## Marshall University Marshall Digital Scholar

Theses, Dissertations and Capstones

1-1-2006

# Popularity and Aggression Among Females in the Eighth Grade

April Lynn Kantz kantz1@yahoo.com

Follow this and additional works at: http://mds.marshall.edu/etd Part of the <u>Education Commons</u>, <u>Personality and Social Contexts Commons</u>, and the <u>School</u> <u>Psychology Commons</u>

#### **Recommended** Citation

Kantz, April Lynn, "Popularity and Aggression Among Females in the Eighth Grade" (2006). *Theses, Dissertations and Capstones*. Paper 119.

This Thesis is brought to you for free and open access by Marshall Digital Scholar. It has been accepted for inclusion in Theses, Dissertations and Capstones by an authorized administrator of Marshall Digital Scholar. For more information, please contact <a href="mailto:rhogi@marshall.edu">rhogi@marshall.edu</a>.

### POPULARITY AND AGGRESSION AMONG FEMALES IN THE EIGHTH GRADE

Thesis submitted to The Graduate College of Marshall University

In partial fulfillment of the Requirements for the degree of Education Specialist School Psychology

By

April Lynn Kantz

Dr. Stephen O'Keefe, Committee Chairperson Dr. Fred Krieg Dr. Tony Goudy Dr. Sandra Stroebel

Marshall University

May 1, 2006

#### ABSTRACT

#### Popularity and Aggression Among Females in the Eighth Grade

#### By April Lynn Kantz

This thesis examines how popularity affects the use of indirect and direct aggression. By using a class roster of all of the participants, the girls nominated three of the most popular and three of the least popular girls. The Direct Indirect Aggression Scales were used to examine which girls exhibited which type of aggressive behaviors. The results indicate that popularity affects aggression and that popular girls use more indirect aggression. These findings are consistent with past research on popularity and aggression and could help parents and educators understand the effects of such behaviors.

## Table of Contents

Abstract	Page ii
Table of Contents	Page iii
List of Tables	Page iv
Literature Review	Page 1
Purpose	Page 12
Method	Page 13
Participants	Page 13
Measures	Page 14
Instrument	Page 14
Procedures	Page 14
Data Analysis	Page 15
Results	Page 15
Discussion	Page 20
References	Page 22

## LIST OF TABLES

Table One: Total of Popularity and Effects on Aggression	.6
Table Two: Popularity and Effects on Indirect Aggression	17
Table Three: Popularity and Effects on Direct Aggression	.8
Table Four: Means and Standard Deviations for All Groups1	9

#### Aggression and Popularity Among

Females in the Eighth Grade

#### **Social Learning Theory of Aggression**

Bandura (1973) believed that people are thinking organisms that possess capabilities that provide them with some power of self-direction. He wrote that by managing the stimulus determinants of given activities and producing consequences for their own actions, people can somewhat control their own behavior. Bandura explained that human aggression is a learned behavior that like other forms of social behavior is under stimulus, reinforcement, and cognitive control.

According to Bandura's (1973), social learning theory, aggression is treated as a complex event that includes behaviors that produce injurious and negative effects to its victims as well as labeling the acts as aggressive. A full explanation of aggression must consider both injurious behavior and social judgments that decide which injurious acts are labeled as aggressive. The social learning theory of aggression distinguishes between the acquisition of behaviors that have destructive and injurious potential and the factors that determine whether a person will perform what he has learned. It recognizes the interrelationship between the individual, the environment, and behavior (Grusec, 1992). The theory is promoted through examples set by individuals one comes across in everyday life. People learn through modeling and direct experience and modeling influences can be especially important in the use of aggression (Bandura, 1973). Perceived popular children and adolescents usually are the most influential and connected members of their grade. Perceived popular children can be described as being manipulative and willing to use their social status in order to control the dynamics of the group and their position in it, even if it hurts other people (Cillessen & Mayeux, 2004). It is because of the high status of perceived popularity among adolescents and the modeling of these perceived popular youths that other youths may aggress to increase their perceived popularity (Rose, Swenson & Waller, 2004).

