparing missing data to existing data across all study variables indicates that the data are missing at random (Little's MCAR test chi-square=0.00, p>.05). As a result, listwise deletion of cases with missing values on any variables in a given regression model was utilized.

Prior to final outcome analyses, variables were also examined for the degree of fit with assumptions of multiple regression, including normality, linearity, homoscedasticity

and independence of errors. When these assumptions were violated, variables and data were transformed following accepted procedures (Tabachnick & Fidell, 2007). First, square root, logarithmic and reciprocal ( $1/x$ ) transformations were computed for variables that violated the normality assumption (i.e., skewness and kurtosis statistics greater than 0.999) and the transformation with the best reduction of skewness and kurtosis was retained for final analyses. Then, each regression model was examined for assumptions of linearity, homoscedasticity and independence of errors as well as the presence of univariate ( $z$  scores  $> 2.5$ ) and multivariate (Mahalanobis distance  $> 13.82, p < .001$ ) outliers. The deletion of univariate and/or multivariate outliers was conducted one at a time to iteratively examine and balance improvement of linearity and homoscedasticity with the remaining sample size. These procedures follow those recommended by Tabachnick & Fidell (2007; see page 93). Due to the volume of variables and regression analyses in the current study, specific transformations and outlier deletions conducted are presented before the results of the analyses to which they apply.

### **Hypotheses Testing**

To test the study's hypothesis that participation in the GIRLSS intervention would significantly predict lower levels of RA than participation in a waitlist control group, multiple regression analyses were conducted. Analyses included entering intervention status (control = 0 and intervention = 1) and pretest levels of RA as the independent variables while posttest levels of RA were entered as the dependent variable. Each report of RA levels was tested separately (i.e., self, teacher and school counselor). These

analyses tested the degree to which intervention status significantly predicted posttest level of RA while controlling for pretest level.

Participants and their caregivers' knowledge of the GIRLSS curriculum were also tested via multiple regression analyses. Analyses included entering intervention status (control = 0 and intervention = 1) and pretest knowledge of GIRLSS as the independent variables while posttest knowledge of GIRLSS was entered as the dependent variable. Participants' and parents' knowledge of GIRLSS were examined separately. These analyses tested the degree to which intervention status significantly predicted posttest knowledge of GIRLSS while controlling for pretest knowledge.

Similarly, in order to test the study's hypothesis that participation in the GIRLSS intervention would significantly predict lower levels of secondary outcomes, including externalizing behaviors, internalizing behaviors, behavioral symptoms, hyperactivity, and emotional symptoms, than participation in a waitlist control group, multipleregression analyses were conducted. Analyses included entering intervention status (control = 0 and intervention = 1) and pretest levels of secondary outcomes as the independent variables while posttest levels of secondary outcomes were entered as the dependent variable. Each secondary outcome was tested separately by reporter type (i.e., parent, teacher, self or school counselor). These analyses tested the degree to which intervention status significantly predicted posttest levels of each secondary outcome while controlling for each pretest level.

In the following sections, transformations and outlier deletions to improve normality, linearity and homoscedasticity are described. Results of the multiple

regression analyses are presented in tables which display the means and standard deviations of each variable across intervention and control groups, unstandardized regression coefficient (B), standard error of the unstandardized regression coefficient (SE B), standardized regression coefficient ( $\beta$ ) and level of significance ( $p$ ).

### **Relational Aggression Outcomes**

Participants' relationally aggressive behaviors were measured by participants' self-report (CSBS-S), teacher report (CSBS-T) and school counselor report (CSBS-T).

**Self-report.** The distribution of pretest self-report of RA was significantly positively skewed (1.44) with a significantly positive kurtosis (2.58). A square root transformation improved the variable's distribution (skewness=0.95, kurtosis=0.87) and was utilized for remaining analyses. Results of the regression model met all other assumptions and no significant outliers were identified. There were no missing values ( $N = 34$ ). As seen in Table 4, treatment condition was not a significant predictor of posttest self-report of RA after controlling for (square root of) pretest scores ( $p = .739$ ).

**Teacher-report.** Kurtosis for the distribution of pretest teacher-report of RA was significantly negative (-1.27) while skewness was within the acceptable range (0.01). A square root transformation improved the variable's distribution (skewness = -0.28, kurtosis = -0.953) and was utilized for remaining analyses. Results of the regression model met all other assumptions and no significant outliers were identified. There were no missing values ( $N = 34$ ). As seen in Table 4, treatment condition was not a significant predictor of posttest teacher-report of RA after controlling for (square root of) pretest scores ( $p = .525$ ).

**School counselor-report.** Kurtosis for the distribution of pretest school counselor-report of RA was significantly negative (-1.27) while skewness was within the acceptable range (0.00). A logarithmic transformation improved the variable's distribution (skewness = -0.55, kurtosis = -0.64) and was utilized for remaining analyses. Results of the regression model met all other assumptions and no significant outliers were identified. There were four missing cases ( $N = 30$ ). As seen in Table 4, treatment condition was a significant predictor of posttest school counselor-report of RA after controlling for (log of) pretest scores ( $p = .015$ ). The negative value of  $\beta$  indicates that as intervention status increased, posttest, school counselor-reported levels of RA decreased. An increase in intervention status would favor the intervention group given that control was coded as 0 and intervention as 1. This indicates that the intervention group was significantly more predictive of lower levels of school counselor-reported RA at posttest than the control group, when controlling for pretest levels. The average trajectory of intervention and control participants' school-counselor reported levels of RA are presented separately in Figure 10.

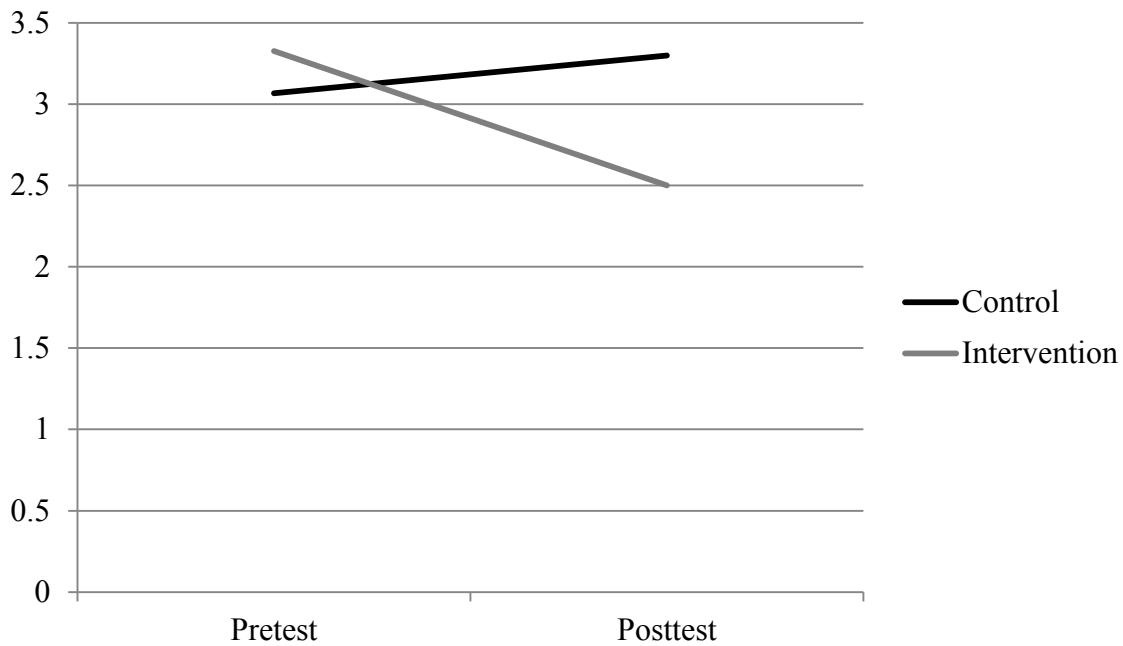
Table 4

*Multiple Regression Analyses of Relational Aggression Outcomes*

	Control Mean (SD)	Intervention Mean (SD)	B	SE b	$\beta$	p
Self-Report	N = 12	N = 22				
Constant			-0.013	0.551		.981
Intervention Status			0.070	0.208	.052	.739
Sqrt Pretest	1.319 (0.256)	1.369 (0.257)	1.273	0.398	.498	.003***
Posttest	1.667 (.611)	1.800 (0.679)				
Teacher Report	N = 12	N = 22				
Constant			0.825	0.709		.254
Intervention Status			-0.193	0.300	-.103	.525
Sqrt Pretest	1.659 (0.354)	1.768 (0.368)	1.201	0.403	.477	.006***
Posttest	2.817 (0.716)	2.754 (1.016)				
School Counselor Report	N = 8	N = 22				
Constant			1.779	0.487		.001***
Intervention Status			-0.875	0.335	-.379	.015**
Log Pretest	0.468 (0.203)	0.491 (0.174)	3.249	0.841	.561	.001***
Posttest	3.300 (1.318)	2.500 (0.855)				

Note. \*p<.10, \*\*p<.05, \*\*\*p<.01; Self-Report  $R^2=0.256$ ; Teacher Report  $R^2=0.224$ ;

School Counselor Report  $R^2=0.433$ . Sqrt = Square root transformation.



*Figure 10.* Average trajectory of control and intervention participants' school counselor-reported levels of relational aggression from pretest to posttest.

### **Knowledge of Relational Aggression and GIRLSS Curriculum**

Participants and caregivers' knowledge of RA and the GIRLSS intervention was measured before and after intervention by the Revised RAKBS-S and P, respectively.

**Participant knowledge.** Pretest and posttest scores obtained by participants on the Revised RAKBS-S were normally distributed and all assumptions of multiple regression were met. No significant outliers were identified. There were no missing values ( $N = 34$ ). As seen in Table 5, treatment condition was a significant predictor of posttest RA and intervention knowledge after controlling for pretest scores ( $p = .000$ ). The positive value of  $\beta$  indicates that as participants' intervention status increased, posttest knowledge of RA and the GIRLSS curriculum increased. An increase in

intervention status would favor the intervention group given that control was coded as 0 and intervention as 1. This indicates that the intervention group's posttest scores on the Revised RAKBS-S were significantly higher than the control group's scores at posttest, when controlling for pretest scores. The average trajectory of intervention and control participants' knowledge of RA and GIRLSS is presented separately in Figure 11.

**Caregiver knowledge.** The distribution of pretest scores obtained by caregivers on the Revised RAKBS-P was significantly negatively skewed (-1.77) with a significantly positive kurtosis (3.98). A square root transformation provided the best improvement of the pretest distribution of scores (square root of pretest skewness = 0.54 and kurtosis = 1.27). No univariate outliers were identified in the distribution of pretest scores. While, the square root transformation of pretest scores is an improvement in the variable's approach to normal distribution, the significantly negative kurtosis still violates the assumption of normality. Therefore, the final results should be interpreted *with caution*. The distribution of posttest scores was also significantly negatively skewed (-1.23). A square root transformation provided the best improvement of the posttest distribution of scores (square root of posttest skewness = 0.43 and kurtosis = -0.84) and was utilized for remaining analyses. Results of the regression model met all other assumptions and no significant outliers were identified. There were three missing values ( $N = 31$ ). As seen in Table 5, treatment condition was not a significant predictor of (square root of) caregivers' posttest RA and intervention knowledge after controlling for (square root of) pretest scores ( $p = .288$ ).

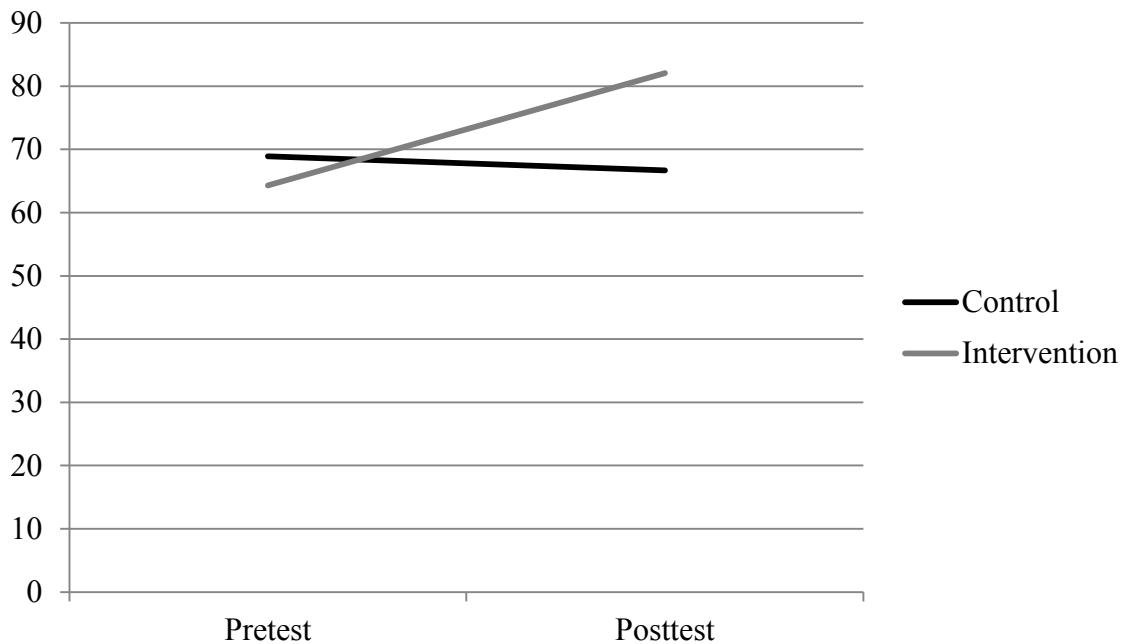
Table 5

*Multiple Regression Analyses of Student and Parent Knowledge of RA and GIRLSS**Curriculum*

	Control Mean (SD)	Intervention Mean (SD)	B	SE b	$\beta$	p
Participant Knowledge	N = 12	N = 22				
Constant			41.411	7.010		.000***
Intervention Status			17.081	3.841	.562	.000***
Pretest	68.917 (18.108)	64.273 (21.735)	0.366	0.091	.507	.000***
Posttest	66.667 (16.406)	82.046 (10.608)				
Caregiver Knowledge	N = 11	N = 20				
Constant			0.266	0.896		.803
Intervention Status			-0.581	0.537	-.163	.288
Sqrt Pretest	3.840 (1.697)	3.829 (1.029)	0.795	0.205	.584	.001***
Sqrt Posttest	3.279 (1.985)	2.689 (1.603)				

Note. \*p<.10, \*\*p<.05, \*\*\*p<.01; Participant Knowledge  $R^2=0.510$ ; Caregiver

Knowledge  $R^2=0.368$ . Sqrt = Square root transformation.



*Figure 11.* Average trajectory of control and intervention participants' knowledge of RA and GIRLSS intervention from pretest to posttest.

### Secondary Outcomes

Composite scales, including externalizing behavior problems, internalizing behavior problems, behavioral symptoms index, hyperactivity and emotional symptoms index, from the BASC-2 self-report, parent-report, teacher-report and school counselor-report were used to analyze the intervention's effects on secondary outcomes.

**Externalizing behavior problems.** *Parent-report.* The distributions of pretest and posttest parent-report composite scores of externalizing behavior problems were normal and all assumptions of regression were met. No univariate or multivariate outliers were identified. There were three missing values ( $N = 31$ ). As seen in Table 6, treatment

condition was not a significant predictor of posttest parent-report of externalizing behavior problems after controlling for pretest scores ( $p = .820$ ).

**Teacher-report.** The distribution of pretest teacher-report composite scores of externalizing behavior problems had a significantly negative kurtosis (-1.05) while skewness was in the acceptable range (0.15). Square root, logarithmic and reciprocal transformations did not result in reduced kurtosis. No univariate or multivariate outliers were identified. In the final analysis, original data without transformation or outlier deletion was included in the model. While assumptions of linearity and homoscedasticity were met, the pretest scores violated assumptions of normality. Therefore, the final results should be interpreted *with caution*. There were no missing cases ( $N = 34$ ). As seen in Table 6, treatment condition was not a significant predictor of posttest teacher-report of externalizing behavior problems after controlling for pretest scores ( $p = .589$ ).

**School counselor-report.** The distributions of pretest and posttest school counselor-report composite scores of externalizing behavior problems were normal. No univariate or multivariate outliers were identified. There were two missing cases ( $N = 32$ ). As seen in Table 6, treatment condition was not a significant predictor of posttest school counselor-report of externalizing behavior problems after controlling for pretest scores ( $p = .250$ ).

Table 6

*Multiple Regression Analyses of BASC-2 Externalizing Behavior Problem Scales*

	Control Mean (SD)	Intervention Mean (SD)	B	SE b	B	p
Parent-Report	N = 11	N = 20				
Constant			13.833	4.716		.007***
Intervention Status			-0.414	1.798	-.024	.820
Pretest	51.000 (9.560)	54.900 (10.068)	0.711	0.088	.844	.000***
Posttest	50.091 (7.529)	52.450 (8.847)				
Teacher Report	N = 12	N = 22				
Constant			26.616	6.534		.000***
Intervention Status			-1.484	2.717	-.075	.589
Pretest	57.5 (13.042)	61.318 (11.954)	0.520	0.107	.664	.000***
Posttest	56.500 (10.423)	57.000 (9.406)				
School Counselor Report	N = 10	N = 22				
Constant			19.396	5.704		.002***
Intervention Status			-2.497	2.129	-.155	.250
Pretest	50.0800 (7.899)	55.818 (9.708)	0.604	0.107	.747	.000***
Posttest	50.100 (6.574)	50.636 (8.121)				

Note. \*p<.10, \*\*p<.05, \*\*\*p<.01; Parent Report  $R^2=0.705$ ; Teacher Report  $R^2=0.431$ ;

School Counselor Report  $R^2=0.524$

**Internalizing behavior problems. Self-report.** The distributions of pretest and posttest self-report of internalizing behavior problems were normal and all assumptions of multiple regression were met. No significant outliers were identified. There were no missing values ( $N = 34$ ). As seen in Table 7, treatment condition was not a significant

predictor of posttest self-report of internalizing behavior problems after controlling for pretest scores ( $p = .794$ ).

***Parent-report.*** The distribution of posttest parent-report of internalizing behavior problems had a significantly positive kurtosis (1.53). A logarithmic transformation improved the variable's distribution (skewness = 0.32, kurtosis = 0.37) and was utilized for remaining analyses. Results of the regression model met all other assumptions. Two univariate outliers (pretest z-score = 2.714, posttest z-score = 2.504) were identified. However, iterative deletion of the outliers from the model did not significantly improve linearity or homoscedasticity, nor did it significantly alter findings. The outliers were therefore included in the final analysis. There were three missing cases ( $N = 31$ ). As seen in Table 7, treatment condition was not a significant predictor of (log of) posttest parent-report of internalizing behavior problems after controlling for pretest scores ( $p = .509$ ).

***Teacher-report.*** The distributions of pretest and posttest teacher-report of internalizing behavior problems were normal and all assumptions of multiple regression were met. A univariate outlier (posttest z scores = 2.887) was identified. However, deletion of the outlier from the model did not significantly improve linearity or homoscedasticity, nor did it significantly alter findings. The outlier was therefore included in the final analysis. There was one missing value ( $N = 33$ ). As seen in Table 7, treatment condition was not a significant predictor of posttest teacher-report of internalizing behavior problems after controlling for pretest scores ( $p = .510$ ).

***School counselor-report.*** The distributions of pretest and posttest school counselor-report of internalizing behavior problems were significantly positively skewed

with significantly positive kurtosis (pretest skewness = 2.46 and kurtosis = 9.64; posttest skewness = 2.44 and kurtosis = 6.58). Square root, logarithmic and reciprocal transformations did not result in reduced skewness or kurtosis for either variable. Standardized residuals were examined and two univariate outliers were initially identified (pretest z-score= 4.21, posttest z-score = 3.870). Iterative deletion of each univariate outlier improved the distribution of both variables at each step. With the two outliers deleted from the model, the pretest skewness improved to -.09 and kurtosis improved to 0.34. Although the posttest distribution improved, the values were still significantly positive (skewness = 1.79 and kurtosis = 3.11). No additional univariate or multivariate outliers were identified. In the final analysis, the two univariate outliers were deleted from the model and the posttest variable violated assumptions of normality. Therefore, the final results should be interpreted *with caution*. There were two missing values (N = 30). As seen in Table 7, treatment condition was not a significant predictor of posttest school counselor-report of internalizing behavior problems after controlling for pretest scores ( $p = .139$ ).

Table 7

*Multiple Regression Analyses of BASC-2 Internalizing Behavior Problem Scales*

	Control Mean (SD)	Intervention Mean (SD)	B	SE b	B	p
Self-Report	N = 12	N = 22				
Constant			5.058	5.142		.333
Intervention Status			-0.560	2.128	-.023	.794
Pretest	53.167 (12.511)	50.636 (8.121)	0.892	0.091	.868	.000***

	Posttest	52.500 (13.229)	49.682 (10.856)			
Parent-Report		N = 11		N = 20		
	Constant			1.329	0.047	.000***
	Intervention Status			-0.011	0.017	-.070
	Pretest	51.273 (7.913)	51.800 (10.440)	0.007	0.001	.834
	Log Posttest	1.687 (0.076)	1.679 (0.083)			.000***
Teacher Report		N = 11		N = 22		
	Constant			19.873	8.617	.028**
	Intervention Status			-1.986	2.975	-.096
	Pretest	54.00 (8.173)	52.864 (9.978)	0.652	0.153	.610
	Posttest	55.091 (9.071)	52.364 (10.445)			.000***
School Counselor Report		N = 9		N = 21		
	Constant			11.354	12.639	.377
	Intervention Status			2.775	1.822	.255
	Pretest	44.778 (2.438)	45.524 (3.281)	0.684	0.280	.408
	Posttest	42.000 (2.345)	45.286 (5.604)			.021**

Note. \*p<.10, \*\*p<.05, \*\*\*p<.01; Self-Report  $R^2= .759$ ; Parent Report  $R^2= .697$ ;

Teacher Report  $R^2= .388$ ; School Counselor Report  $R^2= .255$ . Log = Logarithmic transformation.

**Behavioral symptoms index. Parent-report.** The distributions of pretest and posttest parent-report of behavioral symptoms were normal and all assumptions of multiple regression were met. No significant outliers were identified. There were three missing values ( $N = 31$ ). As seen in Table 8, treatment condition was not a significant

predictor of posttest parent-report of behavioral symptoms after controlling for pretest scores ( $p = .807$ ).

**Teacher-report.** The distributions of pretest and posttest teacher-report of behavioral symptoms had significantly negative kurtosis (pretest kurtosis = -1.20, posttest kurtosis = -1.07). Square root, logarithmic and reciprocal transformations did not result in reduced kurtosis for either variable. Standardized residuals were examined, however all z-scores fell below 2.5. In the final analysis, neither variable was transformed nor were cases deleted from the model. The pretest and posttest variables violated assumptions of normality and should therefore be interpreted *with caution*. There were no missing values ( $N = 34$ ). As seen in Table 8, treatment condition was not a significant predictor of posttest teacher-report of behavioral symptoms after controlling for pretest scores ( $p = .596$ ).

