

12-2011

How Culture Impacts Relational Aggression in Elementary School-Age Children

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HOW CULTURE IMPACTS RELATIONAL AGGRESSION IN ELEMENTARY
SCHOOL-AGE CHILDREN

A Specialist Project
Presented to
The Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Specialist in Education

By
Janice Marie Erlewine

December 2011

HOW CULTURE IMPACTS RELATIONAL AGGRESSION IN ELEMENTARY
SCHOOL-AGE CHILDREN

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ACKNOWLEDGEMENTS

I would like to thank Dr. William Pfohl for leading me and guiding me on this thesis project, Dr. Elizabeth Lemerise for her knowledge in the area of relational aggression and statistics, and Dr. Carl Myers for his knowledge in formatting and structure for a thesis project. Thank you all for your participation and taking time out of your busy schedules to be a part of my committee.

I would also like to thank all the teachers who participated in this project and all of the school psychologists who recruited the teachers for this project. Finally, I would like to thank Brittany Walker and Dr. William Pfohl for collecting the data needed for this study.

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HOW CULTURE IMPACTS RELATIONAL AGGRESSION IN ELEMENTARY SCHOOL-AGE CHILDREN

Janice Erlewine

December 2011

29 pages

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The purpose of this study was to analyze whether cultural differences existed in forms of aggression and prosocial behaviors among 8 to 10 year old students in Ireland (N=145) and Puerto Rico (N=56) and if the prevalence of these forms of aggression differed between genders. Classroom teachers using the Children's Social Behavior Scale – Teacher Form (Crick, 1996) rated all students in their classes on relational aggression, physical aggression, and prosocial behaviors. Three 2 (culture) by 2 (gender) analyses of variance were performed on each of the following dependent variables: relational aggression, physical aggression, and prosocial behavior.

Teachers reported greater prevalence of relational aggression in Puerto Rican students and greater prevalence of prosocial behavior among Irish students. No significant differences were reported between cultures in physical aggression. Teachers reported higher prevalence of physical aggression among males compared to females and higher prevalence of prosocial behavior among females when compared to males. No significant gender differences were found in relational aggression. An interaction effect was found in prosocial behavior with Irish females being higher in prosocial behavior than Puerto Rican females and Irish males. This research supports that cultural differences exist in relational aggression and prosocial behaviors among 8 to 10 year

olds. Gender differences in physical aggression and prosocial behaviors in this age sample were also supported. Future research, and the study's limitations were discussed.

CHAPTER ONE

Introduction

Aggression is often thought to primarily exist among males, with a very low occurrence in females; however, current research has found females to be just as aggressive as males, but they display aggression through a form of aggression called relational aggression (Bowie, 2007; Ostrov & Crick, 2007). It is important to understand aggression and its forms because aggression can have very harmful effects to its victims.

The most commonly recognized and most easily observed form of aggression is physical aggression. Physical aggression, most commonly found in males, is defined as intentionally trying to harm others in a physical way (Bowie, 2007). Physical aggression can include physical behaviors such as hitting, kicking, pushing, biting, pinching, or hair pulling (Bowie, 2007; Love Our Children USA, 2011).

Relational aggression can be just as damaging as physical aggression, but it is often not identified as a problem. Relational aggression, most commonly found in females, is a form of aggression that targets manipulating or damaging peer relationships (Crick, 1996).

Relational and physical aggression can be displayed as direct or indirect aggression. Most people can easily identify direct aggression, which occurs when the aggressive act occurs directly from the perpetrator of the aggression to the victim. Indirect aggression is aggression that does not directly confront the victim and may involve getting someone else to perform the aggressive act (Card, Stucky, Sawalani, & Little, 2008).

There are different reasons aggression occurs and aggression may function as proactive or reactive aggression. Proactive aggression is aggression that is deliberate and goal-oriented, whereas reactive aggression often recurs as retaliation or as a defensive response to a perception of provocation or frustration (Mathieson & Crick, 2010). Proactive aggression usually involves very low physical arousal or emotion, whereas reactive aggression usually involves a high level of physical arousal and emotion (Mathieson & Crick, 2010). Proactive and reactive aggression can be the function of either relational or physical aggression.