Patterns of behavior can be obtained by observing the behavior of others. It is apparent from informal observations that human behavior is socially transmitted through the behavioral examples provided by influential models (Bandura, 1973). Adolescents who are at the top of the status hierarchy are considered to be the most popular and they participate in highly visible and prestigious activities such as athletics (Kennedy & Axelrod, 2002). The behavior of models who possess high status in prestige, power, and competence is more likely to be successful and therefore to command greater attention from others than the behavior of models who are not as social and intellectual. Among the many factors that determine observational experiences which a person associates with is undoubtedly of major importance. The people a person regularly associates with define the types of behavior that that person will repeatedly observe and hence learn most thoroughly (Bandura, 1973). It has been observed that youths who are aggressive and disliked are especially likely to have friends who are also aggressive and disliked, whereas youths who are aggressive and perceived as popular are especially likely to have aggressive friends who also are perceived as popular (Rose, Swenson, & Carlson, 2004). The friendships of youth who are both aggressive and perceived as popular would be compromised if they were aggressive within their friendships; it also seems possible that instead of aggressing toward their friends, these youths would band together with their friends to become aggressive toward others, and this shared aggressiveness could actually strengthen their friendships in some ways (Rose et al., 2004). It has been seen that the popular girls who are aggressive are receiving positive

attention from adults. It is because of this positive attention that many times these popular girls are the least likely suspects to adults (Skowronski, Weaver, Wise, & Kelly 2005).

Bandura (1973) believed that in many social groups aggression can have powerful status and have a rewarding value. Relational aggression may be useful for managing social power in ways that contribute to perceived popularity (Rose, Swenson, & Waller, 2004). Relational aggression can be positively reinforced because aggressors can use it to their advantage in order to get power and to maintain their own social status. Many girls will not stand up to the aggressors for fear of loosing their own social status within a group (Skowronski, Weaver, Wise & Kelly, 2005).

Behavior is considerably controlled by its consequences. People can foresee the probable consequences of different actions and alter their behavior accordingly. A great deal of aggression is prompted by its anticipated benefits (Bandura, 1973). It has been found that perceived popular youths may feel pressure to use socially aggressive strategies in order to establish and to keep their popular status (Lease, Kennedy & Axelrod, 2002). Responses that cause punishing or unrewarding effects tend to be discarded; however, behaviors that produce rewarding outcomes are retained and strengthened (Bandura, 1973). This can be seen with popular children who manipulate and control others, to enforce the social boundaries around their social groups by excluding others so that they can maintain their position at the top of the social hierarchy (Lease, Kennedy, & Axelrod, 2002).

Stimuli indicating that a given action will be punished tend to inhibit their performance, whereas those signifying that the actions are permissible or rewarding facilitate their occurrence (Bandura, 1973). It is often seen that relational aggression goes unnoticed and unpunished by adults because of its subtle nature. Many adults may even believe relational aggression is just "typical" adolescent behavior (Casey-Cannon, Hayward, & Gowen, 2001). Some girls feel that relational aggression is natural because their teachers do not address it and their peers take part in it. Because of the lack of punishment, it can be seen why relational aggression is being used more today (Skowronski, Weaver, Wise, & Kelly, 2005).

#### **Types of Aggression**

Traditionally, it has been believed that males are more aggressive than females. Today, research is suggesting that females are aggressive also; sometimes they can be just as aggressive as males (Lagerspetz, Bjorkqvist, & Peltonen, 1988); although they may use a different type of aggression. There are four types of aggression that have been studied in the past, relational aggression, indirect aggression, direct aggression and overt aggression.

#### Relational Aggression

Relational aggression includes behaviors that inflict harm on others by manipulating peer relationships. It occurs without the use of direct contact with the victim, such as spreading rumors (Grotpeter & Crick, 1996). Relational aggression is used as a tactic that is indirect, using other people to exercise the aggressive acts, as well as social, the aggression is aimed at harming the social standing of the victim (Skowronski, Weaver, Wise, & Kelly, 2005). It has been found to include behaviors like threatening to withdraw friendships so that the aggressor can get his/her own way or using social exclusion as a form of retaliation (Crick, Bigbee, & Howes, 1996). Relational aggression has been found to be similar to indirect aggression (Kaukiainen, Bjorkqvist, Lagerspetz, Osterman, Salmivalli, Rothberg, & Ahlbom, 1999).