**School counselor-report.** The distribution of posttest school counselor-report of behavioral symptoms was significantly positively skewed (1.31) with a significantly positive kurtosis (1.79). Reciprocal transformation improved the variable's distribution (skewness = -0.72, kurtosis = 0.05) and was utilized for remaining analyses. Three univariate outliers were identified (z-scores = 2.847, 2.805 and 2.501) and iteratively deleted. Deletion of outliers improved the model's linearity and homoscedasticity. Further, deletion of two of the three outliers made practical sense given that the school counselor reported not knowing either participant well at the time pretest data was collected. Final analysis did not include these three outliers and there were two missing values ( $N = 29$ ). As seen in Table 8, treatment condition was approaching significance as

a predictor of posttest school counselor-report of behavioral symptoms after controlling for pretest scores ( $p = .077$ ). However, the value of  $\beta$  (0.001) is nearly negligible indicating little effect of intervention status of school counselor-reported behavioral symptoms at posttest. The average trajectory of intervention and control participants' school-counselor reported behavioral symptoms from pretest to posttest shed some light on why this effect was minor (see Figure 12). Although school counselors reported greater changes in behavioral symptoms from pretest to posttest for intervention participants than control participants, the treatment groups were nearly equal at posttest.

Table 8

*Multiple Regression Analyses of BASC-2 Behavioral Symptoms Index*

	Control Mean (SD)	Intervention Mean (SD)	B	SE b	$\beta$	p
Parent-Report	N = 11	N = 20				
Constant			17.236	5.526		.004***
Intervention Status			0.446	1.802	.031	.807
Pretest	51.818 (7.069)	53.900 (9.301)	0.620	0.103	.751	.000***
Posttest	49.364 (5.697)	51.100 (7.732)				
Teacher Report	N = 12	N = 22				
Constant			26.306	7.097		.001***
Intervention Status			-1.311	2.451	-.075	.596
Pretest	58.167 (11.668)	59.227 (9.481)	0.522	0.117	.625	.000***
Posttest	56.667 (8.804)	55.909 (8.485)				
School Counselor Report	N = 10	N = 19				
Constant			0.036	0.001		.000***

Intervention Status			0.001	0.000	.163	.077*
Pretest	46.800 (4.849)	49.368 (6.265)	0.000	0.000	-.918	.000***
Reciprocal Posttest	0.022 (0.002)	0.022 (0.002)				

Note. \* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ ; Parent Report  $R^2 = 0.570$ ; Teacher Report  $R^2 = 0.391$ ;

School Counselor Report  $R^2 = 0.805$ . Reciprocal = Reciprocal transformation.

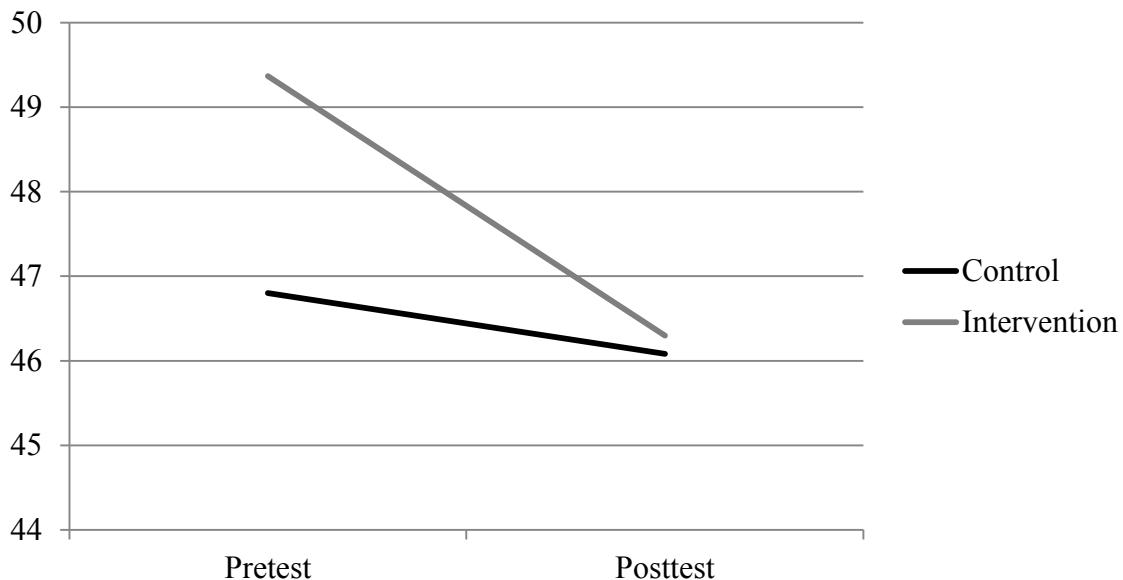


Figure 12. Average trajectory of control and intervention participants' school counselor-reported behavioral symptoms from pretest to posttest.

**Inattention/Hyperactivity.** The distributions of pretest self-report of inattention and hyperactivity had a significantly negative kurtosis (-1.00). Square root, logarithmic and reciprocal transformations did not result in reduced kurtosis. No univariate or multivariate outliers were identified. In the final analysis, original data without transformation or outlier deletion was included in the model. While assumptions of linearity and homoscedasticity were met, the pretest scores violated assumptions of

normality. Therefore, the final results should be interpreted *with caution*. There were no missing cases ( $N = 34$ ). As seen in Table 9, treatment condition was not a significant predictor of posttest self-report of inattention/hyperactivity after controlling for pretest scores ( $p = .821$ ).

**Emotional symptoms index.** The distribution of posttest self-report of emotional symptoms was significantly positively skewed (1.25) with a significantly positive kurtosis (1.89). A logarithmic transformation improved the variable's distribution (skewness=0.65, kurtosis=0.30) and was utilized for remaining analyses. Results of the regression model met all other assumptions and no significant outliers were identified. There were no missing values ( $N = 34$ ). As seen in Table 9, treatment condition was not a significant predictor of (log of) posttest self-report of emotional symptoms after controlling for pretest scores ( $p = .654$ ).

Table 9

*Multiple Regression Analyses of Self-Reported BASC-2 Inattention/Hyperactivity and Emotional Symptoms Index*

	Control Mean (SD)	Intervention Mean (SD)	B	SE b	B	p
Inattention/Hyperactivity	N = 12	N = 22				
Constant			10.593	5.175		.049**
Intervention Status			-0.517	2.261	-.021	.821
Pretest	57.583 (13.283)	54.682 (13.084)	0.796	0.084	.861	.000***
Posttest	56.417 (11.797)	53.591 (12.328)				
Emotional Symptoms Index	N = 12	N = 22				
Constant			1.304	0.038		.000***
Intervention Status			-0.007	0.016	-.037	.654
Pretest	51.000 (12.563)	50.318 (10.494)	0.008	0.001	.888	.000***
Log Posttest	1.689 (0.105)	1.677 (0.090)				

Note. \*p<.10, \*\*p<.05, \*\*\*p<.01; Inattention/Hyperactivity  $R^2= .746$ ; Emotional

Symptoms Index  $R^2= 0.793$ . Log = Logarithmic transformation.

### Mediation Analysis

Risk factors of RA were hypothesized to be partial mediators of the direct effect of intervention status on posttest levels of RA, as reported by participants, teachers and school counselors. Procedures recommended by James and colleagues (2006) based on more well-known procedures put forth by Baron and Kenny (1986) were used to test for partial mediation.

**Preparing the data.** Prior to analysis, the distribution of all pretest and posttest mediator scores was examined for assumptions of multiple regression. The distribution of participants' pretest relational intent attributions had a significantly positive kurtosis (1.627). However, square root, logarithmic and reciprocal transformations did not result in reduced kurtosis. No univariate outliers were identified. Therefore, final results related to relational intent attributions should be interpreted *with caution* because the variable violates the assumption of normality. The distribution of participants' posttest relational distress had a significantly negative kurtosis (-1.014). A reciprocal transformation reduced the kurtosis to an acceptable level (-0.965) and was utilized for related analyses. Participants' posttest report of parental monitoring was significantly positively skewed (1.414) with a significantly positive kurtosis (2.648). A reciprocal transformation successfully reduced the distribution's skewness (0.445) and kurtosis (0.754) and was utilized for related analyses. Finally, the distributions of caregivers' pretest and posttest reports of parental monitoring were significantly positively skewed (pretest 1.969; posttest 1.240) with significantly positive kurtosis (pretest 6.526; posttest 1.037). Reciprocal transformations of both variables successfully reduced skewness (pretest -0.022; posttest -0.492) and kurtosis (pretest -0.225; posttest -0.421) and were utilized for related analyses.

Following tests and transformations to meet assumptions of multiple regression, all variables included in the analyses for partial mediation were standardized. The variables were standardized in order to ensure all variables were on the same scale and contributed equally to the analyses. Through standardization, the means of all

standardized variables was set to zero and their standard deviations equaled one. The SPSS function that computes z-scores for selected variables and saves them as new variables was used to complete standardization.

Change scores of the standardized mediating variables (posttest-pretest) were used in the mediation analyses to better address the study's third research question (i.e., If a school-based group counseling and parent training intervention for relationally aggressive girls in grades six to eight is effective in reducing RA, what are the mechanisms of change?). Using change scores clarifies the relationship between the change produced from pretest to posttest by the intervention in the mediator variable. Change scores were computed by subtracting the pretest standardized score from the posttest standardized score of the corresponding variable. The change score mean and standard deviation of each mediator within treatment groups (i.e., intervention versus control) are reported in Table 10. In the final column of Table 10, the hypothesized direction of change is noted by a plus sign (positive change score) or a minus sign (negative change score). A positive change score mean indicates that the mean value of the mediator increased from pretest to posttest. A negative change score mean indicates that the mean value of the mediator decreased from pretest to posttest. Only those mediators that changed in the hypothesized direction were utilized in further analyses (indicated by \* in the Mediator Column).

Table 10

*Means and Standard Deviations of Mediator Change Scores*

Mediator	Intervention Mean	SD	Control Mean	SD	Hypothesized Direction of Change
<b>Cartoon-based Hostile Attribution Scenarios (HAB)</b>					
Instrumental Intent Attributions	0.211	0.532	-0.386	0.792	-
Relational Intent Attributions	0.132	0.854	-0.242	1.3034	-
Instrumental Distress	.089	0.805	-0.164	0.544	-
*Relational Distress	-0.374	1.643	0.685	1.655	-
<b>Parents' Responses to Children's Behavior (PRCB)</b>					
*Knowledge of Wrongdoing-RA	0.135	0.802	-0.247	0.773	+
Deviation from Expectations-RA	-0.26	0.918	0.473	1.720	+
Blame-RA	-0.047	0.682	.086	.0706	+
Stability-RA	0.080	0.743	-0.146	1.333	-
*Normative-RA	-0.025	0.722	0.045	0.717	-
Power Assertion-RA	-0.131	0.584	0.237	0.603	+
<b>Alabama Parenting Questionnaire - Child (APQ-C)</b>					
Parental Involvement	-0.082	1.135	0.151	0.715	+
*Positive Parenting	0.030	0.736	-0.055	0.654	+
Parental Monitoring	-0.248	1.804	0.455	1.754	+
Inconsistent Discipline	0.182	1.055	-0.334	0.914	-
<b>Alabama Parenting Questionnaire - Parent (APQ-P)</b>					
Parental Involvement	-0.152	0.979	0.276	0.651	+
Positive Parenting	-0.030	0.731	0.055	0.773	+
*Parental Monitoring	0.118	1.061	-0.214	0.474	+
Inconsistent Discipline	0.017	0.490	-0.031	0.602	-

Knowledge of GIRLSS and RA (Revised RAKBS)

*Student	0.449	0.925	-0.823	0.745	+
Parent	-0.117	0.794	0.213	1.103	+

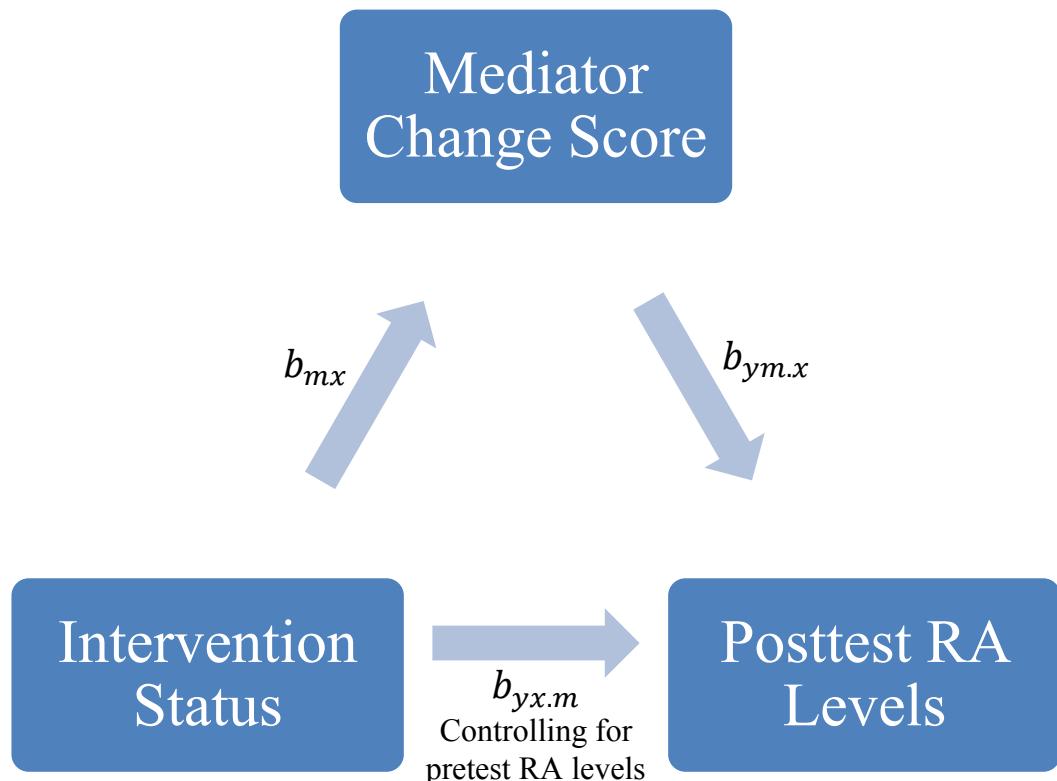
Note. \* indicates mediator changed in the hypothesized direction.

**Procedures for analysis.** James and colleagues (2006) recommended two regression equations to test for partial mediation.

- 1)  $m = b_{mx}x + e_1$
- 2)  $y = b_{yx.m}x + b_{ym.x}m + e_1$

Partial mediation is indicated when all three parameter estimates ( $b$ ) are statistically significant. Due to the small sample size and exploratory nature of the current study, a less conservative criterion for statistical significance was used. Models with p-values less than or equal to .09 were considered for further analyses and interpretation.

In equation one, the independent variable ( $x$ ; Intervention status) should significantly predict the mediator variable ( $m$ ; see list of mediators in first column of Table 11). In equation two, the dependent variable ( $y$ ; posttest RA levels) should be significantly predicted by the independent variable when controlling for the mediator variable and the mediator variable when controlling for the independent variable. In both equations one and two, the effect of pretest levels of RA are controlled for by entering pretest RA levels into each model (see Figure 13).



*Figure 13.* Model, variables and parameter estimates of equations one and two.

**Equation one results.** In order to test for partial mediation, each equation was modeled using multiple regression procedures in SPSS. Thus, for equation one, a mediator variable was entered as the dependent variable. Intervention status was entered as the independent variable. This was repeated individually for each mediator variable that changed in the hypothesized direction. Results are reported in Table 11.

Table 11

*Equation 1 Model Statistics*

Mediator	b	SE b	B	p
Relational Distress (HAB)	-1.058	0.591	-0.302	.083*
Knowledge of Wrongdoing (PRCB)	0.382	0.297	0.232	.209
Normative (PRCB)	-0.070	0.270	-0.048	.797
Positive Parenting (APQ-Student)	.085	0.254	0.059	.741
Parental Monitoring (APQ-Parent)	0.331	0.339	0.179	.336
Knowledge of RA and GIRLSS (Revised RAKBS -S)	1.272	.311	0.585	.000***

*Note.* \* $p \leq 0.09$ , \*\* $p < 0.05$ , \*\*\* $p < 001$ . Relational Distress (HAB) Direct Effects

$R^2 = 0.302$ ; Knowledge of Wrongdoing (PRCB) Direct Effects  $R^2 = 0.054$ ; Normative (PRCB) Direct Effects  $R^2 = 0.002$ ; Positive Parenting (APQ-Student) Direct Effects  $R^2 = 0.003$ ; Parental Monitoring (APQ-Parent) Direct Effects  $R^2 = 0.032$ .

**Interpretation.** Only participants' report of distress in response to cartoon vignettes depicting RA and participants' knowledge of RA and GIRLSS were significantly predicted by intervention status ( $p = .083$  and  $p = .000$ , respectively). As hypothesized, these results indicate that as intervention status increased (from 0=control group to 1=intervention group), participants' distress in response to cartoon vignettes depicting potentially relationally aggressive scenarios decreased. Further, as intervention status increased, participants' knowledge of RA and GIRLSS also increased.

**Equation two results.** Only those models where intervention status significantly predicted ( $p \leq 0.09$ ) mediator change scores were further tested according to equation two. To test the significance of equation two, posttest RA levels were entered as the

dependent variable and intervention status, pretest RA levels and mediator change scores were entered as the independent variables. Models with statistically significant parameter estimates in equations one and two were further tested to determine the significance of the mediation using the Sobel test (Preacher & Hayes, 2004; Sobel, 1982). The Sobel test was conducted by entering the parameter estimates into a calculator hosted by the website “Calculation for the Sobel Test” (<http://quantpsy.org/sobel/sobel.htm>). Results of equation two and the Sobel test are reported in Table 12.

Table 12

*Equation Two Model and Sobel Test Statistics Presented by Reporter of RA*

Mediator	Equation 2 Statistics				Sobel Test Statistics		
	b	SE b	B	p	$z'$	SE	p
<b>Self-Report of RA</b>							
Relational Distress (HAB)							
Intervention Status	0.102	0.221	0.076	.648			
Relational Distress	0.032	0.064	0.083	.624			
Pretest RA	1.308	0.409	0.511	.003***			
Knowledge of RA and GIRLSS (Revised RAKBS-S)							
Intervention Status	-0.122	0.256	-0.091	.638			
Knowledge of RA and GIRLSS	0.149	0.117	0.241	.215			
Pretest RA	1.326	0.397	0.519	.002***			
<b>Teacher-Report of RA</b>							
Relational Distress (HAB)							
Intervention Status	-0.163	0.318	-0.087	.612			
Relational Distress	0.030	0.091	0.056	.742			
Pretest RA	1.216	0.411	0.483	.006***			

Knowledge of RA and GIRLSS (Revised RAKBS-S)						
Intervention Status	-0.600	0.351	-0.320	.098*		
Knowledge of RA and GIRLSS	0.322	0.161	0.373	.055**	1.797	0.228 .072*
Pretest RA	1.173	0.385	0.466	.005***		
School Counselor-Report of RA						
Relational Distress (HAB)						
Intervention Status	-0.787	0.340	-0.341	.029**		
Relational Distress	0.117	0.096	0.195	.234		
Pretest RA	3.679	0.905	0.635	.000***		
Knowledge of RA and GIRLSS (Revised RAKBS-S)						
Intervention Status	-0.504	0.395	-0.219	.213		
Knowledge of RA and GIRLSS	-0.284	0.172	-0.290	.112		
Pretest RA	3.594	0.842	0.620	.000***		

*Note.* \* $p \leq 0.09$ , \*\* $p < 0.05$ , \*\*\* $p < 0.001$ . Knowledge of RA and GIRLSS (Revised RAKBS-S) & Self-Report RA Direct Effects  $R^2 = 0.293$ ; Relational Distress (HAB) & Self-Report RA Direct Effects  $R^2 = 0.262$ ; Knowledge of RA and GIRLSS (Revised RAKBS-S) & Teacher-Report RA Direct Effects  $R^2 = 0.315$ ; Relational Distress (HAB) & Teacher-Report RA Direct Effects  $R^2 = 0.227$ ; Knowledge of RA and GIRLSS (Revised RAKBS-S) & School Counselor-Report RA Direct Effects  $R^2 = 0.487$ ; Relational Distress (HAB) & School Counselor-Report RA Direct Effects  $R^2 = 0.464$ .

**Interpretation.** Partial mediation was only observed when participants' knowledge of RA and GIRLSS ( $p = 0.098$ ), intervention status ( $p = 0.055$ ), and teacher's pretest report of RA ( $p = 0.005$ ) predicted teachers' posttest report of RA ( $R^2 = 0.315$ ). These results indicate that when controlling for teachers' pretest report of RA

and participants' knowledge of RA and GIRLSS, teachers' posttest report of RA decreased as treatment status increased (from 0=control group to 1=intervention group). Further, when controlling for teachers' pretest report of RA and treatment status, teachers' posttest report of RA increased as participants' knowledge of RA and GIRLSS increased. According to the Sobel test, the partial mediation in this model is approaching significance ( $p = 0.072$ ).

### **Effect Sizes**

To determine the practical significance of statistically significant differences found between intervention and control participants on primary and secondary outcomes, effect sizes were estimated using procedures recommended by Cohen (1988) and utilized in a similar pilot study (Leff et al., 2007). Effect sizes were calculated for significant direct effects found between intervention status and posttest scores when controlling for pretests scores. This resulted in effect size estimations for the direct effect of intervention status on school counselor-report of RA and participants' knowledge of RA and GIRLSS. To calculate effect sizes, unstandardized change scores were computed. The school counselor report of RA change score was calculated by subtracting posttest scores from pretest scores such that a positive change score represents less RA at posttest as compared to pretest rates. The participants' knowledge of RA & GIRLSS change score was computed by subtracting pretest scores from posttest scores such that a positive change score represents higher scores at posttest, thus indicating more knowledge of RA and GIRLSS at posttest than pretest. The means and standard deviations of each change score for intervention and control groups were estimated separately and entered into an

effect size calculator hosted online by Dr. Lee Becker at the University of Colorado-Colorado Springs (<http://www.uccs.edu/~faculty/lbecker/>). Table 13 reports the means and standard deviations used in the effect size calculations as well as Cohen's D and the effect size for each significant relationship.

Participants in the GIRLSS intervention group demonstrated greater decreases in school counselor reported levels of RA from pretest ( $M = 3.33$ ,  $SD = 1.20$ ) to posttest ( $M = 2.50$ ,  $SD = 0.85$ ) than participants in the control condition from pretest ( $M = 3.20$ ,  $SD = 1.28$ ) to posttest ( $M = 3.30$ ,  $SD = 1.32$ ). The effect size for this finding was in the moderate range (0.461) and represents nearly a 25 percent reduction in RA for GIRLSS participants.