Most students report they have been a victim of relational aggression at some time during their educational experience. When questioned about relational aggression, the majority of male and female students and their parents reported that they or their child had experienced relational aggression (Waasdorp & Bradshaw, 2009). The Centers for Disease Control (2009) found 32 percent of high school students reported being in a physical fight; 20 percent of high school students reported being bullied on school property the previous year; and over 656,000 injuries from physical assault in youth between the ages of ten and twenty-four years old were treated in United States emergency rooms in 2008. Although these statistics show a significant problem with aggression both in the schools and at home, most parents consider relational aggression to be a typical form of peer interaction (Waasdorp & Bradshaw, 2009).

Due to the differences in societal beliefs and societal opinions about aggression, aggression often differs between cultures; however, a gender gap of females being more relationally aggressive and males being more physically aggressive is often identified across cultures (French, Jansen, & Pidada, 2002; Kikas, Peets, Tropp, & Hinn, 2009;

Kuppens, Grietens, Onghena, & Michiels, 2009). When examining students in the 9 to 10 year old age range, Walker (2010) found German students to be rated higher by teachers in relational and physical aggression than Hungarian students; Hungarian males to be more physically aggressive than Hungarian females; but no significant difference between genders in Hungary in relational aggression.

With a better knowledge of the cultural differences in relational and physical aggression, we can better understand cultures and how societal beliefs and opinions about aggression affect the prevalence of aggression between cultures. This study complements other studies on relational aggression; however, this study examines cultural differences in relational aggression in elementary students, which is an area with little research. In this study, teachers' ratings of students' relational and physical aggression and prosocial behaviors were examined to determine if a difference exists between Puerto Rican and Irish cultures. These data were also analyzed to determine whether the gender gap exists in these cultures.

CHAPTER TWO

Review of Literature

Types of Aggression

Aggression has multiple forms and can be either direct or indirect. Physical aggression, the most commonly recognized form of aggression, is described as intentionally trying to harm others in a physical way which would include such things as hitting, biting, or kicking (Bowie, 2007). This form of aggression is most commonly observed in males and often easy to observe by others (Bowie, 2007; Ostrov & Crick, 2007).

A second form of aggression is relational aggression, which is described as purposefully trying to harm another person through the manipulation of a social relationship (Bowie, 2007; Merrell, Buchanan, & Tran, 2006). This form of aggression, which is often overlooked, can include not accepting or including someone as a member of a group, malicious gossip, lies, secrets, ignoring someone, damaging relationships, or not being someone's friend (Merrell et al., 2007; Ostrov & Crick, 2007).

Although seen most prominently in females, relational aggression affects both males and females. When rating a list of physically and relationally aggressive acts as most harmful by friends, both females and males rated a friend telling his or her secrets and breaking up a friendship intentionally as harmful (Waasdorp & Bradshaw, 2009). Both acts rated as most harmful by the students would fall under the category of relational aggression.

Aggression can also be direct or indirect. Direct aggression occurs when the aggressor directly confronts the victim, whereas indirect aggression occurs when

someone manipulates others to cause pain without personally inflicting the harm themselves (Kuppens et al., 2009). Direct and indirect explains how the aggression is carried out; therefore relational and physical aggression can be either direct or indirect.

Proactive and reactive aggressions are terms used to describe the function of the aggression; therefore, both relational and physical aggression can be proactive or reactive. Proactive aggression describes aggression that is purposeful in order to reach a goal and has very little emotion or physical response (Mathieson & Crick, 2010).

Reactive aggression usually occurs with high emotion and physical response as a reaction to a frustration or a being provoked (Mathieson & Crick, 2010).

Factors that Influence Aggression

Aggression not only differs in form, but also in prevalence between genders. Due to physical aggression often being recognized as the most common form of aggression, males are perceived to be more aggressive than females (Condry & Ross, 1985). Males are usually considered to be more physically aggressive and females are considered to be more relationally aggressive (Bowie, 2007; Ostrov & Crick, 2007).

There are several reasons the difference between genders may exist. Females tend to value intimate relationships more than males, are more likely to emphasize close relationships, and show higher levels of exclusivity toward friends, resulting in females displaying relational aggression more often than males (Kawabata, Crick, & Hamaguchi, 2010; Kikas et al., 2009). Relational aggression is often accepted more in females because it is often considered to be a normal response to anger for females (Kuppens et al., 2009).