#### Indirect Aggression

Indirect aggression has been found to be a type of aggression in which the aggressor tries to inflict pain in some way that he or she makes it seem as though there has been no intention to hurt at all so that he or she is more likely to avoid counteraggression and to remain unidentified (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992). Indirect aggression has been defined as "when the target person is attacked not physically or directly through verbal intimidation but in a circuitous way, through social manipulation" (Kaukiainen et al., p. 83, 1999). Items on Crick's scale of aggression seemed identical to the items measuring indirect aggression on the Direct Indirect Aggression Scales. Some of the items on the DIAS and Crick's scale included spreading rumors, isolating ones from the group, and ignoring individuals (Bjorkqvist, Lagerspetz, & Osterman, 1992; Crick, 1997)

#### **Overt Aggression**

Overt aggression occurs when the behaviors of the aggressor are intended to harm the victim through physical damage or the threat of physical damage, such as hitting another person or the use of verbal threats of violence (Crick, 1997; Grotpeter & Crick, 1996). This type of aggression has been shown to be more characteristic in boys than in girls (Grotpeter & Crick, 1996).

#### **Direct** Aggression

Direct aggression is believed to be physical or verbal (Salmivalli, Kaukiainen, & Lagerspetz, 2000). Direct aggression can be attacks that are usually visible and disruptive. Indirect aggression involves harm that is delivered in a face-to-face situation (Green, Richardson, & Lago, 1996). According to the DIAS verbal aggression can include yelling at or arguing with someone; insulting someone, verbal threats of violence; teasing or calling someone names (Bjorkqvist, Lagerspetz, & Osterman, 1992).

Crick and Grotpeter (1995) defined aggression as "behaviors intended to hurt or harm others" (p. 210). Anger is the emotion most associated with aggression (Owens, Slee, & Shute,

2000). Bjorkqvist and Niemela (1992) believed that, "status, dominance, and competition seem to be important mediators of aggression" (p. 5). Overt forms of aggression are easily seen as aggressive acts because they can be observed, and it is obvious that it is inflicting some sort of harm on the victim. Relational aggression is harder for some people to identify because it is difficult for people to pinpoint the aggressor (Owens et al., 2000). Boys are not more aggressive than girls; however, girls are more subtle in their use of aggression (Skowronski, Weaver, Wise, & Kelly, 2005). Research through studies has shown that children do view relational aggression as another hurtful form of aggression other than overt aggression (Crick, Bigbee, & Howes, 1996; Owens et al., 2000). Children viewed relational acts of aggression involve feelings of anger. These feelings of anger are especially seen in aggressive females. Relational aggression can be just as hurtful as overt aggression and thus can be perceived as aggressive (Crick et al., 1996). Relational acts of aggression such as jealousy and talking behind backs are supposed to cause harm and are clearly aggressive (Owens et al., 2000).

#### **Aggression and Age**

Aggression becomes more problematic in early adolescence during middle school and junior high (Pellegrini & Bartini, 2000). Early adolescence is a period in which young children are confronted with a variety of rapid changes, physical and social. They are maturing and are changing from primary to secondary schools. The adolescents are also forming new friendships and peer groups. In order to establish leadership or dominance in their new groups, some children begin to show aggressive behaviors (Pellegrini, Bartini, & Brooks, 1999).

There have been studies on different age groups in order to assess the different levels of aggression between boys and girls. Lagerspetz, Bjorkqvist, and Peltonen (1988) studied gender differences in aggression among 11 and 12 year old fifth graders. They used peer ratings and

interviews in order to examine the frequency in aggression and friendship patterns of those students. They found that the social lives of 11 and 12 year old girls are more aggressive and ruthless than what previous research has shown. Girls did use more relational aggression while boys used more overt aggression. Gender differences in friendship patterns were also found. It was seen that boys could not pick out same-sex friends as clearly as girls could. The interviews focused on the students' behaviors when they are angry and the meaning and importance of their friendships. Girls reported anger that lasted longer than boys, but boys were rated as becoming angry more often than girls. Boys reported their anger lasting no longer than a day; however, girls reported anger lasting much longer. The interviews also showed that girls' friendships had a greater emotional significance than boys' friendships (Lagerspetz et al., 1988).