Participants in the GIRLSS intervention group also demonstrated greater increases in their knowledge of RA and the GIRLSS curriculum from pretest ( $M = 64.27$ ,  $SD = 21.73$ ) to posttest ( $M = 82.05$ ,  $SD = 10.61$ ) than participants in the control condition from pretest ( $M = 68.92$ ,  $SD = 18.11$ ) to posttest ( $M = 66.67$ ,  $SD = 16.41$ ). The effect size for this finding was in the moderate range (0.535) and represents a 22 percent increase in knowledge of RA and the GIRLSS curriculum.

Table 13

*Effect Sizes of Differences Based on Change Scores*

Outcome Variable	Control		Intervention		Cohen's D	Effect Size
	N	Mean Change Score	N	Mean Change Score		
School Counselor Report of RA	8	-0.100 (0.513)	22	0.827 (1.155)	1.038	0.461
Participants' Knowledge of RA & GIRLSS	12	-2.250 (12.418)	22	17.773 (18.568)	1.268	0.535

*Note.* Standard deviations appear in parentheses below means.

## **CHAPTER 5: Discussion**

This study attempted to address significant gaps in science and practice by evaluating the effectiveness of an empirically-informed intervention designed to reduce relationally aggressive behaviors. Intervention is important in order to prevent many negative outcomes associated with RA and victimization, including depression, anxiety, substance abuse, impulsivity, risky sexual behaviors and suicidal ideation (Crick & Bigbee, 1998; Crick & Grotjeter, 1995). The increase in media and public attention to bullying incidents, including relationally aggressive behaviors, also indicates that there is a growing demand for intervention from practitioners, parents and policymakers (*Broken Arrow Ledger*, 2011; Hersh, 2011; <http://stopbullying.gov/>). However, few, if any, interventions for middle school students have been empirically evaluated, leaving a significant gap between the needs of practitioners and available science.

In order to address this gap, the current study evaluated the effectiveness of GIRLSS, a school-based counseling group and parent training intervention for relationally aggressive female middle school students and their families. The purpose of this chapter is to discuss the study's findings in light of the proposed research questions and previous research. Limitations of the study, practical implications and future research directions are also discussed.

### **Discussion of Findings**

**Primary outcomes.** The primary research question of the study examined the effectiveness of GIRLSS in reducing RA. Statistical significance of the intervention's

effects on participants' relationally aggressive behaviors was only found for the report of school counselors. This finding suggested that inclusion in the intervention group predicted lower levels of RA at posttest than those reported by the school counselor for control group participants. Although similar levels of significance were not found in the reports by participants or teacher, the trajectory of intervention participants' mean levels of teacher-reported RA from pretest to posttest was in the desired direction. The moderate effect size (0.461) of the significant relationship between intervention status and school counselor-report of RA provides further support for the potential of GIRLSS since the measurement of an effect size is not limited by the study's small sample size.

There are, however, limitations to this finding. In this study, the school counselors' investment in the project and knowledge of research design may have made them biased reporters. One school counselor in particular participated in the iterative development of the intervention and attended most counseling sessions. While the other school counselor did not attend counseling sessions, both were aware of participants' assignments to the intervention and control conditions. Both helped coordinate the logistics of delivering the intervention, such as providing a list to teachers of students to be released during class for the group. As a result, keeping them blind to intervention status was not possible.

The finding is also limited by pretest levels of RA, the age of participants and missing data. Although the pretest levels of RA, including severity rankings and CSBS-T scale, and age between intervention and control groups were not statistically significant, there was an observable difference (see Tables 1, 2 and 3). Across all measures of pretest

levels of RA, including self, school counselor and teacher report as well as severity rankings by school counselors, the control group always had a lower mean level of RA than the intervention group. For example, the majority of control group participants were rated as relationally aggressive by their school counselors during the nomination and recruitment procedures while the majority of intervention participants were rated as *very* relationally aggressive. Further, the majority of control group participants were only 12 years of age while the majority of intervention participants were at least 13 years of age. This one year age difference likely provided an extra year of interaction between the intervention participants and their school counselors. As a result, it may be that the school counselors knew intervention participants better than control participants. Finally, due to missing data the control group sample size for school counselors' report of RA was reduced from 12 to eight.

**Secondary outcomes.** Previous research suggested that high levels of RA were associated with several other detrimental outcomes such as depression, inattention/hyperactivity and even suicidal ideation (Crick & Bigbee, 1998; Crick et al., 1997; Galen & Underwood, 1997; Prinstein et al., 2001)). Therefore, interventions that reduce RA will also likely reduce the effects of these secondary outcomes. However, findings from the current study failed to support this hypothesis or previous research. Across measures of externalizing behaviors, internalizing behaviors, emotional symptoms and inattention/hyperactivity, no statistically significant relationship between intervention status and posttest outcomes was found. School counselors' report of behavioral symptoms approached significance, but also violated assumptions of multiple regression

methodology. Specifically, the school counselor's posttest report of behavioral symptoms was not normally distributed. Three univariate outliers were identified before analysis and deleted from the already small sample. Given the school counselors' potential for biased reporting already discussed, it seems this finding should be considered with caution.

The current study's lack of support for this hypothesis is also interesting given previous research. In the current study, participants' reports of internalizing behaviors, such as depression, were considerably lower than that found in other epidemiological studies (Crick & Grotpeter, 1995) and did not even reach at-risk levels (self-report of internalizing behaviors pretest mean = 51.529, posttest mean = 50.677). However, in a similar intervention study, Leff and colleagues (2007) also found that relationally aggressive girls reported low levels of depression at pretest and posttest. It seems that further investigation into the connection between RA and internalizing behaviors, such as depression, is warranted given the inconsistency of these findings.

**Mediation.** The GIRLSS intervention was developed based on an empirically-informed risk factor model including deficits in social information processing and inadequate parental responses to RA (Crick & Dodge, 1994; Dix, 1993). The theoretical basis of the GIRLSS intervention targets these risk factors through cognitive behavioral therapy strategies, social learning theory and parent training. To better understand the impact of these approaches on the identified risk factors for RA, the risk factors were measured at pretest and posttest and examined as mediators of any observed change in RA.

Results indicated that participants' knowledge of RA and GIRLSS partially mediated the relationship between teachers' posttest report of participants' RA and intervention status when controlling for teachers' pretest report. While intervention participants' knowledge of RA and GIRLSS increased from pretest to posttest, control participants' knowledge decreased. Intervention status also significantly predicted participants' knowledge of RA and GIRLSS in the hypothesized direction. This suggests that knowing factual information about RA and being able to identify effective strategies for avoiding RA taught in GIRLSS may promote decreases in RA behaviors.

Although no other hypothesized mediators were found to mediate any direct effect models, the role of participants' distress in response to relationally aggressive cartoon vignettes is noteworthy. While intervention participants' report of distress decreased from pretest to posttest, control participants' report increased. According to a less conservative criterion for significance used due to the small sample size and exploratory nature of the current study, intervention status also significantly predicted participants' report of distress in the hypothesized direction. An observed effect of GIRLSS on participants' experience of distress in response to relationally aggressive cartoon vignettes provides some support for Crick and Dodge's (1994) claim that children's ability to process social information, including regulate their emotional responses, impacts their aggressive or non-aggressive response to provocative situations. It also suggests that the inclusion of cognitive behavioral therapy strategies targeting participants' social information processing skills is an important component of the GIRLSS intervention.

## **Limitations and Future Research Directions**

Perhaps the most influential limitation of this study is its small sample size. Due to constraints of time and capacity, a larger sample could not be recruited, which may have uncovered significant findings missed in the current study. Results of a multiple regression power analysis suggest that a sample size of approximately 50 participants would be necessary to detect an effect size of at least 0.2 when the alpha level equals 0.05 and the level of statistical power equals 0.8

(<http://www.danielsoper.com/statcalc/calc01.aspx>; Cohen, Cohen, West & Aiken, 2003).

Therefore, an important recommendation for future research is to recruit and include a larger sample that sufficiently meets sample size standards for the type of analyses employed. Other limitations of the study include the referral and recruitment procedures, measurement of outcomes, and the author's broad role across the research and clinical procedures.

**Referral and recruitment limitations. *Internal validity threats.*** The study's referral and recruitment procedures did not follow all procedures recommended by previous literature for identifying and recruiting eligible participants (Crick & Grotjeter, 1995; Leff et al., 2009; Young et al., 2006). In designing these procedures, the approval and recommendations of school counselors in the research setting was prioritized to increase the external validity of the intervention and social acceptability. However, it is possible that these procedures compromised the internal validity of the referral measures and led to other unintended outcomes.

As reviewed in the methods chapter, previous literature has suggested the use of peer-nomination procedures to reliably identify appropriate participants (Crick & Grotpeter, 1995; Leff et al., 2009). However, such methods were not acceptable in the study's practice setting and judged to be incongruent with common practices (R. LeCure and A. Olvera, personal communication, October 7, 2009). Although the teacher-school counselor nomination procedures were developed in consultation with school counselors and the dissertation committee, it is important to note that data regarding its internal validity or reliability is not available.

The lack of data raises questions about the appropriateness of students included in the referral sample given previous findings. For example, Leff and colleagues (1999) compared teacher nominations to peer nominations of bullies and victims and found significantly lower agreement in middle school than elementary school. In fact, middle school teachers only identified 22 percent of peer-nominated middle school bullies compared to 47 percent of peer-nominated elementary school bullies. When multiple teacher nominations were combined to predict peer-nominations, agreement across levels of schooling improved. At the middle school level, when only language arts teachers' nominations were considered, there was no significant prediction of peer-nominated bullies. However, combining multiple related arts teachers' nominations significantly predicted peer nominations (Leff, Kupersmidt, Patterson & Power, 1999).

*Future research directions.* This research suggests that teacher nomination procedures are promising, but more research to establish internal validity is needed in

order to develop an externally valid method for identifying aggressors and intervention targets.

***Selection bias and stigmatization.*** The referral and recruitment procedures also introduce selection bias and some degree of stigmatization to the study. Following referral, participants were recruited based on school counselors' rankings of the severity of the relationally aggressive behaviors and parental involvement. Thus, the study may have benefited from the inclusion of more highly involved caregivers that may not be reflective of the true population. Furthermore, for the recruitment of the initial group in Spring 2010, flyers regarding the study were mailed home to all students referred. The flyers caused concern among many caregivers, resulting in several uncomfortable phone calls to the school and complaints to the researcher. A follow-up letter was sent to assuage caregivers' concerns about selection of their daughter for the study and the study's intent; however, the incident seemed to create a stigma around the group that was even present and mentioned in the second group at this particular school more than six months later. While the exact effect of the flyer is unknown, it is likely that it caused some level of selection bias.

***Future research directions.*** Future research should examine recruitment procedures to better understand their effect on who consents and who does not, as well as to understand their effect on participants' motivation for being in the intervention and changes in targeted behaviors.

***Outcome measure limitations.*** Methods used to measure the primary and secondary outcomes may have limited the study's findings because of the reliance on

perceptual data, developmental appropriateness of the self-report measures, and lack of extended follow-up.

***Primary outcomes.*** First and foremost, the primary significance findings based on the school counselors' report of RA may be limited because of the school counselors' investment in the intervention and their knowledge of participants' treatment status, as already discussed. Although it was impossible to maintain a blinded study, it could also be argued that the school counselors provided a more informed report of relationally aggressive behaviors than teachers, given that most relationally aggressive situations are referred to them by students, principals, and teachers. A middle school teacher who only sees a student for about one hour daily may not be as aware of all the relationally aggressive situations in which a student has been involved as a school counselor who hears about relationally aggressive behaviors from other students and/or teachers.

***Future research directions.*** Further research is needed to compare the reliability and correlation of teacher and school counselor reports of RA, as well as methods to maintain blindness for all reporters.

***Perceptual data.*** It could also be argued that the outcome measures may have been further limited by the study's reliance on perceptual data rather than inclusion of direct or naturalistic observations. Previous literature indicates that self-report of externalizing behavior problems such as RA is not as reliable as peer reports or observational techniques (Cairns, Cairns, Neckerman, Ferguson, & Gariepy, 1989; Smith & Sharp, 1994). In fact, Crick and colleagues (1999) found that during adolescence, self-reports do not correlate well with other informant methods, including teacher and peer

reports. Further, there is some cause for concern about teacher reports in regards to the sensitivity of their perceptions over time and cultural differences. Teachers and school counselors may maintain perceptions of students' behavior over the course of the year despite observable changes resulting in inaccurate data. Further, previous research has found differences in how teachers perceive relationally aggressive behaviors according to their ethnicity (Putallaz, Grimes, Foster, Kupersmidt, Coie & Dearing, 2007). For example, Putallaz and colleagues (2007) found that teachers rated girls of the same ethnicity as more relationally aggressive than teachers from other ethnicities and rated girls of other ethnicities as less relationally aggressive than teachers of the same ethnicity. Given the small sample size, an analysis of ethnicity on the reported outcomes is not feasible. However, the findings should be considered in light of possible limitations.

In more traditional research related to aggression, observational methodologies have been used and recommended to circumvent the biases inherent in perceptual and self-report data. Observational methodology is desirable because it is more objective and can track the frequency of relationally aggressive behaviors in a setting familiar to participants. However, given the covert nature of RA, reliable and valid observations are extremely difficult, intensive and scientifically problematic (Archer & Coyne, 2005; Crick, Casas & Ku, 1999; Young et al., 2006). For example, McNeilily-Choque and colleagues (1996) collected data regarding preschool children's aggressive behaviors from teachers, peers and trained playground observers. Although observers attained inter-observer reliability, the correlation between observers, teachers and peers for relationally aggressive behaviors was less than .20 (McNeilily, Hart, Robinson, Nelson &

Olsen, 1996). Similarly, Putallaz and colleagues (2007) found low, non-significant correlations between teacher reports and trained lunchroom observers of relational and overt aggression in fourth grade. Both studies concluded that their observations served as gross measures of RA, unable to detect covert behaviors and conversations. Without more sophisticated procedures such as wireless transmission systems, teacher reports may be the better method for measuring RA (McNeilily et al., 1996; Putallaz et al., 2007).

*Future research directions.* Given the problems presented by perceptual and observational methodologies, many researchers have recommended using a multi-informant, multi-method approach to identifying and measuring RA (Archer & Coyne, 2005; Crick et al., 1999; Crick & Grotpeeter, 1995; McEvoy, Estrem, Rodriguez, & Olson, 2003; Monks, Smith, & Swettenham, 2003; Young et al., 2006). For example, McEvoy and colleagues (2003) found moderate agreement between teacher, peer and observer reports of relationally aggressive girls. They suggest future research should examine the reliability and validity of a combined approach, such as using teacher rating scales to identify students perceived to be relationally aggressive and then confirm teacher opinions' through direct observation. Putallaz and colleagues (2007) argue that in their study, teachers emerged as a valuable source of information. They suggest that teacher reports should be considered in future intervention studies to identify target students and measure change because of the ease with which such data can be collected as compared to peer reports and observational methodologies. In review, it seems future research should seek to develop methodologies that rely on multiple informants and methodologies while balancing issues of feasibility and acceptability.

**Immediate posttest.** Furthermore, the measurement of outcomes may have also been limited by the restraints of posttest data collection immediately following the intervention. It may be that changes related to RA and GIRLSS take more time to occur and were thus not captured in the six weeks following conclusion of the intervention.

*Future research directions.* Long term follow-up is necessary and should be pursued in future research in order to capture any delayed effects.

**Limitations of mediation measures.** The empirically-based intervention model was used to identify constructs that might mediate any observed intervention effect. In order to examine mediation, reliable measures assessing the identified constructs were employed. However, in retrospect not all of the measures provided valid or accurate assessments of the constructs they were intended to examine. For example, the intervention model suggests that addressing issues of poor supervision with parents and caregivers should reduce incidents of RA. During GIRLSS parent workshops, effective supervision methods were discussed, particularly as they related to contemporary supervision issues such as monitoring their daughters' use of social media and text messaging. However, items on the APQ's Poor Monitoring/Supervision scale did not address these issues. The items are limited to questions about how often children are home alone or go out with their friends without adult supervision. In other words, the measure utilized failed to accurately and specifically measure the construct the intervention targeted for change.

Further, the cartoon vignettes used to measure participants' hostile attribution biases seemed developmentally inappropriate for some students. The HAB was

developed and validated for use with girls in grades three to four but was used in previous iterations of GIRLSS with students in grades six to ten as a clinical tool. Its use as a research tool with sixth, seventh and eighth grade girls, however, was likely not as reliable or valid as desired. As a research tool, discussion of the situation in a more developmentally-appropriate context was not possible as it was as a clinical tool during a counseling group. Without this added context, the HAB likely presented vignettes that were not as mature or sophisticated as the relationally aggressive situations the sixth, seventh and eighth grade students encountered in real-life. Given these measurement issues, the mediation findings should be interpreted *with caution*.

*Future research directions.* Examining mediation is a valuable direction for future research. However, developing valid and reliable measures of proposed mediators is an important first step to accurately measuring mediation. As interventions are developed and tested it is important to not only know if the intervention was effective but also how it was effective. In other words, through what constructs did the intervention affect change? To answer this question in regards to GIRLSS, more valid and reliable measures of proposed mediators are necessary. Measures of mediation that specifically and accurately assess targeted constructs at a developmentally appropriate level should be developed.

**Author's role.** Another limitation of the study is the breadth of the author's role in various steps of the study, from research design and hypothesizing, to recruitment, data collection, random assignment, group co-leader, clinical supervisor (under supervision of a licensed psychologist), data entry, data analysis and interpretation. Given the nature of

the project (e.g., the author's dissertation) and limited funding, the author's involvement and leadership in these roles made financial, practical and logistical sense. However, the possibility of unintentional bias exists.

*Future research directions.* In future research, a large study with adequate funding and clinical resources should be pursued in order to separate research and clinical roles.

### **Practical Implications**

Beyond the research findings and scientific limitations, the current study also has implications for local practice settings. The study represents a first step in helping school mental health practitioners, such as school counselors, meet the needs of a diverse group of relationally aggressive girls. Initial data suggests that the GIRLSS intervention may provide an empirically-based strategy for practitioners. However, more research is needed and several clinical modifications may be warranted based on anecdotal and quantitative feedback from participants, school professionals and group leaders.

**Intervention modifications.** Areas of potential modifications include parent participation, intervention length, key activities such as goal sheets and journal prompts, and composition of counseling group members. For example, to increase rates of engagement and attendance at parent workshops, the workshops could be reduced to just one session and phone calls could be replaced with text messages and emails. While attendance at the parent workshops was acceptable it was significantly better at one school than the other suggesting different population needs. Altering the strategies for involving parents may be necessary to better meet the needs of diverse populations.

Further, participants and school counselors expressed concern that the intervention was too long and should be reduced by at least two sessions. Group leaders suggested including booster sessions in the months following conclusion of the intervention. Key activities such as journal prompts and goal sheets were not completed frequently in groups where the school counselor did not attend the counseling sessions and were rated lower than other areas in the summative evaluation reports (see Figure 8). This suggests that the processes around these activities or the activities themselves should be revised. Evaluation data following each session also suggests that session four was not well-received by participants (see Figure 7). This session included a motivational interviewing activity that was mostly discussion limiting participants to their seat and requiring sustained attention. This session is also likely in the transition period of the group's stages of change (Corey, Corey & Corey, 2010). During the transition stage group members may be experiencing heightened anxiety about the group as they are starting to deal with their defensiveness, confront their fears of being in a group and work through conflict. In future implementations, this session should be monitored and modifications made to include more trust building exercises in light of this feedback.

Throughout the implementation of GIRLSS the potential for iatrogenic effects such as peer reinforcement of aggressive behaviors and rumination were monitored and specific prevention strategies and policies were employed (see *GIRLSS Group Counseling* section in *Methods* chapter; Dishion et al., 1999; Rose, 2002). One strategy that was not employed in this intervention but has been recommended and utilized in previous research is creating groups composed of relationally aggressive and non-

relationally aggressive peers (Dishion et al., 1999; Feldmal, 1992; Leff et al., 2009). In future clinical and research iterations of GIRLSS, including a mixed group of participants will likely help strengthen the intervention and improve outcomes for the relationally aggressive group members.

Finally, regardless of what modifications are made to any clinical or research implementation of GIRLSS, the intervention outcome and process variables should be evaluated and an iterative process of improvement continue to be utilized. Evaluation data should be used to inform the continuous improvement of GIRLSS as well as inform progress at the local school site. Local evaluations will help practitioners systematically adapt non-essential components of the intervention to the needs of their population (Godber, 2008). Possible adaptations could include changes in the length of each group counseling session, the order of topics and activities of each session, or the communication methods used to communicate and involve parents (e.g., email and/or text messaging).

## **Conclusion**

The effects of RA have become popular topics in research and media over the past several years with a proliferation of developmental and epidemiological studies as well as sensationalized books and news stories. However, despite increased popularity, the effectiveness of efforts to prevent and/or reduce RA have received little to no attention (Leff et al., 2007). In response, this study provided a first step in understanding what works to reduce and prevent RA. Despite being limited by potentially biased reporting, overreliance on perceptual data and a small sample size, some important findings

emerged. It seems that when participants understand RA and the intervention, they also demonstrate less relationally aggressive behaviors as rated by their teachers at posttest. This is a promising finding and suggests the need for further research and development to improve GIRLSS and address limitations. Given the topic's popularity across professionals and stakeholders, the current study makes an important contribution to the field and further research is warranted.

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APPENDIX A: Letters of Support From Southern Boone County Middle School and  
Lange Middle School

***Southern Boone County  
Middle School***

**Robert (Bob) Simpson, Principal**  
[rsimpson@mail.ashland.k12.mo.us](mailto:rsimpson@mail.ashland.k12.mo.us)

P.O. Box 168  
Ashland, Missouri 65010

**Telephone:** 573-657-2146  
**Fax Number:** 573-657-5519

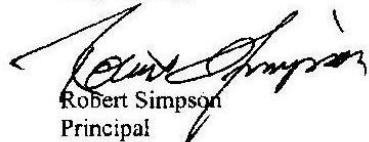
June 3, 2009

Joni Williams Splett  
School Psychology Doctoral Student  
GRA. Center for the Advancement of  
Mental Health Practices in Schools

Joni Williams Splett,

On behalf of Southern Boone County Middle School I would like to extend a warm welcome to both you and your staff. Your research proposal on relational aggression intervention sounds like an excellent opportunity from which we may both benefit. The guidelines, procedural safeguards, and focus in which you set for the research project illustrates your strong commitment to this endeavor. Therefore I would like to cordially invite your team of professionals to Southern Boone Middle School as we will play host to your structured intervention program focusing on relational aggression as outlined during your proposal.