Society often creates expectations for males to be physically aggressive, resulting in physically aggressive acts being more accepted in males. Physical aggression is often accepted more in males because it is considered to be a normal response to anger for males (Kuppens et al., 2009). Adults often support aggression by encouraging males to be physically dominant and females to be relationally dominant (Kuppens et al., 2009). Societal expectations pose different views about relational aggression and often relational aggression is considered to be a normal part of interaction with little thought of it being a problem.

Parenting can also be a factor in aggression, specifically relational aggression. Harsh parenting shows a positive relationship with physical aggression in children, whereas higher levels of responsive parenting and stimulating parenting promote lower levels of physical aggression (Brotman et al., 2009). Mothers who show excessive personal control and manipulation tend to have children who are high in relational aggression (Kuppens et al., 2009). Children who feel like they have to work for their parents' love tend to manipulate their friendships to make their friends work to earn their friendship. Children often learn how to treat others based on their relationships with their parents. Parents who are excessively controlling of their children often have children who manipulate other children to reach a specific goal. In summary, if a parent is physically or relationally aggressive towards others or their child, then the child learns to imitate the behavior (Kuppens et al., 2009).

Cognition is also a factor in aggression in children. Children who have a higher level of verbal reasoning are less likely to display physical aggression because they can use words to express how they feel; however, these higher verbal reasoning skills often

provide these children with the ability to form the comments and statements which occur with relational aggression (Kikas et al., 2009). Physical aggression is thought to decrease by age because as verbal reasoning increases, children are less likely to have to express themselves through physical aggression because they can express themselves by using their words (Kikas et al., 2009). This reasoning is why toddlers and children with language deficits are more likely to be physically aggressive.

Many different factors influence aggression and its prevalence such as gender expectations, parenting styles, or cognitive level. It is important to recognize these factors when looking at aggression in order to help prevent aggression from occurring.

How Aggression Differs by Culture

Values and societal expectations for each gender differ across cultures. When compared to Finnish adolescents, Estonian adolescents were found to be more aggressive in general, show lower levels of social responsibility, and have more positive attitudes about violence and punishment (Kikas et al., 2009). Adolescents in the United States were found to have more positive attitudes about violence and punishment than adolescents in European cultures (Kikas et al., 2009). Walker (2010) found 9 to 10 year old German students were rated by their teachers as higher in both relational and physical aggression than were Hungarian students of the same age, whereas Hungarian students were rated by their teachers as higher in prosocial behavior than were German students. When examining gender differences in the Hungarian culture, Walker (2010) found boys to be rated higher in physical aggression, girls to be rated higher in prosocial behaviors, and no significant differences between genders in relational aggression. No gender information was provided for German students. Indonesia is thought to have harmonious

social interaction and a conflict avoidance attitude when it comes to societal beliefs about aggression; however, when Indonesian males were compared to males from the United States, the Indonesian males rated their peers as more physically aggressive (French et al., 2002). The researchers hypothesized this difference may be due to Indonesian males rating physical aggression in peers more harsh than did American males due to physical aggression not being a normative behavior in their culture.

Although there are differences between cultural values, the gender gap with males being considered more physically aggressive and females being considered more relationally aggressive is still found to exist. Kikas et al. (2009) found Estonian males to be more physically and verbally aggressive than females, with significantly higher scores in physical aggression. Flemish, Indonesian, and American females were all found to be significantly higher in relational aggression than males (French et al., 2002; Kuppens et al., 2009). Walker (2010) found Hungarian males to be more physically aggressive than same age Hungarian females; however, there was no significant difference found between genders in relational aggression. Although culture and values differ, the gender gap in the forms of aggression is often found.

Effects of Relational Aggression

Although relational aggression is often unnoticed while it occurs, it can be just as harmful as physical aggression. Parents often view relational aggression as a normal part of growing up instead of recognizing the harmful effects it may cause (Waasdorp & Bradshaw, 2009). Relational aggression and physical aggression are not always separate from each other, with physical aggression often serving as a form of retaliation to relational aggression (Leff et al., 2010; Waasdorp & Bradshaw, 2009). Leff et al. (2010)

reported relational aggression to not only impact individuals and their relationships, but also to result in a poorer school climate with students feeling less safe in schools where there is a high level of relational aggression.