A study on gender differences in aggression among eight and fifteen year olds was compared to the previous study of eleven and twelve year olds (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Lagerspetz, Bjorkqvist, & Peltonen, 1988). It was found that gender differences regarding the utilization of relational and overt aggression is a definite phenomenon, at least during adolescence. Their study found that boys exhibit physical aggression during all age groups. The study stated that indirect aggression was seen more frequently in girls; however, it was not fully developed at the age of eight. At the ages of 11 and 15, indirect aggression was clearly seen in girls. The authors also compared their results to a previous study involving 11 and 12 year olds. They believed that aggressive behavior peaks at the age of 11 and is seen more among girls.

#### Maturity Level and Types of Aggression

Relational aggressive children reported using high level of aggression within their relationships while overtly aggressive children reported using aggression together with friends to

harm others outside of their friendships (Grotpeter & Crick, 1996). At an early age, girls began to realize that indirect aggression can produce results more effectively than a direct personal attack (Bjorkqvist, Osterman & Kaukiainen, 1992). It has been shown that girls mature faster verbally than boys. The faster maturation of females could be a factor as to why girls participate in indirect aggression more often than boys (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992). The development of social intelligence helps the child realize how to be relationally aggressive (Bjorkqvist, Osterman & Kaukiainen, 1992). Since girls are more relational and social than boys, girls tend to use forms of aggression that damage friendships (Owens, Slee, & Shute, 2000). Since girls focus on establishing close connections during social interactions in friendships, relational aggression can be an effective tool to intimidate others in the peer group (Crick, 1996). The smaller, more intimate social groups of girls make indirect aggression more effective for them (Owens, Shute & Slee, 2000b). Boys, on the other hand, use overt behaviors such as hitting and verbal threats because those actions are more meaningful and effective in their groups since they damage the social goals of boys, those that are dominance-oriented (Crick, 1996). It has been found that girls use almost equal amounts of verbal and indirect aggression (Owens, Shute, & Slee, 2000a), so it is likely that a considerable amount of verbal aggression overlaps with indirect behavior. Verbal aggression is the use of verbal "put downs" by using terms such as dyke, slut, or fat (Owens et al. 2000a). It has been implied that girls can be as aggressive as boys, but girls use more concealed forms of aggression such as telling lies or socially isolating peers (Casey-Cannon, Hayward, & Gowen, 2001). Crick (1997) explained that the "gender gap" of aggression is narrowing by stating that:

Research indicates that, between 1965 and 1987, the frequency of aggressive acts committed by minors in the United States increased steadily for both sexes. However,

the rate for girls increased at a faster rate than that of boys, narrowing the male: female ratio from 11:1 in 1965 to 8:1 in 1987. (p. 610).

#### **Aggressive Children and Their Friendships**

There has been some research done on the friendships of boys and girls. This research has found that the friendships of boys and girls are very different (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Grotpeter & Crick, 1996; Bjorkqvist & Niemela, 1992). Boys usually form loose groups of friends while girls form tight groups of friends sometimes referred to as cliques (Bjorkqvist et al., 1992). Because of the tight knit groups between girls, their friendships have been shown to have higher levels of intimacy and self-disclosure. Relationally aggressive girls have reported that they did not disclose a lot of personal information to their friends, but that their friends could trust them with their private secrets. Relationally aggressive children tend to find friends that are relatively open with their secrets. Researchers believed that relationally aggressive children seek out these types of friends so that the aggressive girls can gain control over their friends by threatening to betray their confidences (Grotpeter & Crick, 1996). Female aggression may appear in a variety of forms in different cultures. It has been seen that dominance hierarchies exist between females in different cultures and because of these hierarchies competition with other females take place more often than with males (Bjorkqvist & Niemela, 1992).

#### **Perceived Popularity**

Perceived popularity has not been examined frequently in the developmental literature of the past. Perceived popularity is not the same as being well liked by a majority of peers, which is known as sociometric popularity, but perceived popularity is a more complex phenomenon involving both positive and negative elements (LaFontana &Cillessen, 2002). Perceived popular youths are generally associated with being visible, attractive, and integrated in the "popular" crowd. It is also related to both prosocial behaviors and aggressive behaviors (Rose, Swenson, & Carlson, 2004). Although sociometric popularity is exclusively associated with prosocial characteristics, perceived popularity is not (LaFontana & Cillessen, 2002).