Respectfully,

  
Robert Simpson  
Principal



## COLUMBIA PUBLIC SCHOOLS

[www.columbus.k12.mo.us](http://www.columbus.k12.mo.us)

Dr. Chris Belcher  
Superintendent

### ADMINISTRATION BUILDING

1818 West Worley Street (573) 214-3400

Columbia, Missouri 65203

Fax: (573) 214-3401

Dr. Sally Beth Lyon  
Chief Academic Officer

June 2, 2010

Ms. Joni Splett  
305 Lewis Hall  
Columbia, MO 65211

Dear Ms. Splett:

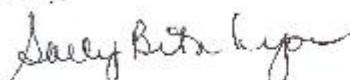
Your research proposal entitled "*GIRLSY: A Multimodal Intervention to Reduce Relational Aggression*" (CPS ID# 234) has been approved, contingent on the following changes to the consent forms:

1. "Consent Forms" for Teacher, Parent and Student. In the paragraph "What About Confidentiality" (last sentence) the working states "we may have to tell their parents or relevant authority." I recommend this be adjusted to reflect that we will follow mandated reporting procedures.
2. Within the same document (Consent Forms) in section "Questionnaires to be completed", last sentence. This sentence states information will be shared, however school personnel i.e. school counselors is invited to participate.
3. We recommend that the consent forms indicate that school personnel / counselors will participate so it is clear they will have access to the information. We are interested in sustainability of these effects so we will want a school counselor to participate. Thus experience / learning will enhance our interest in participating in this research.  
(See attached for revisions to Consent Form)

Dr. Bernard Solomon, Principal, Lange Middle School, will serve as your district contact for the study. You may contact Dr. Bernard Solomon, Principal, Lange Middle School at 214-3250 regarding details of your study.

Best wishes for success in your research.

Sincerely,

  
Sally Beth Lyon  
Chief Academic Officer

sk

cc: Dr. Bernard Solomon, Principal, Lange Middle School  
Mr. Chip Sharp

APPENDIX B: Children's Social Behavior Scale-Self Report (Crick & Grotjohann, 1995)

## **Things I Do At School**

ID#	Spring 2010 Fall 2010	Pre Post Delayed Post	Date:
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We are interested in how kids get along with one another. Please think about your relationship with other kids and how often you do these things while you're with them.

1. Some kids tell lies about a classmate so that the other kids won't like the classmate anymore. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

2. Some kids try to keep certain people from being in their group when it is time to play or do an activity. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

3. Some kids try to cheer up other kids who feel upset or sad. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

4. When they are mad at someone, some kids get back at the person by not letting the person be in their group anymore. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

5. Some kids hit other kids at school. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

6. Some kids let others know that they care about them. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

7. Some kids help out other kids when they need it. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

8. Some kids yell at others and call them mean names. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

9. Some kids push and shove other kids at school. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

10. Some kids tell their friends that they will stop liking them unless the friends do what they say. How often do you tell friends this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

11. Some kids have a lot of friends in their class. How often do you have a lot of friends in your class?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

12. Some kids try to keep others from liking a classmate by saying mean things about the classmate. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

13. Some kids wish that they had more friends at school. How often do you feel this way?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

14. Some kids say or do nice things for other kids. How often do you do this?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
------------	-------------------	----------------	--------------------------	-------------------

15. Some kids have a lot of classmates who like to play with them. How often do the kids in your class like to play with you?

Never 1	Almost Never 2	Sometimes 3	Almost All The Time 4	All The Time 5
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## APPENDIX C: Children's Social Behavior Scale-Teacher and School Counselor Report (Crick, 1996)

ID#: \_\_\_\_\_

Spring 2010	Pre	Date:
Fall 2010	Post Delayed Post	

School	Grade
--------	-------

Never

Almost

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. This child says supportive things to peers.  | 1 | 2 | 3 | 4 | 5 |
| 2. When this child is mad at a peer, s/he gets even by excluding the peer from his or her clique or play group.           | 1 | 2 | 3 | 4 | 5 |
| 3. This child hits or kicks peers.  | 1 | 2 | 3 | 4 | 5 |
| 4. This child tries to cheer up peers when they are upset or sad about something.   | 1 | 2 | 3 | 4 | 5 |
| 5. This child spreads rumors or gossips about some peers.   | 1 | 2 | 3 | 4 | 5 |
| 6. This child initiates or gets into physical fights with peers.  | 1 | 2 | 3 | 4 | 5 |
| 7. When angry at a peer, this child tries to get other children to stop playing with the peer or to stop liking the peer. | 1 | 2 | 3 | 4 | 5 |
| 8. This child is helpful to peers.  | 1 | 2 | 3 | 4 | 5 |
| 9. This child threatens to stop being a peer's friend in order to hurt the peer or to get what s/he wants from the peer.  | 1 | 2 | 3 | 4 | 5 |
| 10. This child threatens to hit or beat up other children   | 1 | 2 | 3 | 4 | 5 |

	Never True			Almost Always True	
	1	2	3	4	5
11. When mad at a peer, this child ignores the peer or stops talking to the peer.					
12. This child pushes or shoves peers.					
13. This child is kind to peers.					

## APPENDIX D: Researcher Phone Script for Recruitment

Hi, my name is \_\_\_\_\_ and I am a researcher from the University of Missouri. How are you doing? I am calling to talk to you briefly about a study we are doing at your daughter's school. (School Counselor's Name) called a few days ago about our study and I'd like to provide you with more information. The purpose of the study is to learn if a combined group counseling and parent training intervention can reduce your daughter's relationally aggressive behaviors and help you have a better relationship with her. If you decide to be part of the study, you and your daughter will be randomly assigned to participate in the intervention during the current semester or a control condition. The control condition means you will not be part of the intervention group, but be asked to provide data before the intervention group begins and two times following its conclusion. I'll tell you more about the data later. If you are in the intervention group, your daughter will be involved in a counseling group and you will be involved in some parent training. The intervention includes two parent training workshops, biweekly phone calls and a 10-week counseling group for your daughter at the school facilitated by graduate students from MU. The parent training workshops will be held at times convenient for families in the study and provide information to you about what relational aggression is, what your daughter is learning in the group, and how you can help her at home. The counseling group will be held during school hours but not during core classes. It will last one hour and 15 minutes each week and help your daughter learn to interact with others in more acceptable ways.

As part of the study, you and your daughter will be asked to complete questionnaires several times throughout the course of the intervention. Regardless of what group you are assigned to, you and your daughter will complete the questionnaires three times between now and the fall. Each time a research assistant will either come to your house or meet you at the school for questionnaire completion, based on what is most convenient for you. In return for your time in completing these questionnaires, your family will receive a small gift card to a local business each time you complete the questionnaires. The information you and your daughter report in the questionnaires will be confidential. It will not be shared with your child's teacher or anyone at the school.

Do you have any questions about what I've said or something I failed to mention?

Are you interested in participating in this study?

(if yes- schedule a time for the first home/school visit to complete the pretest questionnaires and remind the parent to return the consent forms to school with their daughter)

### **Questions Frequently Asked by Parents:**

- (1) *Why was my child referred? How did she get picked?*

The school counselor at your daughter's school told us that she had spoken with you and that you would like to hear about the study. The reason your child was referred to take part in the study is because she has been involved in relationally aggressive friendships at school, as either the victim or the aggressor.

*(2) Do I have to attend the Parent Training Workshops?*

Yes. If you decide you would like to be part of the study you and your partner will be asked to attend both of the Parent Training Workshops. Each workshop will last approximately two hours. The workshops will be scheduled at a time that is most convenient for the majority of families participating.

*(3) How will my daughter benefit from being in the study?*

The main purpose of the study is to work with you, the school, and your daughter to reduce her involvement in relationally aggressive friendships. Your daughter may have improved relationships with her teachers and peers and may have fewer behavior problems at school or at home. However, we cannot guarantee that your daughter will benefit from being part of the study.

*(4) Will participating in this program make my child fall behind in her studies (i.e., because she will be missing class)?*

Your daughter will miss approximately one hour of school during each group counseling session. Sessions will occur one time per week for ten weeks. Sessions will be scheduled around core classes. If missing class during this time becomes a problem, your daughter can drop out of the study at anytime or other plans can be made to adjust her schedule.

*(5) Will my daughter be teased or ridiculed for being a part of this program?*

Other students will not know that your daughter is part of the study unless she tells them. Students are often released from class to participate in a wide variety of activities; therefore it is unlikely that other students will randomly guess that she is involved in this particular group. In addition, your daughter may actually experience improved peer relationships as part of participating in the study.

*(6) Will you share information that I report with the teacher or other school officials?*

Any information that is gathered as part of this study and that can be identified with you will remain private. We will code all information with a number to protect your identity. In any sort of report we might publish, we will not include any information that will

make it possible to identify you or any of the families that participate. The data will be stored in locked file cabinets behind locked doors. Only the researchers will have access to these records.

**APPENDIX E: IRB and School Approved Youth Assent, Parent Consent and Teacher Consent Forms (Southern Boone Middle School)**



Dr. Connie Brooks  
226 Lewis Hall  
Columbia, Missouri 65211  
Phone: 573-884-2131  
[BrooksCM@missouri.edu](mailto:BrooksCM@missouri.edu)

**University of Missouri-Columbia**

**Growing Interpersonal Relationships through Learning and Systemic Supports  
(GIRLSS)  
Youth Assent Form**

This study is about helping families and schools work together to help students do well in school. Specifically we are interested in helping teens learn more effective ways to handle peer relationship problems.

**Why are YOU invited?**

You are invited to be part of the study because you may have been involved in a relationally aggressive friendship.

**WHAT IS RELATIONAL AGGRESSION?**

Relational aggression is a non-physical form of aggression that includes behaviors such as gossiping, rumor-spreading, the “silent treatment,” and manipulating others to get them to also reject a peer. These behaviors are harmful to friendships. While relational aggression is not a psychological disorder, it is a social concern.

**What will happen if I agree to participate?**

1. You will be assigned to participate in either the Spring 2010 or the Fall 2010 counseling group.
2. In the counseling group, you will join a 10-week group, during school hours that will help improve your friendships. The group will last about one hour and not be scheduled during your core courses.
3. Your parent(s) or legal guardian will attend workshops to learn about how to support you as a teenager, who may sometimes have complicated friendships.
4. You will be asked to fill out questionnaires about your behaviors and feelings as well as about your parents’ behavior three to five times during the study. Your parents and/or legal guardian will also be asked to fill out questionnaires. It will take about one hour for you and your parent/legal guardian to complete the questionnaires each time.

5. A teacher and counselor with whom you are familiar will fill out a questionnaire about your progress. **We will not share this information with anyone else.**

#### **Can anything bad happen to me?**

When we talk to you about how you are doing at school or home, our questions might seem strange, but they should not give you any new worries and you don't have to answer them if you don't want to.

#### **Can anything good happen to me?**

You might get along better with classmates by participating in the study, but it's not for sure. Also, we might find out something that will help other teenagers like you later.

#### **What if I don't want to do this?**

If you do not want to be in the study, you just have to tell us. There will be no consequences for your decision. You can also say yes now and if change your mind, you can quit the study. The choice is up to you.

#### **Who will see my information?**

All of the information we get about you from your parents and teacher/counselor **will not be shared with anyone else**. Also, anything that you tell us will be kept in confidence. However, if you tell us that you would like to hurt yourself or someone else, or if you tell us that someone is hurting you we may have to talk to your parents or another adult.

**Your classmates won't know that you are in the study unless you tell them.**

#### **Who can I talk to about the study?**

You can ask questions any time. You can ask now. You can ask later. You can talk to me or you can talk to someone else, like your teacher, your school counselor, or Dr. Brooks, whose phone number is at the top of this page.

**Do you have any questions about the study?**

**Do you want to be in the study?**

**YES**

**NO**

---

**Signature of Youth**

**Date**

---

Printed Name



Dr. Connie Brooks  
226 Lewis Hall  
Columbia, Missouri 65211  
Phone: 573-884-2131  
[BrooksCM@missouri.edu](mailto:BrooksCM@missouri.edu)

University of Missouri-Columbia

**Growing Interpersonal Relationships through Learning and Systemic Supports  
(GIRLSS):  
Parent Consent Form**

You and your child are invited to be part of a research study being conducted by researchers from the University of Missouri's Assessment & Consultation Clinic. The study is focused on helping young girls develop better peer relationships and reduce problems with relational aggression within their friendships. The purpose of the study is to learn if a combined intervention of group counseling and parent consultation reduces instances of relationally aggressive behaviors. We are asking you to be part of the study because your daughter has been identified as one who is involved in relationally aggressive friendships.

**WHAT IS RELATIONAL AGGRESSION?**

Relational aggression is a non-physical form of aggression that includes behaviors such as gossiping, rumor-spreading, the “silent treatment,” and manipulating others to get them to also reject a peer. These behaviors are harmful to the relationships of children during school years and those they establish with their future families and jobs. Involvement in these types of relationships has been shown to lead to problems with academics, behaviors, and future relationships.

**WHAT WILL WE NEED TO DO AS PART OF THE STUDY?**

Participants will be randomly assigned to participate in the intervention this semester or a control condition. The intervention condition will include a counseling group for your daughter at her school and parent training and consultation for you. If you are in the control condition, you and your daughter will not be involved in the intervention described below.

**Your Involvement:**

Parent involvement in the intervention includes biweekly phone calls and two parent training workshops. The phone calls will be brief updates on your daughter's progress, reminders about the parent training workshops and an opportunity for you to ask questions about the intervention. The parent training workshops will be scheduled during times convenient to you and other parents involved in the study. The workshops are intended to help you learn more about relational aggression, the counseling group your daughter is attending and how you can help your daughter improve her relationships and reduce relationally aggressive

behaviors. There is a weekly calendar at the bottom of this form for you to indicate what times are most convenient for you to attend the parent training workshops.

**Your Daughter's Involvement:**

If you decide to be part of the study, your daughter will be asked to meet for weekly group counseling with Group Leaders and other group members (5 to 6 fellow female classmates) during the school day at Southern Boone County Middle/High School. Group participants will miss a minimum amount of academic time as the group sessions will not be scheduled during core classes. The group counseling will last 10 weeks, during which Group Leaders will focus on appropriate ways to build relationships without being involved in relational aggression.

**Questionnaires to complete:**

Regardless of which condition you are randomly assigned to you, you and your daughter will each be asked to fill out questionnaires no more than three times during the course of the study, over a period of approximately 12 months. The questionnaires for your daughter will include questions about her friendships, physical and relational aggression, prosocial skills, and feelings. The questionnaires will take her about 45 minutes to complete. The questionnaires you will complete will ask about your daughter's behaviors and feelings, your knowledge of relational aggression, and parent discipline strategies. The questionnaires will take you approximately one hour to complete. The questionnaires are available for your review by contacting Dr. Brooks (contact information listed above). Research assistants will contact you each time you and your daughter need to complete the questionnaires. They will schedule a convenient time to either visit your home or meet you at school during which you will complete the questionnaires.

Additionally we will ask one of your daughter's teachers and a school counselor to complete similar questionnaires about your daughter's behaviors and peer relationships. The information that you and others share is **private**. It will **NOT** be shared with your child's teacher or anyone at the school.

**HOW LONG WILL I BE IN THE STUDY?**

All research related activities (e.g., questionnaires) will occur between January and December 2010. If you are in the intervention condition, your involvement in the intervention (attending group counseling sessions, receiving phone calls and attending 2 parent workshops) will be completed within a 10-week period.

**WHAT ABOUT CONFIDENTIALITY?**

Any information gathered as part of this study that could be identified with you or your daughter will remain **private**. We will code all information with a number to protect your identity. In any sort of report we might publish, we will not include any information that will make it possible to identify you. The data will be stored in locked file cabinets and only the researchers will have access. However, if we gather any information that indicates your daughter intends to hurt herself, that someone is abusing her, or that she plans to seriously hurt someone else we may have to tell you or relevant authorities.

Group sessions and parenting workshops will be videotaped for supervision and student training purposes. Detailed information from the group sessions will be provided to parents as deemed necessary. The videotapes will be kept in a secured and confidential location following conclusion of the study. **They will only be shared with people who are part of the research team.**

### **WHAT ARE THE RISKS AND BENEFITS OF THE STUDY?**

The risks associated with being in this study are greater than minimal. However, it is possible that our efforts to protect your privacy will not work. Also, you and your daughter may feel uncomfortable talking about sensitive issues during the Parenting Workshops, consultation phone calls, or the group counseling sessions.

The benefit of the study is that the intervention may help your daughter build more appropriate relationships and do better at school academically and behaviorally. Also, the study may help future families by helping us understand how a family-school intervention can affect student behavior. However, we cannot guarantee that you or your child will benefit from this research.

You will also receive a small giftcard to a local restaurant or business to reimburse you for your time each time you complete the questionnaires and attend a parent training workshop.

### **WHAT ARE MY RIGHTS AS A PARTICIPANT?**

You and your daughter are free to choose whether or not you want to be in the study. Your choice will not affect your relationship with Southern Boone County School District or the University of Missouri. If you decide to be part of the study, you and your daughter are free to withdraw at any time without penalty.

### **UNIVERSITY OF MISSOURI INJURY POLICY**

It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri, in fulfilling its public responsibility, has provided medical, professional and general liability insurance coverage for any injury in the event such injury is caused by the negligence of the University of Missouri, its faculty and staff. The University of Missouri also provides within the limitations of the laws of the state of Missouri, facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event your child suffers injury as the result of participation in the research program, you are to contact the Risk Management Officer, telephone number (573) 882-1181, at the Health Sciences Center, who can review the matter and provide further information. This statement is not to be construed as an admission of liability.

### **WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?**

If you have any questions, please feel free to contact Connie Brooks, Ph.D. by email ([BrooksCM@missouri.edu](mailto:BrooksCM@missouri.edu)) or phone (573-884-8131), Project Director, University of Missouri; 226 Lewis Hall; Columbia, MO 65211.

If you have any questions or concerns about the study and want to talk to someone other than the researcher(s), contact the Campus Institutional Research Board, 483 Mc Reynolds, Columbia, MO, 65201; telephone (573) 882-9585. This office oversees the review of the research to protect your rights and is not involved with this study. The project number is 1143477.

*If you agree to the above guidelines for participation, please separate this page from the others and return it with your daughter to school (to the school counselor) no later than XXXXX XX, 2010.*

---

**SIGNATURE:**

By signing this form you agree that you have read and understand the information above. It also shows that you agree to participate, that you are allowing your daughter to be in the study, and that you consent to your daughter being videotaped during group counseling sessions. Additionally, your signature indicates that you understand that you may withdraw from the study at any time without penalty.

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Child's Name (Printed)

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Parent's Signature

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Date

Please **CIRCLE** the top three most convenient times for you to attend 2 parent training workshops during this semester. Each workshop will last 1.5 to 2 hours and be held at the Southern Boone Country Middle or High School.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am- 12pm	8am- 12pm	8am-12pm	8am-12pm	8am-12pm	8am- 12pm	8am-12pm
12pm- 5pm	12pm- 5pm	12pm- 5pm	12pm-5pm	12pm-5pm	12pm- 5pm	12pm-5pm
5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm



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### **Growing Interpersonal Relationships through Learning and Systemic Supports (GIRLSS): Teacher Consent Form**

You are invited to be part of a research study being conducted by researchers from the University of Missouri's Assessment & Consultation Clinic. The study is focused on helping young girls develop better peer relationships and reduce problems with relational aggression within their friendships. The purpose of the study is to learn if including girls in group counseling for relational aggression, along with inclusion of their families in parent education workshops/phone consultation, reduces instances of relationally aggressive behaviors. You are being asked to be part of the study because a student in your classroom is part of the study.

#### **WHAT WILL I NEED TO DO AS PART OF THE STUDY?**

If you decide to be part of the study, you will be asked to fill out a questionnaire about the participating student's social behaviors three to five times throughout the study. It will take you no more than 15 minutes to complete the questionnaire each time. You will be asked to complete the questionnaire within one week of receiving it. .

#### **HOW LONG WILL I BE IN THE STUDY?**

All research related activities of the study will occur between January 2010 and March 2011. Intervention activities will conclude by December 2010 and only data will be collected in March 2011 on those students who received the intervention during the Fall 2010 semester.

#### **WHAT ABOUT CONFIDENTIALITY?**

Any information that is gathered as part of this study and that can be identified with you will remain private; however parents are aware that school personnel are providing behavioral information on the group participants. We will code all information with a number to protect your identity. In any sort of report we might publish, we will not include any information that will make it possible to identify you or any of the families that participate. The data will be stored in locked file cabinets behind locked doors. Only the researchers will have access to these records. **However, if we gather any information that indicates participants would like to hurt themselves, someone else is hurting them, or they would like to hurt someone else we may have to tell their parents or relevant authorities**

## **WHAT ARE THE RISKS AND BENEFITS OF THE STUDY?**

The risks associated with being in this study are greater than minimal. However, it is possible that our efforts to protect your privacy will not be effective. Also, you may feel uncomfortable when filling out questions about the student's behaviors.

The benefit of the study is that it may help the student build more appropriate relationships and do better at school academically and behaviorally. Also, the study may help future families by helping us understand how a family intervention can affect student behavior and home-school involvement. However, we cannot guarantee that you or the student in your classroom will benefit from this research.

## **WHAT ARE MY RIGHTS AS A PARTICIPANT?**

You are free to choose whether or not you want to be in the study. Your choice will not affect your relationship with Southern Boone County School District or the University of Missouri. Please be aware that you have the right to refuse to be in the study or withdraw from this study at any time.

## **UNIVERSITY OF MISSOURI INJURY POLICY**

It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri, in fulfilling its public responsibility, has provided medical, professional and general liability insurance coverage for any injury in the event such injury is caused by the negligence of the University of Missouri, its faculty and staff. The University of Missouri also provides within the limitations of the laws of the state of Missouri, facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event your child suffers injury as the result of participation in the research program, you are to contact the Risk Management Officer, telephone number (573) 882-1181, at the Health Sciences Center, who can review the matter and provide further information. This statement is not to be construed as an admission of liability.

## **WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?**

If you have any questions, please feel free to contact Connie Brooks, Ph.D. by email ([BrooksCM@missouri.edu](mailto:BrooksCM@missouri.edu)) or phone (573-884-8131), Project Director, University of Missouri; 226 Lewis Hall; Columbia, MO 65211.

If you have any questions or concerns about the study and want to talk to someone other than the researcher(s), contact the Campus Institutional Research Board, 483 Mc Reynolds, Columbia, MO, 65201; telephone (573) 882-9585. This office oversees the review of the research to protect your rights and is not involved with this study. The project number is 1143477.

**SIGNATURE:**

By signing this form you agree that you have read and understand the information above. It also shows that you agree to be part of the study. Additionally your signature indicates that you understand that you may withdraw from the study at any time without penalty. A copy of this form, with your signature, is available upon request.

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Teacher's Signature

Date

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Printed Name

**APPENDIX F: IRB and School Approved Youth Assent, Parent Consent and Teacher Consent Forms (Lange Middle School)**



**University of Missouri-Columbia**

Dr. Connie Brooks  
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Project #: 1143477

**Growing Interpersonal Relationships through Learning and Systemic Supports  
(GIRLSS)**

**Youth Assent Form**

This study is about helping families and schools work together to help students do well in school. Specifically we are interested in helping teens learn more effective ways to handle peer relationship problems.

**Why are YOU invited?**

You are invited to be part of the study because you may have been involved in a relationally aggressive friendship.

**WHAT IS RELATIONAL AGGRESSION?**

Relational aggression is a non-physical form of aggression that includes behaviors such as gossiping, rumor-spreading, the “silent treatment,” and manipulating others to get them to also reject a peer. These behaviors are harmful to friendships. While relational aggression is not a psychological disorder, it is a social concern.

**What will happen if I agree to participate?**

1. You will be assigned to participate in either the Fall 2010 or the Spring 2011 counseling group.
2. In the counseling group, you will join a 10-week group, during school hours that will help improve your friendships. The group will last about one hour and not be scheduled during your core courses.
3. Group leaders will be graduate clinicians from the MU Assessment and Consultation Clinic. School counselors may participate in group counseling and parent training sessions.
4. Your parent(s) or legal guardian will attend workshops to learn about how to support you as a teenager, who may sometimes have complicated friendships.
5. You will be asked to fill out questionnaires about your behaviors and feelings as well as about your parents’ behavior three to five times during the study. Your parents and/or legal guardian will also be asked to fill out questionnaires. It will take about

- one hour for you and your parent/legal guardian to complete the questionnaires each time.
6. A teacher and counselor with whom you are familiar will fill out a questionnaire about your progress. **We will not share this information with anyone else.**

**Can anything bad happen to me?**

When we talk to you about how you are doing at school or home, our questions might seem strange, but they should not give you any new worries and you don't have to answer them if you don't want to.

**Can anything good happen to me?**

You might get along better with classmates by participating in the study, but it's not for sure. Also, we might find out something that will help other teenagers like you later.

**What if I don't want to do this?**

If you do not want to be in the study, you just have to tell us. There will be no consequences for your decision. You can also say yes now and if change your mind, you can quit the study. The choice is up to you.

**Who will see my information?**

All of the information we get about you from your parents and teacher/counselor **will not be shared with anyone else**. Also, anything that you tell us will be kept in confidence. However, if you tell us that you would like to hurt yourself or someone else, or if you tell us that someone is hurting you we will follow mandated reporting procedures and may have to talk to your parents or another adult.

**Your classmates won't know that you are in the study unless you tell them.**

**Who can I talk to about the study?**

You can ask questions any time. You can ask now. You can ask later. You can talk to me or you can talk to someone else, like your teacher, your school counselor, or Dr. Brooks, whose phone number is at the top of this page.

**Do you have any questions about the study?**

**Do you want to be in the study?**

**YES**

**NO**

---

**Signature of Youth**

**Date**

---

**Printed Name**



Dr. Connie Brooks  
226 Lewis Hall  
Columbia, Missouri 65211  
Phone: 573-884-2131  
[BrooksCM@missouri.edu](mailto:BrooksCM@missouri.edu)

University of Missouri-Columbia

### **Growing Interpersonal Relationships through Learning and Systemic Supports (GIRLSS):**

#### **Parent Consent Form**

You and your child are invited to be part of a research study being conducted by researchers from the University of Missouri's Assessment & Consultation Clinic. The study is focused on helping young girls develop better peer relationships and reduce problems with relational aggression within their friendships. The purpose of the study is to learn if a combined intervention of group counseling and parent consultation reduces instances of relationally aggressive behaviors. We are asking you to be part of the study because your daughter has been identified as one who is involved in relationally aggressive friendships.

#### **WHAT IS RELATIONAL AGGRESSION?**

Relational aggression is a non-physical form of aggression that includes behaviors such as gossiping, rumor-spreading, the “silent treatment,” and manipulating others to get them to also reject a peer. These behaviors are harmful to the relationships of children during school years and those they establish with their future families and jobs. Involvement in these types of relationships has been shown to lead to problems with academics, behaviors, and future relationships.

#### **WHAT WILL WE NEED TO DO AS PART OF THE STUDY?**

Participants will be randomly assigned to participate in the intervention this semester or a control condition. The intervention condition will include a counseling group for your daughter at her school and parent training and consultation for you. If you are in the control condition, you and your daughter will not be involved in the intervention described below.

#### **Your Involvement:**

Parent involvement in the intervention includes biweekly phone calls and two parent training workshops. The phone calls will be brief updates on your daughter's progress, reminders about the parent training workshops and an opportunity for you to ask questions about the intervention. The parent training workshops will be scheduled during times convenient to you and other parents involved in the study. The workshops are intended to help you learn more about relational aggression, the counseling group your daughter is attending and how you can help your daughter improve her relationships and reduce relationally aggressive behaviors. There is a weekly calendar at the bottom of this form for you to indicate what times are most convenient for you to attend the parent training workshops.

### **Your Daughter's Involvement:**

If you decide to be part of the study, your daughter will be asked to meet for weekly group counseling with Group Leaders and other group members (5 to 6 fellow female classmates) during the school day at Lange Middle School. Group participants will miss a minimum amount of academic time as the group sessions will not be scheduled during core classes. The group counseling will last 10 weeks, during which Group Leaders will focus on appropriate ways to build relationships without being involved in relational aggression. Group leaders will be graduate clinicians from the MU Assessment and Consultation Clinic. School counselors may participate in group counseling and parent training sessions.

### **Questionnaires to complete:**

Regardless of which condition you are randomly assigned to you, you and your daughter will each be asked to fill out questionnaires no more than three times during the course of the study, over a period of approximately 12 months. The questionnaires for your daughter will include questions about her friendships, physical and relational aggression, prosocial skills, and feelings. The questionnaires will take her about 45 minutes to complete. The questionnaires you will complete will ask about your daughter's behaviors and feelings, your knowledge of relational aggression, and parent discipline strategies. The questionnaires will take you approximately one hour to complete. The questionnaires are available for your review by contacting Dr. Brooks (contact information listed above). Research assistants will contact you each time you and your daughter need to complete the questionnaires. They will schedule a convenient time to either visit your home or meet you at school during which you will complete the questionnaires.

Additionally we will ask one of your daughter's teachers and a school counselor to complete similar questionnaires about your daughter's behaviors and peer relationships. The information that you and others share is **private**. It will **NOT** be shared with your child's teacher or anyone at the school.

### **HOW LONG WILL I BE IN THE STUDY?**

All research related activities (e.g., questionnaires) will occur between January and December 2010. If you are in the intervention condition, your involvement in the intervention (attending group counseling sessions, receiving phone calls and attending 2 parent workshops) will be completed within a 10-week period.

### **WHAT ABOUT CONFIDENTIALITY?**

Any information gathered as part of this study that could be identified with you or your daughter will remain **private**. We will code all information with a number to protect your identity. We will give a summary of findings from the study to the Columbia Public School district; however, in any sort of report we might publish, we will not include any information that will make it possible to identify you. The data will be stored in locked file cabinets and only the researchers will have access. However, if we gather any information that indicates your daughter intends to hurt herself, that someone is abusing her, or that she plans to seriously hurt someone else we will follow mandated reporting procedures and may have to tell you or relevant authorities.

Group sessions and parenting workshops will be videotaped for supervision and student training purposes. Detailed information from the group sessions will be provided to parents as deemed necessary. The videotapes will be kept in a secured and confidential location following conclusion of the study. **They will only be shared with people who are part of the research team.**

### **WHAT ARE THE RISKS AND BENEFITS OF THE STUDY?**

The risks associated with being in this study are greater than minimal. It is possible that our efforts to protect your privacy will not work. Also, you and your daughter may feel uncomfortable talking about sensitive issues during the Parenting Workshops, consultation phone calls, or the group counseling sessions.

The benefit of the study is that the intervention may help your daughter build more appropriate relationships and do better at school academically and behaviorally. Also, the study may help future families by helping us understand how a family-school intervention can affect student behavior. However, we cannot guarantee that you or your child will benefit from this research.

You will also receive a small giftcard to a local restaurant or business to reimburse you for your time each time you complete the questionnaires and attend a parent training workshop.

### **WHAT ARE MY RIGHTS AS A PARTICIPANT?**

You and your daughter are free to choose whether or not you want to be in the study. Your choice will not affect your relationship with Columbia Public School District or the University of Missouri. If you decide to be part of the study, you and your daughter are free to withdraw at any time without penalty.

### **UNIVERSITY OF MISSOURI INJURY POLICY**

It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri, in fulfilling its public responsibility, has provided medical, professional and general liability insurance coverage for any injury in the event such injury is caused by the negligence of the University of Missouri, its faculty and staff. The University of Missouri also provides within the limitations of the laws of the state of Missouri, facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event your child suffers injury as the result of participation in the research program, you are to contact the Risk Management Officer, telephone number (573) 882-1181, at the Health Sciences Center, who can review the matter and provide further information. This statement is not to be construed as an admission of liability.

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*If you agree to the above guidelines for participation, please separate this page from the others and return it with your daughter to school (to the school counselor) no later than XXXXX XX, 2010.*

---

**SIGNATURE:**

By signing this form you agree that you have read and understand the information above. It also shows that you agree to participate, that you are allowing your daughter to be in the study, and that you consent to your daughter being videotaped during group counseling sessions. Additionally, your signature indicates that you understand that you may withdraw from the study at any time without penalty.

---

Child's Name (Printed)

---

Parent's Signature

---

Date

Please **CIRCLE** the top three most convenient times for you to attend 2 parent training workshops during this semester. Each workshop will last 1.5 to 2 hours and be held at Lange Middle School.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8am- 12pm	8am- 12pm	8am-12pm	8am-12pm	8am-12pm	8am- 12pm	8am-12pm
12pm- 5pm	12pm- 5pm	12pm- 5pm	12pm-5pm	12pm-5pm	12pm- 5pm	12pm-5pm
5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm	5pm-9pm



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#### **WHAT WILL I NEED TO DO AS PART OF THE STUDY?**

If you decide to be part of the study, you will be asked to fill out a questionnaire about the participating student's social behaviors three to five times throughout the study. It will take you no more than 15 minutes to complete the questionnaire each time. You will be asked to complete the questionnaire within one week of receiving it. .

#### **HOW LONG WILL I BE IN THE STUDY?**

All research related activities of the study will occur between January 2010 and March 2011. Intervention activities will conclude by December 2010 and only data will be collected in March 2011 on those students who received the intervention during the Fall 2010 semester.

#### **WHAT ABOUT CONFIDENTIALITY?**

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#### **WHAT ARE THE RISKS AND BENEFITS OF THE STUDY?**

The risks associated with the study are minimal. It is possible that our efforts to protect your privacy will not be effective. Also, you may feel uncomfortable when filling out questions about the student's behaviors.

The benefit of the study is that it may help the student build more appropriate relationships and do better at school academically and behaviorally. Also, the study may help future families by helping us understand how a family intervention can affect student behavior and home-school involvement. However, we cannot guarantee that you or the student in your classroom will benefit from this research.

### **WHAT ARE MY RIGHTS AS A PARTICIPANT?**

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### **SIGNATURE:**

By signing this form you agree that you have read and understand the information above. It also shows that you agree to be part of the study. Additionally your signature indicates that you understand that you may withdraw from the study at any time without penalty. A copy of this form, with your signature, is available upon request.

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Teacher's Signature

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Date

---

Printed Name

APPENDIX G: GIRLSS Group Counseling Curriculum

## **GIRLSS MIDDLE SCHOOL GROUP LESSON 1**

**Lesson Topic:** General Objectives and Goals

**Objective:** Girls will get to know each other and the procedures, structure of the group. Girls will also set rules for their group and build group cohesion.

<b>Activity Number</b>	<b>Time</b>	<b>Outline</b>	<b>Materials Needed</b>
Intro	15 min	<ul style="list-style-type: none"> <li>• Introduction           <ul style="list-style-type: none"> <li>- Group Leader introduction</li> <li>- Introduction game: Pairs ask each other favorite condiment and celebrity, then introduce each other saying “This is _____ and she likes _____.”</li> </ul> </li> <li>• Purpose of Group- improve friendships by learning better bxs and decreasing RA bxs</li> <li>• Name Group (every group needs a name!)</li> <li>• Establish Group Rules worksheet: Each girl will sign the list of rules and then we will need to make copies to give each girl at next session           <ol style="list-style-type: none"> <li>1. Confidentiality- what is said in here, stays here; when we break it; videotaping; parents</li> <li>2. Kind: Safe space- support others with body language; be aware of body language and message it sends (no eye rolling)</li> <li>3. Responsibility: Participation- to learn you have to be engaged; to get something you have to give something; homework/journals</li> <li>4. Respect others- no interruptions</li> <li>5. Bathroom before you go</li> </ol> </li> </ul>	Post-it notes poster, Marbles & jar, name tags
<b>1.1</b>	15 min	<ul style="list-style-type: none"> <li>• Explain Positive Behavior System-           <ul style="list-style-type: none"> <li>- Marble Goal</li> <li>- Housekeeping: weekly time of group, rewarding good behavior so need to know what behavior is expected (est. group rules)</li> </ul> </li> <li>• Explain journals and homework</li> </ul>	Group Rules Contract Handout (1 copy)
<b>1.2</b>	10 min	LINK IT! First person (Group leader) describes self until	

		someone (2 <sup>nd</sup> group leader should go next) finds something in common and gets up and links to them until everyone is linked in a circle	
<b>1.4</b>	15 min	Do worksheet in pairs and discuss as group	Handout 1.4
<b>1.5</b>	5 min	1. Summary/closing 2. Count & announce # of marbles earned 3. Journal prompt: "In what ways have you been involved in relationally aggressive situations?" 4. Weekly Feedback	Handout 1.4 Journal prompt Weekly Feedback

## GIRLSS MIDDLE SCHOOL GROUP LESSON 2

**Lesson Topic:** Relational Aggression Defined

**Objective:** Girls will have a working definition of RA and be able to give appropriate examples, identifying the victim and aggressor in each example. Girls will be able to describe SMART goals and give appropriate examples

Activity Number	Time	Outline	Materials Needed
Review	15 min	1. Award marbles (on time & homework) 2. Marble goal: 3. Review last week – rules, group name, etc. 4. Discuss journal & review last week 5. Review agenda on board	Marbles & Jar Group Rules
1	5 min	Video Clip: Mean Girls – Costume Party (scene 5)	Movie clip TV & DVD player
2	10 min	Definition and Identification Example 1. Add concrete examples of RA from clip 2. Identify aggressor/victim & RA behaviors on poster paper 3. Identify outcomes from clip	Post-it poster
3	15 min	Role-play of video clip in Activity 1 1. Ask for strategies that will resolve Regina's problem	

		<p>2. Leaders role play fir strategy</p> <p>3. Ask how that went, did it resolve it, would Regina really be able to do that?</p> <p>4. Get more ideas of what strategies would resolve Regina's problem and ask them to role play those</p> <p><b>Key Themes:</b></p> <ol style="list-style-type: none"> <li>1. Discuss difficulty of doing a positive strategy b/c that is not their typical response and too angry/hostile thoughts</li> <li>2. Will take longer to learn new/prosocial behaviors, but recognize that current RA strategies aren't working</li> <li>3. To learn new behaviors have to set goals....</li> </ol>	
4	10 min	<p>Goal Setting Discussion</p> <ol style="list-style-type: none"> <li>1. Discuss how to set goals and encourage the girls to start thinking about the goal they want to set for the week.</li> <li>2. SMART: Specific, Measurable, Achievable, Realistic, Timely</li> </ol>	Goal Sheets (come with examples)
5	10 min	<ol style="list-style-type: none"> <li>1. Count &amp; announce # of marbles earned</li> <li>2. Journal prompt: "Describe a situation that you have witnessed in real life, or watched on TV or in a movie. Identify who was the victim, who was the aggressor and how did each of them feel in the situation? Describe any positive strategies they used."</li> <li>3. Remind of reward and need to bring back journal prompt</li> <li>4. Weekly feedback</li> </ol>	Journal prompt Weekly feedback
Optional 6		<p>Reading Passage: Odd Girl Speaks Out: Strengthened Spirit p. 18</p> <ol style="list-style-type: none"> <li>1. take turns reading or ask ahead of time if anyone would like to read</li> <li>2. give highlighters &amp; prompt them of follow-up questions so they know what to pay attention to</li> <li>3. identify aggressor/victim and RA behaviors</li> </ol>	Copies of passage; Handout 2.3 Post-it poster

## GIRLSS MIDDLE SCHOOL GROUP LESSON 3

**Lesson Topic:** Influence of Friendships on Thoughts, Feelings & Behavior

**Objective:** Girls will learn the how friends influence their feelings and actions in positive and negative ways.

Activity Number	Time	Outline	Materials Needed
<b>Intro</b>	20 min	<ol style="list-style-type: none"> <li>1. Check in</li> <li>2. Marble goal: more group participation</li> <li>3. Award marbles (being on time)</li> <li>4. Review Visual Agenda</li> <li>5. Review last week (see written notes from discussion) – RA, RA roles, and goal setting</li> <li>6. Discuss journals/goals (award marbles)           <ol style="list-style-type: none"> <li>a. “Describe a situation that you have witnessed in real life, or watched on TV or in a movie. Identify who was the victim, who was the aggressor and how did each of them feel in the situation? Describe any positive strategies they used.”</li> </ol> </li> </ol>	Marbles & jar Handout 3.5 (front only-for leaders, not girls)
<b>3.3</b>	20 min	<p>Topic: Influence of friendships &amp; Intro to T/F/A</p> <ol style="list-style-type: none"> <li>1. Movie clip : Mean Girls at Lunch table – scene: Entering Girl World           <ol style="list-style-type: none"> <li>a. How did the girls in the movie influence each others' .....?</li> </ol> </li> <li>2. Discussion: brainstorm ways friends influence us           <ol style="list-style-type: none"> <li>a. <i>Leader: organize into thoughts, feelings and actions and prompt if examples in one area are not mentioned</i></li> <li>b. <i>Leader: draw visual flow chart of how friends influence thoughts, feelings and actions</i></li> </ol> </li> <li>3. Identification of what an action, feeling, thought is: <i>seems like our friends influence in these ways, what are these?</i> <ol style="list-style-type: none"> <li>a. What is an action? Example?</li> <li>b. What is a feeling? Example?</li> <li>c. What is a thought? Example?</li> </ol> </li> </ol>	Handout 3.3, 5.3 (leaders only)

		4. Explore connections between T-F-A- how are these connected	
<b>MI PREP</b>	20 min	<p>Discussion: Enhancing motivation to change: <i>break into two small groups; one identifies three positives (question 1-3) and other identifies three negatives (questions 4-6); then share three positives/negatives in large group and discuss</i></p> <ol style="list-style-type: none"> <li>1. What are some of the good things about influencing each other in our friendships?</li> <li>2. How does this help our friendships?</li> <li>3. How does this help how we feel about ourselves?</li> <li>4. What are some of the not so good things about influencing each other in our friendships?</li> <li>5. How does this hurt our friendships?</li> <li>6. How does this hurt how we feel about ourselves?</li> </ol>	
<b>Closing</b>	15 min	<ol style="list-style-type: none"> <li>1. Summary/Closing</li> <li>2. Goal sheet</li> <li>3. Journal prompt: "Choose a positive situation and a negative situation that happens with your friends over the next week. Record how you felt and acted in each situation."</li> <li>4. Count &amp; announce # of marbles earned</li> <li>5. Weekly feedback</li> </ol>	Goal sheet Journal prompt Weekly feedback

## GIRLSS MIDDLE SCHOOL GROUP LESSON 4

**Lesson Topic:** Motivation to Change & Reframing Negative Thoughts

**Objective:** Participants will be able to express their level of motivation to change RA behaviors; identify Situation, Thoughts & Feelings, Options and Progress; and reframe thoughts to identify more prosocial options.

Activity Number	Time	Outline	Materials Needed
		1. LINK IT: Thanksgiving break (What are you looking forward to doing over Thanksgiving break?)	
<b>Intro</b>	10	1. Check in	

	min	<ol style="list-style-type: none"> <li>2. Award marbles (being on time)</li> <li>3. Marble goal:</li> <li>4. Marble Discussion</li> </ol>	
<b>Positive Movie Example</b>		<p>Sisterhood of the Traveling Pants clip</p> <p>Discussion: add to last week's list positive influences</p>	
		<ol style="list-style-type: none"> <li>1. Discuss journals/goals (award marbles)</li> <li>2. Review discussion with journal and goal</li> <li>3. Connect goals to desire to change and strategies</li> </ol>	
<b>1</b>	22 min	<p>Topic: Motivation</p> <ol style="list-style-type: none"> <li>1. What are some of the 'pros' of being relationally aggressive? In what ways do those behaviors work well for you?</li> <li>2. What are some of the 'cons' of being relationally aggressive? In what ways do those behaviors NOT work well for you? What are some consequences?</li> <li>3. What is difficult about changing RA behaviors? What do you not like about having to change?</li> <li>4. What do you like about changing RA behaviors? What are some benefits of changing?</li> </ol>	On White Board
<b>3</b>	20 min	<p>Revisiting T/F/A</p> <ol style="list-style-type: none"> <li>1. Since we now know we want to change, what could be changed? How could we change? (tie into T/F/A) <ul style="list-style-type: none"> <li>a. Try changing A first, then F, then T</li> <li>b. How does it work to just change A or F?</li> </ul> </li> </ol>	
<b>Closing</b>	15 min	<p>Wrap-up</p> <ol style="list-style-type: none"> <li>1. Count &amp; announce # of marbles earned</li> <li>2. Goal Setting- pick anything around lesson topic</li> <li>3. Journal prompt: What do you like about changing RA behaviors? What are some benefits of changing?</li> <li>4. Plan reward- pizza, popcorn (something they can do/eat during lesson)</li> <li>5. Weekly feedback</li> </ol>	Goals sheets Journal Prompt Weekly feedback

## GIRLSS MIDDLE SCHOOL GROUP LESSON 5

**Lesson Topic:** Relational Aggression and Thoughts, Feelings, & Actions

**Objective:** Students will be able to identify thoughts, feelings, and actions.

Activity Number	Time	Outline	Materials Needed
<b>Intro</b>	15 min	<ol style="list-style-type: none"> <li>1. Check in</li> <li>2. Marble goal:</li> <li>3. Award marbles (being on time)</li> <li>4. Discuss journals/goals (award marbles)</li> <li>5. Review last week – MI discussion, Friendships, Thoughts, Feelings, Actions Intro           <ol style="list-style-type: none"> <li>a. Have the girls try to remember each of the pieces (T/F/A) without prompting</li> </ol> </li> </ol>	
<b>5.1R/5.2</b>	10 min	<p><b>Topic: Feelings</b></p> <ol style="list-style-type: none"> <li>1. Worksheet 5.1R (as a group)           <ol style="list-style-type: none"> <li>a. Identifying Feelings               <ol style="list-style-type: none"> <li>i. Physically/Mentally</li> </ol> </li> <li>b. Purposes of Feelings               <ol style="list-style-type: none"> <li>i. Feedback about situation</li> <li>ii. Informing choices about actions</li> </ol> </li> </ol> </li> <li>2. Discuss “normal/acceptable” feelings           <ol style="list-style-type: none"> <li>a. Do you think it is okay to have these feelings?</li> </ol> </li> </ol>	Handout 5.1R, 5.1/5.2 for leaders only
<b>5.3</b>	40 min	<p><b>Topic: Exploring connections between T/F/A</b></p> <ol style="list-style-type: none"> <li>1. Use movie clip (Scene 5, 26:55 -28) again (Costume Party)</li> <li>2. One girl will take each role (T/F/A) and a necklace</li> <li>3. Identify all actions from beginning to end of clip of Caty. Then identify all feelings and connect to action (“what was she feeling when she smiled and waved?”). Finally, identify all thoughts and connect to feelings (“what was the sentence in her head when she was feeling X and did X?”).</li> <li>4. Change roles. Do #2 for Aaron and then Regina</li> <li>5. Remind that all these feelings are okay and of discussion about what Regina could have done differently (Session 2).</li> <li>6. Assign 3 more girls to take on a role (T/F/A) and</li> </ol>	T/F/A Necklaces

		<p>determine what replacement thoughts and feelings for Regina would have to be in order for her to act better/resolve problem</p> <p>7. Compare replacement thoughts and feelings to thoughts and feelings identified in #4. How are they different? What has to happen to make the change or replacement?</p>	
<b>Closing</b>	10 min	<ol style="list-style-type: none"> <li>1. Goal setting</li> <li>2. Journal prompt: Using the situations from last week's journal identify the thoughts that occurred before the feelings and actions. Write about a new situation and identify all three (thoughts, feelings and actions).</li> <li>3. Count &amp; announce # of marbles earned</li> <li>4. Weekly feedback</li> </ol>	Journal prompt Goal Sheet Weekly feedback

## GIRLSS MIDDLE SCHOOL GROUP LESSON 6

**Lesson Topic:** Relational Aggression Empathy & Perspective-Taking

**Objective:**

1. Participants will be able to identify most of the people affected by a situation when they or someone else act's relationally aggressive.
2. Participants will be able to identify how the relationally aggressive situation affected others' thoughts, feelings and behaviors.
3. Participants will begin to think about strategies for changing their thoughts to be less hostile and more realistic in order to be less relationally aggressive.