If children are directly asked whom they perceive as popular or unpopular, popularity can be measured as a reputation rather than as a personal preference (LaFontana & Cillessen, 2002). A positive relation between perceived popularity and being well liked; however, not all perceived popular youths are well liked by their peers (Rose, Swenson, & Carlson, 2004). Children who rank high on perceived popularity but low on sociometric popularity tend to be seen by peers as dominant, aggressive, and stuck-up, whereas peers who rank high on sociometric popularity but low on perceived popularity are seen as kind and trustworthy, and those who are ranked high on both measures may possess all of these traits (LaFontana & Cillessen, 2002). Perceived popular youth are believed to use a balance of prosocial and aggressive behavior strategically in order to serve their social needs. Ethnographic research has shown perceived popular youth were desired as friends because having a popular friend enhanced a child's own status (Rose et al., 2004).

#### **Popularity and Aggression**

In adolescence, aggression does not always lead to rejection by peers. Some studies have found a relationship between adolescent aggression and acceptance among peers and that there are findings that suggest female bullies are surprisingly popular amongst their peers. Children with mixed ratings (highly liked and highly disliked) are significantly more relationally aggressive than all other status groups, including rejected children. A positive or at least average status may be a perquisite for the use of indirect aggression (Salmivalli et al., 2000). Children associate physical and relational aggression more strongly with disliking than liking peers, but they also associate both forms of aggression more strongly with popular peers than with unpopular peers (LaFontana & Cillessen, 2002).

Popular children were seen as willing to act aggressively or otherwise antisocially to achieve their social goals. Children attributed more hostility to the behaviors of popular targets than neutral targets and they did not like popular targets more than neutral targets (LaFontana & Cillessen, 2002). If a child is unpopular, it might be difficult to manipulate other group members and make them do as that unpopular child wishes. It may be possible, that the "social power" needed for indirect aggression is based on the aggressor's status within the group (Salmivalli, Kaukiainen, & Lagerspetz, 2000).

#### Victims of Aggression

Relational aggression is just as hurtful to its victims as overt aggression. It damages the goals that are important to girls such as the intimate connections that they make with one another (Crick, Bigbee, & Howes, 1996). The victims of relational aggression show higher levels of social-psychological maladjustment than non-victims; this reaction is similar to victims of overt aggression (Crick, Casas, & Mosher, 1997; Owens et al., 2000b).

*Gender differences*. Since girls have strong emotional ties with one another, it has been seen that girls feel more emotionally distressed by relational aggressive events than boys feel about these events (Crick & Bigbee, 1998; Owens et al., 2000b). It has been seen that boys were more likely to report feelings of anger when they were victimized and girls reported feelings of sadness (Owens, Slee, & Shute, 2000). Girls think relational aggression is more hurtful than overt (Owens et al., 2000b).

*Victims.* The reactions of victims of relational aggression and found that the initial reaction of manipulation is confusion. Afterwards the victims begin to deny what is happening to them. Finally, they begin to feel the effects of the psychological pain of hurt, loss of self-esteem and self-confidence, anxiety, and a fear for future relationships. The victims try to escape the feelings by joining other groups, skipping school, or leaving school all together (Owens et al. 2000a). As many as 160,000 students have stopped going to school because of fear of relational aggression. Some victims go as far as thoughts of suicide (Skowronski, Weaver, Wise & Kelly, 2005).

*Passive Vs. Active Victims*. Differences have been observed between passive victims and aggressive victims. Passive victims tend to be smaller than their peers, not very assertive and they can be less popular. Aggressive victims usually are more hostile in their social interactions. They are highly emotional and hot tempered. Their aggression usually comes to be after they are a victim of bullying (Pellegrini, Bartinin, & Brock, 1999).

#### Purpose

The purpose of this study was to examine if popular girls use more indirect aggression than unpopular girls. This research is important because past research has looked at males and their aggressiveness, or mixed gender groups (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Bjorkqvist, Osterman, & Kaukiainen, 1992; Crick, 1997; Crick & Bigbee,1998; Crick, Bigbee, & Howes, 1996; Crick, Casas, & Mosher, 1997; Crick & Grotpeter, 1995; Grotpeter & Crick, 1996; Kaukiainen, Bjorkqvist, Lagerspetz, Osterman, Salmivalli, Rothberg, & Ahlbom, 1999; Rose, Swenson, & Waller, 2004), but no one has focused as exclusivley on females. This study examined popularity and indirect aggression among girls in the eighth grade. Eighth graders are in a transition phase between being kids in middle school and becoming high school students. High school is a time of personal growth and growing into becoming young adults. The information provided by this study is important because all aggression is being discouraged since it has been seen that victims of aggression can experience many psychological as well as psychosocial problems and can also become aggressive. Results of the study may be used to identify prosocial aggression. Aggression which is indirect and used to establish and/or maintain social status should not be discouraged. It is also important to look at these aggressive students in order to learn about aggression so that educators and parents can begin to help aggressors and victims. While there has been previous research on aggressive children who were eight years old, 11 years old, 12 years old, and 15 years old (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Lagerspetz, Bjorkqvist, & Peltonen, 1988), there has not been research on the ages of 13 and 14.

The hypothesis of this study is that popularity affects aggression in eighth grade girls. The type of aggression is hypothesized to also affect the level of aggression. Popular girls are expected to have more indirect aggression and unpopular girls are expected to use direct aggression.

#### Method

#### **Participants**

The sample included 8<sup>th</sup> grade girls from one school in central Ohio. The sample size was 28 females. The participants were from different socioeconomic backgrounds. The socioeconomic backgrounds of the students were determined by the amount of children who are eligible for free lunch. There were more Caucasians than other races; however, there was minorities in the sample. Permission to give the girls the surveys at school came from the principals. One week before the surveys were given, a consent form was sent home to the parents to be signed. The day of the surveys an assent form was signed by the participants.

#### Measures

All of the data was collected by questionnaires during school hours. The questions were peer-ratings on indirect and direct aggression (DIAS-scale, Bjorkqvist, Lagerspetz, & Osterman, 1992). This study is similar to the study conducted by Salmivalli, Kaukiainen, and Lagerspetz (2000). Peer nominations of the most popular and least popular girls were also used. *Instrument* 

*DIAS*. The Direct Indirect Aggression Scales, DIAS, measures the use of direct verbal aggression, direct physical aggression and indirect aggression (Bjorkqvist et al. 1992). Usually, the DIAS has the names of all pupils in the class printed at the top of the paper beforehand. The participants are asked to rank each student's behavior as well as their own on a five-point scale according to each statement on the page. The questionnaire consists of 24 items. This procedure is different from peer nominations because each participant evaluates all classmates at one time. This can provide researchers with as many as 30-35 evaluations of each pupil's behavior.

In this study, the procedure was simplified so that the participants were given a numbered class roster and wrote the number of three students they wanted to nominate after reading the statement at the top of the page.

Peer Nomination. Students were asked to name three girls who they consider to be popular and three girls they consider to be unpopular. Once again, they wrote the number of the girl from the class roster of whom they wanted to nominate. Two variables were observed on the basis of these nominations: perceived popular girls and perceived unpopular girls.

#### Procedures

The school was chosen and permission from the principals and superintendents was sought. Informed consent was sent home one week before the research took place. This allowed the parents ample time to ask questions and to send the questionnaire back to the school. One half of the girls received the questionnaires first while the other half received the peer nominations first. This mixing up of the questionnaires and peer nominations was counterbalanced to control for instrument reactivity.

#### Data Analysis

Assignment to groups. Using peer nomination girls were group assigned to popular or unpopular based on use of the mean score. The girls who were ranked as the most popular were put under the classification as popular. The girls who were ranked as the least popular were ranked under unpopular. Each group consisted of 14 girls and no girl was in both categories.

Dependent measure. Using the nominations for each student on the DIAS, the totals for each participant was found by totaling their nominations for each scale. In order to find the total for each group, the totals for each student were then added together. An Analysis of Variance (ANOVA) was used to see if popularity affects aggression and if being perceived as popular indicated the use of more indirect aggression.

#### Results

The ANOVA indicated that popularity affects aggression, F(26, 1) = 4.323, p>.05 as shown in Table 1. It was also found that popular girls exhibited more indirect aggression than unpopular girls, F(26, 1) = 4.642, p>.05) as shown in Table 2. The results in Table 3 show that perceived unpopular girls did not use more direct aggression than perceived popular girls. The means and standard deviations for all groups on each of the measures are shown in Table 4. The size of the effect was 0.378.