Activity Number	Time	Outline	Materials Needed
<b>Intro</b>	15 min	<ol style="list-style-type: none"> <li>1. Check in</li> <li>2. Marble goal:</li> <li>3. Award marbles (being on time)</li> <li>4. Discuss journals/goals (award marbles)</li> <li>5. Review last week –Thoughts, Feelings, Actions           <ol style="list-style-type: none"> <li>a. Have the girls try to remember each of the pieces (T/F/A) without prompting</li> </ol> </li> </ol>	
<b>6.1</b>	15 min	Statue Activity: Keep pace fast and quick Identify all people affected	Scenarios Paper

		<ol style="list-style-type: none"> <li>1. Introductory discussion of how people might be affected (“Are other people affected by RA? Who’s affected?”)</li> <li>2. Use scenario gum scenario first, read aloud</li> <li>3. Group identifies all people affected in scenario</li> <li>4. Label each person/thing identified by making “label” on brightly colored post-it note and have girls post around room (in visible spot)</li> </ol>	Tape Markers
<b>6.2</b>	18 min	Identify all people’s perspective <ol style="list-style-type: none"> <li>1. Ask group to identify perspective of each labeled person/thing and how behavior affected that person/thing (as time permits)</li> <li>2. Be sure to mention/emphasize that perspective of aggressor is okay but action is not</li> </ol>	Post-it note paper
<b>6.3</b>	17 min	Identify thoughts, feelings and actions <ol style="list-style-type: none"> <li>1. One girl will take each role (brain, feelings, actions)</li> <li>2. Identify all actions of Julie, then feelings and thoughts</li> <li>3. With new set of 3 girls and roles, identify how she could have acted differently and then identify replacement feelings and thoughts</li> <li>4. Compare replacement T/F/A to original T/F/A. What would have to happen for Julie to <i>own</i> replacement thoughts/feelings?</li> <li>5. Go through steps 2-4 with focus being on girl with gum in her hair. If she was really mad, how would she act? How would she be feeling? What would be her thoughts? Then identify replacement T/F/A and compare (step 4 above).</li> <li>6. Wrap up Discussion: Re-emphasize difficulty changing behavior without having different thought too, not only what others do to us, but how we react too, awareness of T and F before Acting</li> </ol>	T/ F/A necklaces Scenarios
<b>OPTIONAL</b>		Repeat 6.3 as time permits with other scenarios	
<b>6.4</b>	10 min	Wrap-up <ol style="list-style-type: none"> <li>1. Count &amp; announce # of marbles earned</li> <li>2. Goal Setting</li> <li>3. Journal prompt: Write about a relationally aggressive (RA) situation that happened this week that affected many people. Identify those affected and write about how it affected them. Write out the aggressor’s thoughts, feelings and actions and</li> </ol>	Journal Prompt Goal sheets Weekly feedback

		then write ways to change their thoughts so that they don't act relationally aggressive (RA). 4. Weekly feedback	
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## GIRLSS MIDDLE SCHOOL GROUP LESSON 7

**Lesson Topic:** Building Self-Confidence

**Objective:**

1. Participants will be able to identify the difference between positive and negative self-talk.
2. Participants will be able to identify how self-talk is related to self-esteem.
3. Participants will begin to think about how changing their thoughts to positive self-talk can change their feelings and actions.

Activity Number	Time	Outline	Materials Needed
<b>Intro</b>	10 min	<ol style="list-style-type: none"> <li>1. Welcome! Check-in. – have a fun activity so need cooperation, set goal related to on-task behaviors, also introduce name strips and process</li> <li>2. Award marbles (being on time)</li> <li>3. Marble goal (on-task):</li> <li>4. Discuss journals/goals as review of last week- one volunteer (keep short)</li> </ol>	
<b>Compliments</b>	20 min-activity	<ol style="list-style-type: none"> <li>1. Do you give or receive lots of compliments? How does it feel?</li> <li>2. Re-emphasize importance of listening and respecting those who are talking/sharing</li> <li>3. Set up activity procedures:             <ol style="list-style-type: none"> <li>a. Differentiate superficial/surface versus characteristic or skill compliments</li> <li>b. If don't know each other outside of group, compliment on participation or what you have learned from them in group</li> </ol> </li> <li>4. Compliments Activity:             <ol style="list-style-type: none"> <li>a. Each girl receives a compliment from the other group members.</li> <li>b. Group leaders model this first.</li> <li>c. Compliments will be recorded by the group leaders and given back to the girls.</li> </ol> </li> </ol>	Compliment Sheets

	Proce ss- 5min	<p>5. Processing Compliments:</p> <ol style="list-style-type: none"> <li>Were you surprised by any of the compliments?</li> <li>How does it feel to receive compliments?</li> <li>Does that change how you think about yourself?</li> <li>Connection to self-talk: Do you ever give yourself compliments in your mind?</li> </ol>	
<b>Self-Talk</b>	15 min	<ol style="list-style-type: none"> <li>What is self-talk? Be sure to identify both positive &amp; negative form.</li> <li>How does it relate to self-esteem? (effect of positive and negative self-talk)</li> <li>How are both related to relational aggression? Draw conceptual diagram based on group discussion.</li> <li>Examples of negative self-talk affecting self-esteem and relational aggression.</li> <li>Have girls turn some of the compliments into self-talk statements.</li> </ol>	Positive-self talk Handout
<b>7.3</b>	10 min	<p>Steps for changing self-talk: (get their ideas first)</p> <ol style="list-style-type: none"> <li>When you notice yourself using negative self-talk (<i>thoughts</i>), STOP.</li> <li>CHANGE your self-talk to positive self-talk (<i>change thoughts</i>).</li> <li><b>How does changing thought to positive self-talk change feelings and actions?</b></li> </ol>	Markers Paper
<b>Closing</b>	10 min	<p>Wrap-up</p> <ol style="list-style-type: none"> <li>Count &amp; announce # of marbles earned</li> <li>Goal Setting</li> <li>Journal prompt: Create 3 positive self-talk statements to add to the ones created in group. Use your positive self talk statements throughout the week. Write about how you felt using these statements.</li> <li>Weekly feedback</li> </ol>	Goal Sheets Journal Prompt Weekly feedback

## GIRLSS MIDDLE SCHOOL GROUP LESSON 8

**Lesson Topic:** Challenging Negative Beliefs: STOP

**Objective:** Participants will be able to describe problem solving; identify Situation, Thoughts & Feelings, Options and Progress; and change thoughts to identify more prosocial options

Activity Number	Time	Outline	Materials Needed
<b>Intro</b>	15 min	1. Check in 2. Marble goal: 3. Award marbles (being on time) 4. Discuss journals/goals (award marbles) 5. (Use the journal and goal discussion as a review.)	
<b>8.1</b>	10 min	How do you consider your options at the Action stage? What are skills you use to decide how you will act? Act out scenario 8.1R with as many students as will volunteer orally expressing thoughts and feelings. <ul style="list-style-type: none"> <li>• As group, identify options and then progress</li> <li>• Ask for reframe- how could we look at situation differently so we have more positive options and better progress- complete this in last row of 8.1R</li> </ul>	Handout 8.1R
<b>8.2</b>	20 min	Use own situation to practice STOP strategy <ol style="list-style-type: none"> <li>1. All write and develop own situation that leads to negative beliefs on back of 8.1R</li> <li>2. Group selects one situation</li> <li>3. Each person takes t,f,o or p and work through situation with negative thoughts first (use necklaces)</li> <li>4. Process T/F and options to illustrate that with negative thoughts there aren't many behavioral options</li> <li>5. Reframe: How can you look at situation differently?</li> <li>6. Change thoughts &amp; feelings on new chart to show that there are more options and outcome is</li> </ol>	Handout 8.2R blank STOP charts (2 each) Pens/pencils

		<p>better</p> <p>Facilitator Note: Be sure to label strategies used: reframing, positive self talk, etc and probe about their motivation for changing T/F/A or for choosing a prosocial action</p>	
<b>Strategy Discussion</b>	20 min	<ol style="list-style-type: none"> <li>1. Practice reframing thoughts- how can we practice this? <ul style="list-style-type: none"> <li>a. What is another way to interpret the situation?</li> <li>b. Are we missing any facts about the situation?</li> <li>c. Would things be different from another perspective?</li> </ul> </li> <li>2. Practice positive self-talk strategies</li> <li>3. Work through alternative feelings, options, and progress from the reframed thoughts and positive self-talk.</li> </ol>	
<b>Closing</b>	10 min	<p>Wrap-up</p> <ol style="list-style-type: none"> <li>1. Count &amp; announce # of marbles earned</li> <li>2. Goal Setting- pick anything around lesson topic</li> <li>3. Journal prompt: On blank STOP form (8.2R) write about a situation that did not go well this week. Write out what happened (the situation, your thoughts, feelings, emotions, options and progress). Then answer these questions <ul style="list-style-type: none"> <li>a. How did Thoughts and Feelings affect your options?</li> <li>b. Brainstorm a different way you could have thought about the situation that would lead to different outcomes. What is a different thought and what would the different options be as a result</li> </ul> </li> <li>4. Weekly feedback</li> </ol>	Journal Prompt 8.2R Goal sheets Weekly feedback

## GIRLSS MIDDLE SCHOOL GROUP LESSON 9

**Lesson Topic:** Relational Aggression and the Future

**Objective:** The girls will learn how to create short term goals consistent with their long term goals.

<b>Activity Number</b>	<b>Time</b>	<b>Outline</b>	<b>Materials Needed</b>
<b>Intro</b>	10 min	<ol style="list-style-type: none"> <li>1. Award marbles (on time &amp; homework)</li> <li>2. Marble goal</li> <li>3. Discuss goal sheets</li> <li>4. Discuss journals for a review</li> </ol>	Marbles Marble jar
<b>MI-4 SQUARE</b>	15 min	<ol style="list-style-type: none"> <li>1. Revisit the MI-4 Square created in lesson 4</li> <li>2. Update it with new ideas the girls might have</li> </ol>	
<b>9.2R</b>	40 min	<p>Creating SMART Goals</p> <ol style="list-style-type: none"> <li>1. Who I Admire- create collage of people group members admire and why (focus on personal characteristic admiration related to how they treat people). Facilitators start this activity presenting who they admire and why</li> <li>2. Connect admiration to who you want to be and setting goals for becoming that person</li> <li>3. Connect these personal goals to professional goals (how does treating others well relate to your success in college or another professional goal)</li> <li>4. Set personal long-term goals and relate to SMART acronym</li> <li>5. Complete worksheet 9.2R with personal long-term goal</li> <li>6. Discuss how well goal fits SMART criteria</li> <li>7. Then have the girls identify short term goals that will help them meet their long term goals</li> </ol>	Handout 9.2R, website handout for leaders only
<b>Closing</b>	10 min	<ol style="list-style-type: none"> <li>1. Goal sheets</li> <li>2. Journal prompt: Write about something you did during the week that is related to your long term goals.</li> <li>3. Weekly feedback</li> <li>4. Party Planning</li> </ol>	Goal sheets Journal prompt Weekly feedback

## GIRLSS MIDDLE SCHOOL GROUP LESSON 10

**Lesson Topic:** Relational Aggression and the Future

**Objective:** Girls will be able to review what they have learned by identifying relationally aggressive behaviors, describing their motivation to change, and identifying strategies to change their behaviors (t/f/a, reframing, etc).

Activity Number	Time	Outline	Materials Needed
<b>Intro</b>	15 min	1. Award marbles (on time & homework) 2. Marble goal: 3. Discuss goal sheets 4. Discuss journals for a review	
<b>9.1</b>	20 min	What I learned... 1. Group discussion starter worksheet 2. Group discussion of response <ul style="list-style-type: none"> <li>a. If they have the old worksheet (1.4) they can use it.</li> </ul> 3. What did you learn about changing? (why, how) 4. What did you learn about strategies to help you change (T/F/A, positive self-talk, STOP, reframing, goal setting)	Review Worksheet
<b>Wrap-up</b>	15 min	1. Weekly Group Eval 2. Final/Summative Group Eval 3. Certificates 4. Thank you notes to school counselors	Weekly & Summative Feedback Certificates, thank yous
<b>Final Group Reward</b>	25 min		

APPENDIX H: GIRLSS Group Counseling Fidelity Check

**GIRLSS GROUP COUNSELING FIDELITY CHECKLIST**

Lesson # \_\_\_\_\_ Site: \_\_\_\_\_ Date: \_\_\_\_\_

Group Leader/Supervisor (circle one) completing checklist: \_\_\_\_\_

Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_

Other Leaders in Attendance (circle those who also completed a fidelity checklist for this session):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

<b>Activity Checklist: Did I.....</b>	YES	NO
Set marble goal?		
Award marbles?		
Review Homework/Journal?		
Review group members' progress towards their goals?		
Review material from previous session?		
Complete activity _____ ?		
Hand out journal prompt and review for understanding?		
Allow time for group members to set weekly goal?		
Review group members' weekly goal for appropriateness?		
Count marbles aloud to group and offer praise for attaining goal?		
Remind group members to check in with goal mentor prior to next group?		

Process Checklist: Did I....	YES	NO
Ask more questions than I gave directives?		
Attend to the needs of the group in terms of balancing process discussions and lesson content?		
Use active listening skills?		
Use reflection skills?		
Ask clarifying questions?		
Empathize with group members?		
Confront group members when appropriate?		
Ask questions that elicited “change talk”?		
Reflect group members’ “change talk”?		
Ask questions that elicit connections between thoughts, feelings and actions?		
Make/reflect connections between thoughts, feelings and actions for group members?		
Demonstrate enthusiasm about group and lesson topic?		
Ask group members about successes in meeting their weekly goal <i>before</i> failures?		
Process group members’ journal responses?		
Verbally praise group members for participation?		
Praise group members for participation with marble?		

Overall, I feel that this session followed the GIRLSS manual and curriculum as expected.

Completely Disagree	Disagree	Neutral	Agree	Completely Agree					
1	2	3	4	5	6	7	8	9	10

Rationale for agreement above:

Self-Evaluation and Notes:

APPENDIX I: GIRLSS Group Counseling Session and Parent Training Workshop  
Feedback Form

*GIRLSS Middle School Group Weekly Evaluation*

Please circle your answer:

1. I think what the group leaders were teaching us was...
  - A. Easy to figure out—I understood everything
  - B. Pretty easy—I had trouble understanding some things
  - C. Hard—I did not understand the lesson
2. I think the group leaders did a good job leading our group.
  - A. Totally Agree
  - B. Agree Somewhat
  - C. Disagree—they did a poor job leading group
3. I think what I learned today was:
  - A. Very helpful—I will use it all the time
  - B. Helpful—I will use it sometimes
  - C. NOT helpful—I will not use it
4. I think that what we talked about as a group was
  - A. Important and worth talking about
  - B. Not worth talking about
5. What did you like the **BEST** this week?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. What did you like the **LEAST** this week?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Please write anything else that you want to share with the group leaders (such as any questions, concerns, things you would like more information about, etc.).  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX J: GIRLSS Group Counseling Summative Evaluation Form

## **GIRLSS Group Evaluation**

Group Coordinators: \_\_\_\_\_ & \_\_\_\_\_ Date: \_\_\_\_\_

Using the following scale, please take a moment to evaluate this group. Your input will be greatly appreciated in arranging future groups.

1. How would you rate the group overall?  
EXCELLENT            VERY GOOD            GOOD            FAIR            POOR
2. How would you rate the group content (topics that were discussed)?  
EXCELLENT            VERY GOOD            GOOD            FAIR            POOR
3. How would you rate the activities (discussions, movie clips, role plays, scenarios)?  
EXCELLENT            VERY GOOD            GOOD            FAIR            POOR
4. How useful did you find the journal prompts?  
EXCELLENT            VERY GOOD            GOOD            FAIR            POOR
5. How useful did you find the weekly goal sheets?  
EXCELLENT            VERY GOOD            GOOD            FAIR            POOR
6. How well did the group coordinators lead discussions and the overall group?  
EXCELLENT            VERY GOOD            GOOD            FAIR            POOR
7. What is one activity you liked? \_\_\_\_\_
8. Why did you like it?
  
9. What is one activity you did not like? \_\_\_\_\_
10. Why did you not like it?
  
11. What suggestions do you have in improving the group for future participants?
  
12. What is one thing you will use from the group in the future? How will you use it?

Thank you for your time!!

## APPENDIX K: GIRLSS Parent Training Workshop Curriculum

### GIRLSS Parent Training Workshop 1

**GIRLSS: Growing  
Interpersonal Relationships  
through Learning &  
Systemic Supports**  
Workshop 1

**Introduction**

**Welcome!!**

- ▶ Introductions
- ▶ Agenda
  - Consents & Group rules
  - What is Relational Aggression
  - Break
  - What your girls are learning and how you can help
  - Strategies to Help @ Home
  - Summary

**Getting Started**

- ▶ Consent forms ([white handout](#))
- ▶ Rules
- ▶ Overview of the program

**What are we talking  
about?**

**Definition of Relational Aggression**

- ▶ Harming the relationship one has with others through manipulation, rumor spreading, exclusion, and other covert strategies
- ▶ Includes relationships with both boys and girls, parents, siblings, teachers, etc.

www.ourrights.org/relational

## Examples

- What are some examples?
- How is relational aggression different from physical aggression? How is it the same?

## Circle of Relational Aggression



## Effects of Relational Aggression

- What happens to all those involved? What are the outcomes for everyone in the circle?

10 minute break!

## What Are the Girls Learning in Group?



## Group Sessions

- One hour and 15 min sessions
- Marbles/Rewards
- Weekly Goal Sheets
- Weekly Journals
- Teaching Skills/Strategies
- Video Clips/Role Plays
- Group Discussions



## Lesson 1: General Objectives



- Naming Group: PPWEGG
- Setting Group Rules
  - Responsibility
  - Respect
  - Confidentiality
- Group Cohesion: LINK IT!
- Journal: In what ways have you been involved in relationally aggressive situations?

## Lesson 2: Relational Aggression



- Discussion: What is relational aggression?
- Video Clip from Mean Girls
- Roles in RA
- Goal Setting
- Journal: Describe a situation that you have witnessed in real life, or watched on TV or in a movie. Identify who was the victim, who was the aggressor and how did each of them feel in the situation? Describe any positive strategies they used.

## Lesson 3: Friendships



- Discussion: How our friends influence us
- Positive and negative influences
- Feelings and Behaviors
- Journal: Choose a positive and negative situation that happens with your friends over the next week. Write about how you felt and acted in each situation.

## Lesson 4: Motivating



- Discussion: Pros & Cons of RA behaviors
- Journal: What do you like about changing RA behaviors? What are some benefits of changing?

## Lesson 5: T-F-A Sequence



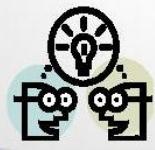
- Discussion: Connecting thoughts, feelings and actions
- Journal: Using the situations from your journal entry two weeks ago identify the thoughts that occurred before the feelings and actions. Write about a new situation and identify all three (thoughts, feelings and actions).

## Thoughts, Feelings & Actions



## Thoughts

- A sentence in your head.
- Your interpretation or perception of a situation.
- What is an example of a thought?



## Feelings

- Your emotions/emotional response.
- The way you feel...
- What are some examples of feelings?



## Actions

- Your behavior. How you ACT.
- What you do, how you respond in a situation.
- What is an example of an action?



## Thoughts, Feelings & Actions

- Feelings provide important information to girls about the situations & relationships around them.
- All Feelings are OK, but there are positive & negative ways of expressing feelings to others (e.g. it is OK to be mad but not to spread a rumor about someone).
- Understanding the connection between thoughts, feelings & actions, empowers girls to develop a better understanding of themselves & learn strategies to make better choices in their friendships.

## Thoughts → Feelings → Actions

- Our THOUGHTS influence how we FEEL about something
- Our feelings can influence how we ACT
- Activity

## Strategies @ Home

- Reinforce and re-teach sequence at home
- Share own Thoughts, Feelings and Actions in ambiguous and/or provocative situations
- Look for teaching moments in media & entertainment
- Praise daughter when she is appropriately assertive
- Helpful for all girls, no matter what role they're playing in any given RA situation

## Strategies @ Home

Behaviors are managed through

- Quality Relationship
- Consequences and Reinforcers
- Supervision

## Helping Your Daughter at Home



## Parent-Child Quality Time

- (light pink handout)
- Relationship and personal connections are the most important part of parenting
- Your daughter will listen and learn if....
  - ...she can trust you
  - ...she knows you love her
  - ...you show her you care with your time

## What is Quality Time?

- Spending fun, "drama-free" time together
- Participating together in things SHE likes
- Cooking a meal or planning an activity together
- Laughing at a television show together
- Playing games or going shopping together

GET IT ....TOGETHER!

## Parental Monitoring

- (dark pink handout)
- **K**- Keep your eyes and ears open!
- **N**- Never underestimate the power of peer pressure!
- **O**- Offer your wisdom and guidance!
- **W**- Work with your daughter on balancing her privacy & your obligation to KNOW!

## KNOW....

- ...your daughter's friends and their families
- ...where & how your daughter spends her time
- ...what types of internet activity your daughter is involved with (chat rooms, Facebook, etc)
- ...what kinds of text messages your daughter sends & receives
- ...what type of phone conversations your daughter engages in

## Conclusion

### Conclusion

#### ► Summary/Review

- What is relational aggression?
- What are the different roles in relational aggression?
- What are the negative outcomes associated with relational aggression?
- What strategies are the girls learning?
- What strategies can you use?