TOTAL	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12601.286	1	12601.286	4.323	.048
Within Groups	75795.429	26	2915.209		
Total	88396.714	27			

Total of Popularity and Effects on Aggression

igi

INDIRECT	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3984.143	1	3984.143	4.642	.041
Within Groups	22316.286	26	858.319		
Total	26300.429	27			

Popularity and Effects on Indirect Aggression

\*Critical Value of F @ the 0.05 significance level = 4.22

DIRECT	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	558.036	1	558.036	1.580	.220
Within Groups	9180.071	26	353.080		
Total	9738.107	27			
		27			

Popularity and Effects on Direct Aggression

\*Critical Value of F @ the 0.05 significance level = 4.22

Popularity		Ind. Aggression	Dir. Aggression	Total Aggression
Popular	Mean	47.2857	24.2857	92.4286
	n	14	14	14
	sd	38.11002	21.60281	65.49306
Unpopular	Mean	23.4286	15.3571	50.0000
	n	14	14	14
	sd	16.25619	15.47508	39.25655
Total	Mean	35.3571	19.8214	71.2143
	n	28	28	28
	sd	31.21041	18.99133	57.21846

Means and Standard Deviations for All Groups

#### Discussion

The results of this study show that popularity affects aggression and perceived popular eighth grade girls are more indirectly aggressive than perceive unpopular eighth grade girls. These results are similar to that of LaFontana and Cillessen (2002) who found that children associated relational aggression with being popular and perceived popularity correlated with relational aggression. While the study conducted by LaFontana and Cillessen examined relational aggression, it is important to note that relational aggression has been found to be almost identical to indirect aggression (Bjorkqvist, Lagerspetz, & Osterman, 1992).

Owens, Shute and Slee (2002) found in their interviews of fifteen and sixteen year females that being a part of the "right" or popular group were found to be important to them. Once popular, the girls noticed their status in the popular group declining rapidly. In order to keep their status in the group they began to use indirect aggression (i.e. talking behind other girls' backs).

These findings are important because students need to understand that indirect aggression can be considered bullying and that it can hurt just as much, if not more, than verbal or direct aggression. It has been found that the majority of the victims of indirect aggression have a higher rate of absenteeism, anxiety, and depression. Theses victims are have an increased instance of mental health problems including thoughts of suicide (Mullin-Ridler, 2003).

The results of this study also show that the problem of indirect aggression does exist and educators and parents need to be aware of the different types of aggression and that anyone can be aggressive. According to Mullin-Rindley (2003) most school districts nationwide have policies against physical aggression and there are thirteen states that have laws on bullying in school; however, there are few schools who have policies on verbal bullying or indirect

aggression, which are behaviors that are more common and menacing in the late elementary and middle school years. The more parents and educators know about indirect aggression, the more they can help the aggressors and their victims.

Future research on this topic may find it beneficial to use a larger sample size. A larger sample size make could open up the possibility of looking at the children who are perceived as neither popular nor unpopular. To date, this is a part of the population which has had very little research conducted.

#### References

Bandura, A. (1973). Aggression: A Social Learning Analysis. New Jersey: Prentice-Hall, Inc.

- Bjorkqvist, K., Lagerspetz, K.M.J., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*, 18, 117-127.
- Bjorkquist, K., Lagerspetz, K.M.J., & Osterman, K. (1992). Direct and Indirect Aggression Scales. On-Line: http://www.vasa.abo.fi/svf/up/dias.htm
- Bjorkqvist, K. & Niemela, P. (1992). New trends in the study of female aggression. In K.
  Bjorkqvist & P. Niemela (Eds.), *Of Mice and Women: Aspects of Female Aggression* (pp. 3-15). San Diego: Academic Press.
- Bjorkqvist, K., Osterman, K., & Kaukiainen, A. (1992). The development of direct and indirect aggressive strategies in males and females. In K. Bjorkqvist & P. Niemela (Eds.), *Of Mice and Women: Aspects of Female Aggression* (pp. 51-63). San Diego: Academic Press.
- Casey-Cannon, S., Hayward, C., & Gowen, K. (2001). Middle-school girls' reports of peer victimization: Concerns, consequences, and implications. *Professional School Counseling*, 5, 138-148.
- Cillessen, A. H. N., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child Development*, 75, 147-163.
- Crick, N. R. (1997). Engagement in gender normative versus nonnormative forms of aggression: Links to social-psychological adjustment. *Developmental Psychology*, 33, 610-617.

- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development*, 67, 2317-2327.
- Crick, N. R. & Bigbee, M. A. (1998). Relational and overt forms of peer victimization: A multiinformant approach. *Journal of Counseling and Clinical Psychology*, 66, 337-347.
- Crick, N. R., Bigbee, M. A., & Howes, C. (1996). Gender differences in children's normative beliefs about aggression: How do I hurt thee? Let me count the ways. *Child Development*, 67, 1003-1014.
- Crick, N. R., Casas, J. F., & Mosher, M. (1997). Relational and overt aggression in preschool. Developmental Psychology, 33, 579-588.
- Crick, N. R. & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66, 710-722.
- Green, L.R., Richardson, D.R., & Lago, T. (1996). How do friendship, indirect aggression, and direct aggression relate? *Aggressive Behavior*, *22*, 81-86.
- Grotpeter, J. K. & Crick, N. R. (1996). Relational aggression, overt aggression and friendship. *Child Development*, 67, 2328-2338.
- Grusec, J. (1992). Social learning theory and developmental psychology: The Legacies of Robert Sears and Albert Bandura. *Developmental Psychology*, 28, 776-786.
- Kaukiainen, A., Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Rothberg, &
  Ahlbom, A. (1999). The relationship between social intelligence, empathy, and three types of aggression. *Aggressive Behavior*, 25, 81-89.
- LaFontana, K. M. & Cillessen, A. H. N. (2002). Children's perceptions of popular and unpopular peers: A Multimethod assessment. *Developmental Psychology*, *38*, 635-647.

- Lagerspetz, K. M. J., Bjorkqvist, K., & Peltonen, T. (1988). Is indirect aggression typical of females? Gender differences in aggressiveness in 11 to 12 year old children. *Aggressive Behavior*, 14, 403-414.
- Lease, A. M., Kennedy, C. A., & Axelrod, J. L. (2002). Children's social constructions of popularity. *Social Development*, 11, 87-109.
- Mullin-Rindler, N. (2003). New fixes for relational aggression. Educational Digest, 69, 9-11.
- Owens, L., Shute, R., & Slee, P. (2000a). Guess what I just heard! Indirect aggression among teenage girls in Australia. *Aggressive Behavior*, *26*, 67-83.
- Owens, L., Shute, R., & Slee, P. (2000b). I'm in and you're out...Explanations for teenage girls' indirect aggression. *Psychology, Evolution and Gender, 2*, 19-46.
- Owens, L., Slee, P., & Shute, R. (2000). It hurts a hell of a lot...The effects of indirect aggression on teenage girls. *School Psychology International*, *21*, 359-376.
- Pellegrini, A. D. & Bartini, M.G., (2000). An empirical comparison of methods of sampling aggression and victimization in school settings. *Journal of Educational Psychology*, 92, 360-366.
- Pellegrini, A. D., Bartini, M.G., & Brook, F. (1999). School bullies, victims, and aggressive victims: Factors relating to group affiliation and victimization in early adolescence. *Journal of Educational Psychology*, 91, 216-224.
- Rose, A. J., Swenson, L. P. & Carlson, W. (2004). Friendships of aggressive youth: Considering the influences of being disliked and of being perceived as popular. *Journal of Experimental Child Psychology*, 88, 25-45.

- Rose, A. J., Swenson, L. P., & Waller, E. M. (2004). Overt and relational aggression and perceived popularity: Developmental differences in concurrent and prospective relations. *Developmental Psychology*, 40, 378-387.
- Salmivalli, C., Kaukiainen, A., & Lagerspetz, K. (2000). Aggression and sociometric status among peers: Do gender and type of aggression matter. *Scandinavian Journal of Psychology*, *41*, 17-24.
- Skowronski, M., Weaver, N.J., Wise, P. S., & Kelly, R. M. (2005). Helping girls combat relational aggression. *Communique*, *33*, 35-37.