### Questions?



## GIRLSS Parent Training Workshop 2



### Welcome!!

- ▶ Introductions
- ▶ Agenda
  - Review
  - What are the girls learning?
  - Strategies @ Home
  - BREAK
  - Home-School Collaboration
  - Summary



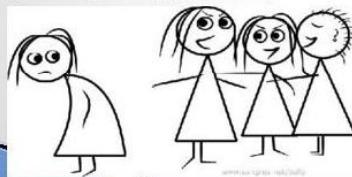
### Update & Review

How have things gone since our last workshop?

What strategies have you tried and how have they worked?

### Definition of Relational Aggression

- ▶ Harming the relationship one has with others through manipulation, rumor spreading, exclusion, and other covert strategies
- ▶ Includes relationships with both boys and girls, parents, siblings, teachers, etc.



### Effects of Relational Aggression

- ▶ Why is relational aggression a problem?
  - Related to school problems:
    - Absenteeism
    - Drop-out
  - Related to mental health concerns:
    - Low self-esteem
    - Depression
    - Loneliness
    - Suicidal ideation
  - Related to problem behaviors:
    - Substance abuse
    - Risky behaviors
    - Abusive interactions in future relationships

## What Are the Girls Learning in Group?



## Group Sessions

- One hour sessions
- Marbles/Rewards
- Weekly Goal Sheets
- Weekly Journals/Homework
- Teaching Skills/Strategies
- Video Clips/Role Plays
- Group Discussions



## The BIG Idea

- Thoughts, Feelings, and Actions!
- **Thoughts:** A sentence in your head. Your interpretation or perception of a situation.
- **Feelings:** Your emotions/emotional response.
- **Actions:** Your behavior. How you ACT.



## Lessons 5–7

- **Lesson 5: Connecting T-F-A**
  - All feelings are normal; how we **react** to those feelings matters!
  - Hard to change A without **changing T & F first!**
- **Lesson 6: Perspective Taking**
  - Think of all the others affected by actions
- **Lesson 7: Building Confidence**
  - Positive & Negative Self-Talk

## Upcoming Lessons: 8–10

- **Lesson 8: Challenging Negative Beliefs: STOP**
  - Situation, Thoughts & Feelings, Options, Progress
  - Reframing
- **Lesson 9: Short & Long-Term Goal Setting**
  - Review Pros/Cons of RA and changing behavior
  - Set short term goals consistent with long term goals
- **Lesson 10: Wrap Up Celebration**
  - Review strategies learned
  - Celebrate successes and learning

## Strategies @ Home

- Behaviors are managed through
- Quality Relationship
  - Consequences and Reinforcers
  - Supervision

## Strategies @ Home

- Reinforce and re-teach sequence at home
- Be intentional about praising daughter's effort and personal characteristics
- Monitor self-esteem and self-talk, especially when things are rough with friends
  - Pay attention to mood, dress, self-care, effort on chores/hw, statements about self, activity level
- Model Positive Self-Talk
- [Role Play 1](#)
- Encourage her to think of others affected by her actions & options

10 minute break!

## Strategies @ Home

- Monitor extreme or irrational thoughts and help daughter reframe
- Share own irrational and extreme thoughts to help her identify them
  - [Role Play 2](#)
- Check in about her goals and intentionally point out behaviors that are helping or not helping her attain them
  - [Role Play 3](#)
- Look for teaching moments in media & entertainment

## Planning to Use Strategies

- What is your plan?



## Home School Collaboration

## Benefits of Family-School Partnerships

- Improved grades and attitude towards school work
- Improved behavior at school
- Higher attendance rates
- Lower drop-out rates
- Higher self-esteem
- Higher probability of avoiding high-risk behavior in adolescence

### Promote Regular, Positive Communication

- Regular & Respectful communication
- Build the partnership over time – have regular contact throughout the school year.
- Face-to-face meeting, phone calls, email, letters, newsletters, and a special note sent to school with your student
- Provide assistance for brainstorming solutions & planning interventions
- Provide support for implementing interventions & delivering consequences, both positive & negative

### Partnering to Stop RA

- Familiarize yourself with the school's anti-bullying policy.
- Discuss school rules and expectations with your teen.
- Report any incidents of relational aggression to the school, even if your child is the one engaging in those behaviors.
- If appropriate, seek outside help.

### Conclusion

- Summary/Review
  - Continue reinforcing group lessons at home
  - Try some of the strategies and let us know how they work for you
  - Maintain regular & respectful contact with the school

### Questions?



### Conclusion

- Workshop Evaluation
- Availability to Complete Questionnaires following conclusion of group

**Thanks for coming to the workshop and allowing us to work with your daughters!**

APPENDIX L: GIRLSS Parent Phone Consultation Curriculum and Fidelity Checklist

**GIRLSS MIDDLE SCHOOL GROUP  
PARENT CONSULTATION 1 (WEEK 1)**

Start Time \_\_\_\_ : \_\_\_\_\_ Parent/Guardian Name \_\_\_\_\_

End Time \_\_\_\_ : \_\_\_\_\_ Student Name \_\_\_\_\_

1. Hello, my name is \_\_\_\_\_ and am a group leader of the group your daughter is in at \_\_\_\_\_ (school name). The group started a week or so ago and I'm calling to give you an update. Do have a few minutes?
2. Format of the group
  - a. There are ten weeks of the group.
  - b. During the first week the group did games and activities to get to know one another and established the rules of the group.
  - c. During the second session the girls will work to define relational aggression. What questions do you have about relational aggression?  
**Spreading rumors about a friend, getting other peers to not let someone sit at a lunch table with them, gossiping. Used to manipulate relationships.**  

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  - d. In the next few sessions the girls will talk about what it means to be a friend and how their friends influence their thoughts, feelings and behaviors. Most of the remaining groups will then help the girls think about their thoughts, feelings, and behaviors and how to change them.
3. Explain journal and goal sheets
  - a. She will have a journal prompt that gives your daughter/granddaughter topic related to the group to write about briefly each week.
  - b. She will also set a goal to increase or decrease some behavior discussed in the group during each week and check in with her school counselor to see how it's going. A good way to get involved would be to just ask her about her weekly goal or journal prompt.
4. Information on Parent Group Meeting
  - a. We will host two parent group meetings during the weeks also so share more specific information about the group and brainstorm ideas for better recognizing and responding to relational aggression.

- b. The first parent group meeting will be \_\_\_\_\_ (date and time) and the second one will be \_\_\_\_\_ (date and time) at \_\_\_\_\_ (location). We hope to see you there!
5. I would like to call you again, when would be the best time for me to follow up?

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6. Do you have any questions?

7. Contact information: If you need to contact me, you can reach me at \_\_\_\_\_ (give hours or alternate phone number and direct to leave message if necessary).

<b>Fidelity Checklist</b>	<b>Yes</b>	<b>No</b>
I let the parent/guardian know what their daughter has been learning over the past two sessions		
I asked the parent/guardian if they had any questions about the intervention and responded to them appropriately, including writing the questions below		
I reminded the parent/guardian of upcoming parent training workshops		
I let the parent know when I would call again and asked if this was okay with them		

Questions from parent/guardian:

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Overall, I feel that this phone call followed the GIRLSS consultation curriculum as expected.

Completely Disagree	Disagree	Neutral	Agree	Completely Agree
1	2	3	4	5

Rationale for agreement above:

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Self-Evaluation and Notes:

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## **GIRLSS MIDDLE SCHOOL GROUP PARENT CONSULTATION 2 (WEEK 3)**

Start Time \_\_\_\_ : \_\_\_\_\_ Parent/Guardian Name \_\_\_\_\_

End Time \_\_\_\_ : \_\_\_\_\_ Student Name \_\_\_\_\_

1. Introduce self/remind caregiver who you are and why you are calling. Ask “Do you have a few minutes?”
2. Share summary points from sessions 2 and 3. Ask if they have any questions about group.

### **SESSION 2**

- Girls learned what relational aggression is and practiced identifying relationally aggressive situations (on movies, books and in real life)
- Girls started to think about how relational aggression affects the feelings of the victim and aggressors.
- Girls learned how to make SMART goals (Specific, measurable, achievable, realistic and timely) and started thinking about goals they want to set
- Girls will set a weekly goal related to reducing RA and check-in with the school counselor before group to see if they have met their goal.

### **SESSION 3**

- Girls have different roles in their friendships. These roles can include being a leader, a follower, a bystander or someone in the middle.
- Girls might play these roles when it comes to relational aggression.
- Girls can influence each others' feelings and behaviors in positive or negative ways.

3. Share how caregiver can get involved with daughters' learning
  - a. Ask daughter/granddaughter what group thought relational aggression is.
  - b. Ask daughter/granddaughter what goal they set for themselves and how their progress is going.
  - c. Share story of how your friends influence(d) you.
4. Remind caregiver of upcoming parent workshop (date, time and location: \_\_\_\_\_). Will you be there?
5. Remind caregiver of when you will call again.
6. Ask if they have any questions or anything they want to talk about with you.

<b>Fidelity Checklist</b>	<b>Yes</b>	<b>No</b>
I let the parent/guardian know what their daughter has been learning over the past two sessions (see summary points above)		
I asked the parent/guardian if they had any questions about the intervention and responded to them appropriately, including writing the questions below		
I reminded the parent/guardian of upcoming parent training workshops		
I let the parent know when I would call again and asked if this was okay with them		

Questions from parent/guardian:

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Overall, I feel that this phone call followed the GIRLSS consultation curriculum as expected.

Completely Disagree	Disagree	Neutral	Agree	Completely Agree					
1	2	3	4	5	6	7	8	9	10

Rationale for agreement above:

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Self-Evaluation and Notes:

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## **GIRLSS MIDDLE SCHOOL GROUP PARENT CONSULTATION 3 (WEEK 5)**

Start Time \_\_\_\_ : \_\_\_\_\_ Parent/Guardian Name \_\_\_\_\_

End Time \_\_\_\_ : \_\_\_\_\_ Student Name \_\_\_\_\_

1. Introduce self/remind caregiver who you are and why you are calling. Ask “Do you have a few minutes?”
2. Share summary points from sessions 4 and 5. Ask if they have any questions about group.

### **SESSION 4**

- Girls discussed their motivation to change relationally aggressive behaviors.
- Using the STOP strategy, the girls learned that when their thoughts are negative or inaccurate they don’t have many options of how to respond that are positive or acceptable
- Girls discussed ideas of how they might start changing and learned more about how their thoughts, feelings and actions are related. They started thinking about how they could change their thoughts or feelings or actions to stop being relationally aggressive

### **SESSION 5**

- Emotions/Feelings provide important information to girls about the situations and relationships around them.
- Emotions/Feelings can be normal or acceptable in many situations, but there are positive and negative ways of expressing feelings to others.
- Understanding the connection between thoughts, feelings, and actions empowers girls to develop a better understanding of themselves and learn strategies to make better choices in their friendships.
  - Thoughts – a sentence in your head/interpretation or your perception of a situation.
  - Feelings – Your emotional response.
  - Action – How you act/Your behaviors

3. Share how caregiver can get involved with daughters’ learning
  - a. Share what your thoughts and feelings were in a situation where you controlled your anger and when you didn’t.
  - b. Ask daughter/granddaughter what goal they set for themselves and how their progress is going.
4. Remind caregiver of upcoming parent workshop (date, time and location: \_\_\_\_\_). Will you be there?

- a. If 1<sup>st</sup> parent workshop has passed, follow up with parent about what they thought of it (if there). Reinforce attempts to use strategies and problem-solve barriers they are experiencing in using the strategies or attending the workshops.
5. Remind caregiver of when you will call again.
  6. Ask if they have any questions or anything they want to talk about with you.

<b>Fidelity Checklist</b>	<b>Yes</b>	<b>No</b>
I let the parent/guardian know what their daughter has been learning over the past two sessions (see summary points above)		
I asked the parent/guardian if they had any questions about the intervention and responded to them appropriately, including writing the questions below		
I reminded the parent/guardian of upcoming parent training workshops		
I let the parent know when I would call again and asked if this was okay with them		

Questions from parent/guardian:

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Overall, I feel that this phone call followed the GIRLSS consultation curriculum as expected.

Completely Disagree	Disagree	Neutral	Agree	Completely Agree
1	2	3	4	5

Rationale for agreement above:

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Self-Evaluation and Notes:

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## **GIRLSS MIDDLE SCHOOL GROUP PARENT CONSULTATION 4 (WEEK 7)**

Start Time \_\_\_\_ : \_\_\_\_\_ Parent/Guardian Name \_\_\_\_\_

End Time \_\_\_\_ : \_\_\_\_\_ Student Name \_\_\_\_\_

1. Introduce self/remind caregiver who you are and why you are calling. Ask “Do you have a few minutes?”
2. Share summary points from sessions 6 and 7. Ask if they have any questions about group.

### **SESSION 6**

- Girls learned about empathy and perspective taking, which included thinking about others affected in a situation and empathizing with how the situation affected them and how they might have felt in the situation.
- Empathizing means they tried to understand how someone else might feel in a situation
- Girls also began to think about the thoughts, feelings and actions of various aggressors and bystanders in the situation and how they could change their thoughts and feelings to be less aggressive.

### **SESSION 7**

- Girls learned about self-talk, which is thoughts in our heads that are about ourselves (such as, I look nice today, or I don't have any friends because I don't have the right clothes)
- Girls learned about how self-talk can be negative or positive and affects their self-esteem. They also learned about how their self-esteem impacts their relationships with others. Some even thought that having negative self-talk and a poor self-esteem might lead them to act relationally aggressive
- Girls started to think about ways to change their negative self-talk in to positive self-talk

3. Share how caregiver can get involved with daughters' learning
  - c. Make a point to share genuine, meaningful compliments with your daughter/granddaughter and others when she is around
  - d. Share example of when you have regulated or controlled your own thoughts to be positive rather than negative
  - e. Ask daughter/granddaughter what goal they set for themselves and how their progress is going.
4. Remind caregiver of upcoming parent workshop (date, time and location: \_\_\_\_\_). Will you be there?

- a. If 1<sup>st</sup> parent workshop has passed, follow up with parent about what they thought of it (if there). Reinforce attempts to use strategies and problem-solve barriers they are experiencing in using the strategies or attending the workshops.
5. Remind caregiver of when you will call again.
  6. Ask if they have any questions or anything they want to talk about with you.

<b>Fidelity Checklist</b>	<b>Yes</b>	<b>No</b>
I let the parent/guardian know what their daughter has been learning over the past two sessions (see summary points above)		
I asked the parent/guardian if they had any questions about the intervention and responded to them appropriately, including writing the questions below		
I reminded the parent/guardian of upcoming parent training workshops		
I let the parent know when I would call again and asked if this was okay with them		

Questions from parent/guardian:

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Overall, I feel that this phone call followed the GIRLSS consultation curriculum as expected.

Completely Disagree	Disagree	Neutral	Agree	Completely Agree
1	2	3	4	5

Rationale for agreement above:

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Self-Evaluation and Notes:

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## **GIRLSS MIDDLE SCHOOL GROUP PARENT CONSULTATION 5 (WEEK 9)**

Start Time \_\_\_\_ : \_\_\_\_\_ Parent/Guardian Name \_\_\_\_\_

End Time \_\_\_\_ : \_\_\_\_\_ Student Name \_\_\_\_\_

1. Introduce self/remind caregiver who you are and why you are calling. Ask “Do you have a few minutes?”
2. Share summary points from sessions 8 and 9. Ask if they have any questions about group.

### **SESSION 8**

- Girls learned a problem solving strategy called STOP, which stands for identifying the Situation, their Thoughts & feelings, their Options, and the Progress or outcomes of those options.
- Using the STOP strategy, the girls learned that when their thoughts are negative or inaccurate they don't have many options of how to respond that are positive or acceptable
- Girls learned ideas of how to change thoughts to be more accurate or less negative so that they have more positive and less relationally aggressive options of how to respond.

### **SESSION 9**

- Girls learned the differences between short term and long term goals and discussed the need for long term goals
- Girls learned how to set several short term goals to help them reach their long term goals and how to make their goals specific, measurable and achievable
- Girls made posters that illustrated their long term goals and discussed how their posters related to the weekly goals they have been making each week

3. Share how caregiver can get involved with daughters' learning
  - f. When daughter/granddaughter starts to get upset, remind them of STOP strategy or others they have learned throughout group.
  - g. Ask your daughter/granddaughter what her long term goals are. Express excitement in them and willingness to help her reach them through more short-term goals.
  - h. Ask daughter/granddaughter what weekly goal they set for themselves and how their progress is going.
4. Remind caregiver of upcoming parent workshop (date, time and location: \_\_\_\_\_). Will you be there?
  - b. If 2<sup>nd</sup> parent workshop has passed, follow up with parent about what they thought of it (if there). Reinforce attempts to use strategies and problem-

solve barriers they are experiencing in using the strategies or attending the workshops.

5. Remind caregiver of when you will call again.
6. Ask if they have any questions or anything they want to talk about with you.

<b>Fidelity Checklist</b>	<b>Yes</b>	<b>No</b>
I let the parent/guardian know what their daughter has been learning over the past two sessions (see summary points above)		
I asked the parent/guardian if they had any questions about the intervention and responded to them appropriately, including writing the questions below		
I reminded the parent/guardian of upcoming parent training workshops		
I let the parent know when I would call again and asked if this was okay with them		

Questions from parent/guardian:

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Overall, I feel that this phone call followed the GIRLSS consultation curriculum as expected.

Completely Disagree	Disagree	Neutral	Agree	Completely Agree
1	2	3	4	5

Rationale for agreement above:

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Self-Evaluation and Notes:

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## **GIRLSS MIDDLE SCHOOL GROUP PARENT CONSULTATION 6 (WEEK 10)**

Start Time \_\_\_\_ : \_\_\_\_\_ Parent/Guardian Name \_\_\_\_\_

End Time \_\_\_\_ : \_\_\_\_\_ Student Name \_\_\_\_\_

1. Introduce self/remind caregiver who you are and why you are calling. Ask “Do you have a few minutes?”
2. Share summary points from session 10. Ask if they have any questions about group.

### **SESSION 10**

- Girls reviewed what they have learned during the group, including t/f/a sequence, stop strategy, reframing and other concepts
- Girls enjoyed final group reward that they earned based on their participation in the group
- Since they are no longer participating in the group they will need extra reminders to practice the strategies they have learned in group. You can do this by helping them talk about their t/f/a, asking them to teach you certain strategies (STOP, reframing, etc), and reflecting their motivation to change by reminding them of how much easier life is without all the drama caused by relational aggression.

3. Share how caregiver can get involved with daughters' learning
  - a. Continue reinforcing and eliciting t/f/a sequence.
  - b. Continue prompting daughter/granddaughter to use strategies from group before getting upset or reacting.
  - c. Continue focusing on positive quality time with daughter/granddaughter and self-esteem building.
4. If 2<sup>nd</sup> parent workshop has passed and not yet been discussed during a previous phone call, follow up with parent about what they thought of it (if there). Reinforce attempts to use strategies and problem- solve barriers they are experiencing in using the strategies or attending the workshops.
5. Ask if they have any questions or anything they want to talk about with you.
6. Thank caregiver for letting their daughter/granddaughter be part of the group and for their very important involvement. Let them know they should contact their school counselor if they have further questions.

<b>Fidelity Checklist</b>	<b>Yes</b>	<b>No</b>
I let the parent/guardian know what their daughter has been learning over the past two sessions (see summary points above)		
I asked the parent/guardian if they had any questions about the intervention and responded to them appropriately, including writing the questions below		
I reminded the parent/guardian of upcoming parent training workshops		
I let the parent know when I would call again and asked if this was okay with them		

Questions from parent/guardian:

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Overall, I feel that this phone call followed the GIRLSS consultation curriculum as expected.

Completely Disagree	Disagree	Neutral	Agree	Completely Agree					
1	2	3	4	5	6	7	8	9	10

Rationale for agreement above:

Self-Evaluation and Notes:

APPENDIX M: GIRLSS Parent Training Workshop Fidelity Checklist

**GIRLSS PARENT WORKSHOP FIDELITY CHECKLIST**

PW # \_\_\_\_\_ Site: \_\_\_\_\_ Date: \_\_\_\_\_

Group Leader/Supervisor (circle one) completing checklist: \_\_\_\_\_

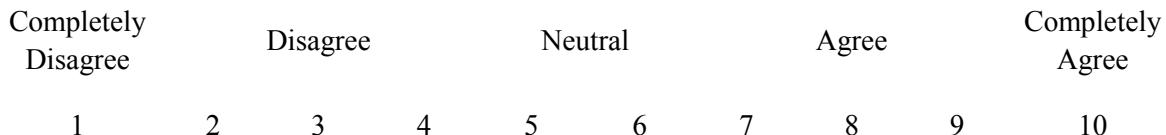
Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_

Other Leaders in Attendance (circle those who also completed a fidelity checklist for this session):  
 \_\_\_\_\_  
 \_\_\_\_\_

Activity Checklist: Did I.....	YES	NO
Facilitate introductions?		
Help the group set appropriate rules?		
Review material from previous session?		
Describe and define relational aggression adequately?		
Facilitate discussions participants' normative beliefs and experiences of RA as well as negative effects experienced by all involved in RA?		
Complete activity _____ ?		
Remind participants of next workshop?		
Remind participants of upcoming procedures (home visits for posttest, etc)?		
Collect workshop evaluation feedback from participants?		
Ensure that notes were taken during the workshop?		
Ensure that the workshop was videotaped?		

<b>Process Checklist: Did I....</b>	<b>YES</b>	<b>NO</b>
Ask more questions than I gave directives?		
Attend to the needs of the group in terms of balancing process discussions and lesson content?		
Use active listening skills?		
Use reflection skills?		
Ask clarifying questions?		
Empathize with group members?		
Confront group members when appropriate?		
Ask questions that elicited “change talk”?		
Reflect group members’ “change talk”?		
Ask questions that elicit connections between thoughts, feelings and actions?		
Make/reflect connections between thoughts, feelings and actions for group members?		
Demonstrate enthusiasm about group and workshop topic?		
Verbally praise group members for participation?		

Overall, I feel that this session followed the GIRLSS manual and curriculum as expected.



Rationale for agreement above:

Self-Evaluation and Notes:

APPENDIX N: Revised Relational Aggression Knowledge and Beliefs Scale- Parent and Child Form

## **Relational Aggression Knowledge & Beliefs Scale**

ID: _____	Spring 2010 Fall 2010	Pre Post Delayed Post	Date:
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1. Relational aggression is using relationships or friendships to hurt others.
  - a. True b. False
2. Examples of relational aggression include:
  - a. Excluding someone on purpose
  - b. Telling someone you won't be their friend if they don't do what you want
  - c. Spreading a rumor about someone else
  - d. All of the above are examples
  - e. I don't know what relational aggression is
3. Preschool children can be relationally aggressive.
  - a. True b. False
4. Rolling your eyes, or using rude body language when others are talking can be an example of relational aggression.
  - a. True b. False
5. If I don't agree with my friend and want to tell them in a positive way, I could use reframing and self talk skills.
  - a. True b. False
6. The T,F, A sequence is:
  - a. Recognizing your thoughts, feelings and actions in a situation
  - b. A strategy for telling someone how you feel, changing your friendship with them, and accepting their forgiveness for what you did
  - c. A strategy for reframing your thoughts and choosing better actions.
  - d. Both A and C
  - e. None of the above

7. Relational aggression may lead to depression (feeling sad for a long time), anxiety (constantly worrying about things) and/or loneliness (feeling alone and isolated).
  - a. True
  - b. False
8. A feeling:
  - a. Is an emotion
  - b. Tells you something
  - c. Can help you recognize when you need to make a change
  - d. Can be recognized by how my body feels on the inside and outside
  - e. All of the above
  - f. None of the above
9. Telling someone else private information or a lie about a friend can be an example of relational aggression
  - a. True
  - b. False
10. Empathy is understanding someone else's feelings.
  - a. True
  - b. False
11. Leaving a friend out of a party or get-together in order to make them mad or get back at them can be relationally aggressive.
  - a. True
  - b. False
12. Reframing your thought means that you think about someone or a situation in a more positive way that changes your actions.
  - a. True
  - b. False
13. A thought:
  - a. Is what you think about a friend in a particular situation
  - b. Is what you think about what your friend did and why they did it in a particular situation
  - c. How you feel about your friend in a particular situation
  - d. A and B
  - e. All of the above
  - f. None of the above

14. Self-talk is the thoughts you have in your head about yourself that influence how you feel and act.
- a. True b. False
15. Setting goals is not related to changing your relationally aggressive behaviors.
- a. True b. False
16. I believe that excluding others (i.e., not letting others in my friendship group) is okay
- a. True b. False
17. I believe that it is okay to talk behind someone's back when I am mad.
- a. True b. False
18. It is better to talk with your friend when you are mad at them instead of telling someone else about it.
- a. True b. False
19. I believe that it is okay to ignore someone on purpose.
- a. True b. False
20. I am friends with people who want me to be exclusively (i.e., be only with them) in their group.
- a. True b. False
21. I feel that I always have to control (i.e., tell them what to do) my friends.
- a. True b. False
22. I feel that I have control over my thoughts and beliefs.
- a. True b. False
23. I feel that I have control over my behavior or actions
- a. True b. False

APPENDIX O: Cartoon-based Hostile Attribution Scale (Leff et al., 2006)

**WHY KIDS DO THINGS**

ID#: _____	Spring 2010 Fall 2010	Pre Post Delayed Post	Date:
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**Directions: You will be reading several stories. Pretend that the things that are happening in each story are happening to you. Then answer the questions after each story. Put a circle around your answer.**

**VI. PARTY STORY**

Imagine that you are in the bathroom one day after recess. While you are in there, two other kids from your class come in and start talking to each other. You hear one of the kids invite the other one to a birthday party. The kid says that there are going to be a lot of people at the party. You have not been invited to this party.

1. Why hasn't the kid invited you to the birthday party?
  - A. The kid doesn't want me to come to the party.
  - B. The kid hasn't had a chance to invite me yet.
  - C. The kid is trying to get back at me for something.
  - D. The kid was planning to invite me later.
  
2. In this story, do you think that the kid was
  - A. trying to be mean?
  - B. not trying to be mean?
  
3. How upset would you be if the things in this story really happened to you?
  - A. Not upset at all.
  - B. A little upset.
  - C. Very upset.
  
4. How mad would you be if the things in this story really happened to you?
  - A. Not mad at all.
  - B. A little mad.
  - C. Very mad
  
5. How sad would you be if the things in this story really happened to you?
  - A. Not sad at all.
  - B. A little sad.
  - C. Very sad



## VII. PAINT STORY

Imagine that you have just finished an art project for school. You've worked on it a long time and you're really proud of it. Another kid comes over to look at your project. The kid is holding a jar of paint. You turn away for a minute and when you look back the kid has spilled paint on your art project. You worked on the project for a long time and now it's ruined.

1. Why did the kid spill paint on your project?
  - A. The kid is mean.
  - B. The kid bumped into the paint by accident.
  - C. The kid is kind of clumsy.
  - D. The kid wanted to ruin my project.
  
2. In this story, do you think that the kid was
  - A. trying to be mean?
  - B. not trying to be mean?
  
3. How upset would you be if the things in this story really happened to you?
  - A. Not upset at all.
  - B. A little upset.
  - C. Very upset.
  
4. How mad would you be if the things in this story really happened to you?
  - A. Not mad at all.
  - B. A little mad.
  - C. Very mad

5. How sad would you be if the things in this story really happened to you?
- A. Not sad at all.
  - B. A little sad.
  - C. Very sad



### VIII. LUNCH STORY

Imagine that you are at lunch one day and looking for a place to sit. You see some kids you know at a table across the room. The kids are laughing and talking to each other and they look like they are having a good time. You walk over to their table. As soon as you sit down, the kids stop talking and no one says anything to you.

1. Why did the kids stop talking when you sat down?
  - A. They were waiting for me to say something first.
  - B. They didn't want to talk to me.
  - C. They were saying mean things about me before I got there.
  - D. They were finished talking.
2. In this story, do you think that the kids were
  - A. trying to be mean?
  - B. not trying to be mean?
3. How upset would you be if the things in this story really happened to you?
  - A. Not upset at all.
  - B. A little upset.
  - C. Very upset.

4. How mad would you be if the things in this story really happened to you?
  - A. Not mad at all.
  - B. A little mad.
  - C. Very mad
  
5. How sad would you be if the things in this story really happened to you?
  - A. Not sad at all.
  - B. A little sad.
  - C. Very sad



## IX. RACE STORY

Imagine that you are on the playground. You and some other kids are having a race. Another kid is standing on the side, bouncing a basketball. The next thing you realize is that the kid has bounced the ball and it rolls under your feet, making you fall. You skin your knee and someone else wins the race.

1. Why did the kid bounce the ball under your feet?
  - A. The kid wanted to get back at me for something.
  - B. The kid didn't see me coming.
  - C. The ball accidentally got away from the kid.
  - D. The kid wanted me to lose the race.
  
2. In this story, do you think that the kid was
  - A. trying to be mean?
  - B. not trying to be mean?

3. How upset would you be if the things in this story really happened to you?
  - A. Not upset at all.
  - B. A little upset.
  - C. Very upset.
  
4. How mad would you be if the things in this story really happened to you?
  - A. Not mad at all.
  - B. A little mad.
  - C. Very mad
  
5. How sad would you be if the things in this story really happened to you?
  - A. Not sad at all.
  - B. A little sad.
  - C. Very sad



APPENDIX P: Parents' Responses to Children's Behavior (Werner & Grant, 2009)

**Parent's Response to Children's Behavior Scale**

ID # _____	Spring 2010 Fall 2010	Pre Post Delayed Post	Date: _____
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Parent Completing Form (Circle One):      Mother      Father      Other \_\_\_\_\_

**Instructions:** Please read the following descriptions of children's behavior. As you read them, try to imagine vividly that the things in the story have just happened. Then answer the questions below. Give us your opinion by circling the single best number on the scale after each question. Remember, all of the questions refer to your child's behavior. Don't labor over these questions, but instead, answer them with the primary initial impression you have when you read them.

Imagine that you overhear your child on the phone one afternoon with a friend. Your child is telling an embarrassing story about a classmate he/she sometimes hangs around with. You know about the story, and you also know that your child promised not to tell anyone about it. When you confront your child about the promise, he/she says that the classmate has been spreading rumors about them in school.

1. Does your child know that he/she is acting badly or improperly?

1	2	3	4	5	6	7
Definitely does not know			Definitely knows			

2. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?

1	2	3	4	5	6	7
Definitely no: can't expect child to have known better			Definitely yes: child should have known better			

3. How much does this behavior deviate from what you realistically expect of your child in this situation?

1	2	3	4	5	6	7
Not at all			A lot			

4. How much blame does your child deserve for acting like this?

1	2	3	4	5	6	7
No blame			Complete			

blame

5. How likely is it that your child would behave in a similar way in this kind of situation in the future?



6. In general, how typical or common is this kind of behavior among children your child's age?



7. How upset with your child would you be for doing this?



8. How much disapproval would you express toward your child for doing this?



9. How much sternness would be present in your response?

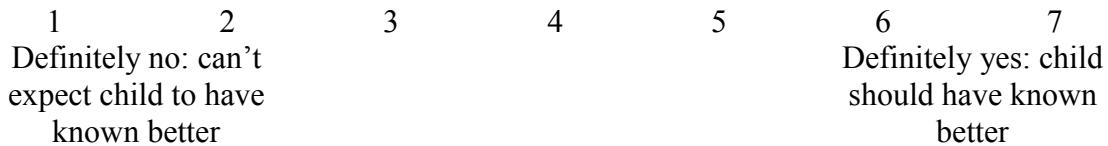


Imagine that you receive a call from your child's school one day. The school counselor tells you that your child has been teasing a classmate lately and that the classmate is very upset by the teasing.

10. Does your child know that he/she is acting badly or improperly?



11. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?



12. How much does this behavior deviate from what you realistically expect of your child in this situation?



13. How much blame does your child deserve for acting like this?



14. How likely is it that your child would behave in a similar way in this kind of situation in the future?



15. In general, how typical or common is this kind of behavior among children your child's age?



16. How upset with your child would you be for doing this?



17. How much disapproval would you express toward your child for doing this?



18. How much sternness would be present in your response?



Imagine that you are chaperoning a field trip with your child's class. During a lunch break, you overhear a classmate say something mean to your child. The next thing you know, your child has punched the other child in the arm.

19. Does your child know that he/she is acting badly or improperly?



20. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?



21. How much does this behavior deviate from what you realistically expect of your child in this situation?



22. How much blame does your child deserve for acting like this?



23. How likely is it that your child would behave in a similar way in this kind of situation in the future?



24. In general, how typical or common is this kind of behavior among children your child's age?



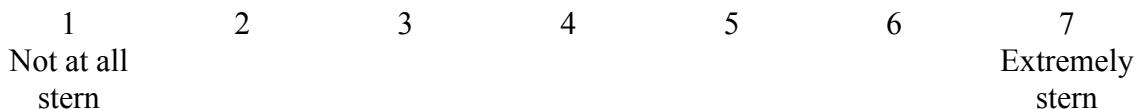
25. How upset with your child would you be for doing this?



26. How much disapproval would you express toward your child for doing this?



27. How much sternness would be present in your response?



Imagine that you happen to see an email message your child sent to one of his/her friends. In the email, your child is talking about another child from their class at school. Your child says that he/she doesn't like that classmate anymore, and that everyone should stop being friends with him/her.

28. Does your child know that he/she is acting badly or improperly?



29. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?



30. How much does this behavior deviate from what you realistically expect of your child in this situation?



31. How much blame does your child deserve for acting like this?



32. How likely is it that your child would behave in a similar way in this kind of situation in the future?



33. In general, how typical or common is this kind of behavior among children your child's age?



34. How upset with your child would you be for doing this?



35. How much disapproval would you express toward your child for doing this?



36. How much sternness would be present in your response?



Imagine that your child comes home from school one day very upset because their best friend made fun of the new shirt they wore to school. Your child tells you that, even though the friend tried to apologize, they refused to talk to them all day at school.

37. Does your child know that he/she is acting badly or improperly?



38. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?



39. How much does this behavior deviate from what you realistically expect of your child in this situation?



40. How much blame does your child deserve for acting like this?



41. How likely is it that your child would behave in a similar way in this kind of situation in the future?



42. In general, how typical or common is this kind of behavior among children your child's age?



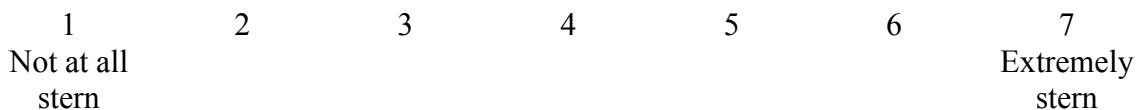
43. How upset with your child would you be for doing this?



44. How much disapproval would you express toward your child for doing this?



45. How much sternness would be present in your response?



Imagine that your child has a friend over afterschool. You walk by your child's room and you overhear the friend say that the shirt your child is wearing looks "stupid." Your child gets upset and calls the friend a mean name.

46. Does your child know that he/she is acting badly or improperly?



47. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?



48. How much does this behavior deviate from what you realistically expect of your child in this situation?



49. How much blame does your child deserve for acting like this?



50. How likely is it that your child would behave in a similar way in this kind of situation in the future?



51. In general, how typical or common is this kind of behavior among children your child's age?



52. How upset with your child would you be for doing this?



53. How much disapproval would you express toward your child for doing this?



54. How much sternness would be present in your response?



Imagine that you just received a call from the parent of a child in your child's class at school. The parent says that your child has been pushing their child up against the lockers at school lately.

55. Does your child know that he/she is acting badly or improperly?



56. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?



57. How much does this behavior deviate from what you realistically expect of your child in this situation?



58. How much blame does your child deserve for acting like this?



59. How likely is it that your child would behave in a similar way in this kind of situation in the future?



60. In general, how typical or common is this kind of behavior among children your child's age?



61. How upset with your child would you be for doing this?



62. How much disapproval would you express toward your child for doing this?



63. How much sternness would be present in your response?



Imagine that your child's birthday is coming up and you are planning a party together. Your child is writing a guest list but leaves off of the list the name of a child who just moved in next door and is in your child's class at school. You've heard from the mother of this child that he/she is making a lot of friends at school. When you ask your child why he/she doesn't want to invite them, he/she says that they just don't want that kid to be in his/her group of friends.

64. Does your child know that he/she is acting badly or improperly?



65. Would it be reasonable to expect your child to have known that this was wrong? In other words, should your child have known better?



66. How much does this behavior deviate from what you realistically expect of your child in this situation?



67. How much blame does your child deserve for acting like this?



68. How likely is it that your child would behave in a similar way in this kind of situation in the future?



69. In general, how typical or common is this kind of behavior among children your child's age?



70. How upset with your child would you be for doing this?



71. How much disapproval would you express toward your child for doing this?



72. How much sternness would be present in your response?



APPENDIX Q: Alabama Parenting Questionnaire- Parent Form (Frick et al., 1999)

**The University of New Orleans**  
**Alabama Parenting Questionnaire (APQ)**

ID # _____	Spring 2010 Fall 2010	Pre Post Delayed Post	Date: _____
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Parent Completing Form (Circle One):      Mother      Father      Other \_\_\_\_\_

Instructions: There are a number of sentences about your family. Please rate each item as to how often it TYPICALLY occurs in your home. The possible answers are Never (1), Almost Never (2), Sometimes (3), Often (4), Always (5). PLEASE ANSWER ALL ITEMS.

	Never	Almost Never	Sometimes	Often	Always
1. You have a friendly talk with your child.	1	2	3	4	5
2. You let your child know when he/she is doing a good job with something.	1	2	3	4	5
3. You threaten to punish you child and then do not actually punish him/her.	1	2	3	4	5
4. You volunteer to help with special activities that your child is involved in (such as sports, boy/girl scouts, church youth group)	1	2	3	4	5
5. You reward or give something extra to your child for obeying you or behaving well.	1	2	3	4	5
6. Your child fails to leave a note or to let you know where he/she is going.	1	2	3	4	5
7. You play games or do other fun things with your child.	1	2	3	4	5
8. Your child talks you out of being punished after he/she has	1	2	3	4	5

done something wrong.

9. You ask your child about his/her day in school.	1	2	3	4	5
10. Your child stays out in the evening past the time he/she is supposed to be home.	1	2	3	4	5
11. You help your child with his/her homework.	1	2	3	4	5
12. You feel that getting your child to obey you is more trouble than it's worth	1	2	3	4	5
13. Your compliment your child when he/she does something well.	1	2	3	4	5
14. You ask your child what his/her plans are for the coming day.	1	2	3	4	5
15. You drive your child to a special activity.	1	2	3	4	5
16. You praise your child if he/she behaves well.	1	2	3	4	5
17. Your child is out with friends you don't know.	1	2	3	4	5
18. You hug or kiss your child when he/she has done something well.	1	2	3	4	5
19. Your child goes out without a set time to be home.	1	2	3	4	5
20. You talk to your child about his/her friends.	1	2	3	4	5
21. Your child is out after dark without an adult with him/her.	1	2	3	4	5
22. You let your child out of a punishment early (like lift restrictions earlier than you originally said).	1	2	3	4	5
23. Your child helps plan family activities.	1	2	3	4	5

24. You get so busy that you forget where your child is and what he/she is doing.	1	2	3	4	5
25. Your child is not punished when he/she does something wrong.	1	2	3	4	5
26. You attend PTA meetings, parent/teacher conferences, or other meetings at your child's school.	1	2	3	4	5
27. You tell your child that you like it when he/she helps out around the house.	1	2	3	4	5
28. You do not check that your child comes home at the time he/she was supposed to.	1	2	3	4	5
29. You don't tell your child where you are going.	1	2	3	4	5
30. Your child comes home from school more than an hour past the time you expect him/her.	1	2	3	4	5
31. The punishment you give your child depends on your mood.	1	2	3	4	5
32. Your child is at home without adult supervision.	1	2	3	4	5
33. You spank your child with your hand when he/she has done something wrong.	1	2	3	4	5
34. You ignore your child when he/she is misbehaving.	1	2	3	4	5
35. You slap your child when he/she is misbehaving.	1	2	3	4	5
36. You take away privileges or money from your child as a punishment.	1	2	3	4	5
37. You send your child to his/her room as a punishment.	1	2	3	4	5

38. You hit your child with a belt, switch, or other object when he/she has done something wrong.	1	2	3	4	5
39. You yell or scream at your child when he/she has done something wrong	1	2	3	4	5
40. You calmly explain to your child why his/her behavior was wrong when he/she misbehaves.	1	2	3	4	5
41. You use time out (make him/her sit or stand in a corner) as a punishment.	1	2	3	4	5
42. You give your child extra chores as a punishment.	1	2	3	4	5

APPENDIX R: Alabama Parenting Questionnaire- Child Form (Frick et al., 1999)

**The University of New Orleans**  
**Alabama Parenting Questionnaire (APQ)**

ID # _____	Spring 2010 Fall 2010	Pre Post Delayed Post	Date:
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Instructions: The following are a number of statements about your family. Please rate each item as to how often it TYPICALLY occurs in your home. The possible answers are Never (1), Almost Never (2), Sometimes (3), Often (4), Always (5). If your dad or mom is not currently living at home with you, then skip the questions that ask about that person.

	Never	Almost Never	Someti mes	Often	Always
1. You have a friendly talk with your mom.	1	2	3	4	5
A. How about your dad?	1	2	3	4	5
2. Your parents tell you that you are doing a good job.	1	2	3	4	5
3. Your parents threaten to punish you child and then do not do it.	1	2	3	4	5
4. Your mom helps with some of your special activities (such as sports, boy/girl scouts, church youth groups)	1	2	3	4	5
A. How about your dad?	1	2	3	4	5
5. Your parents reward or give something extra to you for behaving well.	1	2	3	4	5
6. You fail to leave a note or to let your parents know where you are going.	1	2	3	4	5
7. You play games or do other fun things with your mom.	1	2	3	4	5

A. How about your dad?	1	2	3	4	5
8. You talk your parents out of punishing you after you have done something wrong.	1	2	3	4	5
9. Your mom asks you about your day in school.	1	2	3	4	5
A. How about your dad?	1	2	3	4	5
10. You stay out in the evening past the time you are supposed to be home.	1	2	3	4	5
11. Your mom helps you with your homework.	1	2	3	4	5
A. How about your dad?	1	2	3	4	5
12. Your parents give up trying to get you to obey them because it's too much trouble.	1	2	3	4	5
13. Your parents compliment you when you have done something well.	1	2	3	4	5
14. Your mom asks what your plans are for the coming day.	1	2	3	4	5
A. How about your dad?	1	2	3	4	5
15. Your mom drives you to a special activity.	1	2	3	4	5
A. How about your dad?					
16. Your parents praise you for behaving well.	1	2	3	4	5
17. Your parents do not know the friends you are with.	1	2	3	4	5
18. Your parents hug or kiss you when you have done something well.	1	2	3	4	5
19. You go out without a set time to be home.	1	2	3	4	5

20. Your mom talks to you about your friends.	1	2	3	4	5
A. How about your dad?	1	2	3	4	5
21. You go out after dark without an adult with you.	1	2	3	4	5
22. Your parents let you out of a punishment early (like lift restrictions earlier than they originally said).	1	2	3	4	5
23. You help plan family activities.	1	2	3	4	5
24. Your parents get so busy that they forget where you are and what you are doing.	1	2	3	4	5
25. Your parents do not punish you when you have done something wrong.	1	2	3	4	5
26. Your mom goes to a meeting at school like a PTA meeting or parent/teacher conferences.	1	2	3	4	5
A. How about your dad?	1	2	3	4	5
27. Your parents tell you that they like it when you help out around the house.	1	2	3	4	5
28. You stay out later than you are supposed to and your parents don't know it.	1	2	3	4	5
29. Your parents leave the house and don't tell you where they are going.	1	2	3	4	5
30. You come home from school more than an hour past the time your parents expect you to be home.	1	2	3	4	5
31. The punishment your parents give depends on their mood.	1	2	3	4	5

32. You are at home without an adult being with you.	1	2	3	4	5
33. Your parents spank you with their hand when you have done something wrong.	1	2	3	4	5
34. Your parents ignore you are misbehaving.	1	2	3	4	5
35. Your parents slap you when you have done something wrong.	1	2	3	4	5
36. Your parents take away privileges or money from you as a punishment.	1	2	3	4	5
37. Your parents send you to your room as a punishment.	1	2	3	4	5
38. Your parents hit you with a belt, switch, or other object when you have done something wrong.	1	2	3	4	5
39. Your parents yell or scream at you when you have done something wrong	1	2	3	4	5
40. Your parents calmly explain to you why your behavior was wrong when you misbehave.	1	2	3	4	5
41. Your parents use time out (makes you sit or stand in a corner) as a punishment.	1	2	3	4	5
42. Your parents give you extra chores as a punishment.	1	2	3	4	5

## VITA

Joni Denise Williams Splett was born in Lamar, MO on August 21, 1982 to Rick and Denise Williams. After graduating from Lamar High School, Lamar, MO in 2001, Joni studied at the University of Arkansas. Joni studied abroad in Costa Rica in Spring 2004 and graduated from the University of Arkansas with a bachelor's of arts in psychology and Spanish in August 2005. She worked as a school-based mental health paraprofessional with Ozark Guidance, Inc in the Elkins and Springdale, AR school districts during the 2005-2006 school year. In August 2006, Joni entered the doctoral program in school psychology at the University of Missouri. She married Matt Splett on June 2, 2007 and earned her Masters of Arts degree in December 2009. Joni completed a pre-doctoral internship with the Richland 2 School District in Columbia, SC in June 2012 and obtained a postdoctoral fellowship position with Mark Weist, Ph.D. and the School Mental Health Team at the University of South Carolina for the 2012-2013 and 2013-2014 school years.