Relational aggression is fairly stable over time (Adams, Bukowski, & Bagwell, 2005). This is important because it does not only impact the victim of the aggression, but it may also impact the instigator. Maladjustment has been found to be an effect of relational aggression for both perpetrators of aggression and their victims (Card et al., 2008). Children often do not want to be friends with someone who has been aggressive towards them, whether physically or relationally, so the stability of relational aggression may result in the aggressor having few friends.

Assessing Relational Aggression

There are many methods that can be effectively used to assess relational aggression in school-age children. Methods that are used frequently to rate relational aggression include teacher reports, self reports, and peer reports. Although there are other ways to assess relational aggression, due to the purpose and nature of this research, only a few of the methods are discussed.

Peer reports and self reports. Peer reports ask students to rate their peers on different statements about aggression. The students are given statements about aggression and told to select the top three or four students who are best described by the statement. Self-reports, a method in which students rate themselves on different areas of aggression, are a common method used in assessing relational aggression among elementary school age students (Crick, 1996; Kawabata et al., 2010).

Teacher reports. Teacher reports are commonly used as a way to assess students' relational aggression in the classroom. To assess teacher ratings of students' relational aggression, Crick created the Children's Social Behavior Scale – Teacher Form (CSBS-T) by adapting a peer measurement from a previous study (Crick & Grotpeter, 1995). The CSBS-T was developed to measure relational aggression, overt physical aggression, prosocial behavior, and acceptance by peers. In the areas of both relational and overt physical aggression, the CSBS-T yielded a Cronbach's alpha of .94 and a Cronbach's alpha of .93 on the prosocial behavior scale. These results suggest scale reliability in measuring relational and overt physical aggression. When examining the correlation between the teacher and peer scales on the relational aggression scale, Crick's research found correlations that yielded $r = .57, p < .001$ for males and $r = .63, p < .001$ for females for relational aggression. When examining the relationship between teacher and peer reports on the subscale of overt aggression, correlations yielded $r = .69, p < .001$ for males and $r = .74, p < .001$ for females (Crick, 1996). Crick (1996) stated:

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

Due to the support that data from teacher and peer reports of relational aggression are comparable, Crick concluded that teacher assessments of relational aggression may serve as a valid and reliable substitute for peer assessments.

Purpose

Very little research has addressed the difference in forms of aggression between cultures, specifically among elementary age students (ages 8 to 10 years old). The majority of research conducted on relational aggression focuses on the gender differences, the causes, and the effects of relational aggression, and pays very little attention to how relational aggression differs between cultures. Few studies were identified which looked at cultural differences of relational aggression among elementary school children. It is important to study and understand how relational aggression differs between cultures in order to identify how beliefs and opinions about aggression affect the prevalence of aggression. The purpose of this research is to determine whether cultural differences exist in relational aggression between students from Puerto Rico and Ireland as reported by their teachers.

Teacher reports were used in this study to assess the prevalence of relational aggression in students from Puerto Rico and Ireland. Previous research in this area using the CSBS-T (Crick, 1996) has been conducted by Janoski (2005) and Walker (2010). Janoski (2005) used the CSBS-T combined with the Preschool Social Behavior Scale – Teacher Form (PSBS-T, Crick, Casas, & Mosher, 1997) to assess relational aggression in a sample of students in kindergarten through second grade in the United States. The results from the study found a higher incidence of overt physical aggression among males and higher incidence of relational aggression among females. She also found that age

was not a factor in relational aggression in the kindergarten through second grade sample. Walker (2010) conducted research assessing cultural differences in relational aggression among 269 nine and ten year old Hungarian and German students and concluded cultural differences existed in relational and physical aggression. When examining the gender gap within the Hungarian sample, she also found males to be more physically aggressive than females, but no significant gender difference was found in relational aggression. No gender information was reported in the German sample.

Research Questions

The purpose of this study was to examine the prevalence of physical and relational aggression and prosocial behaviors displayed by 8 to 10 year old students in Ireland and Puerto Rico. Due to very little research in this area, this research is exploratory in nature. It included the following research questions. Are there differences in the prevalence of relational aggression, physical aggression, and prosocial behavior in Puerto Rico and Ireland? Are boys more physically aggressive than girls and are girls more relationally aggressive than boys in Puerto Rico and Ireland? Do culture and gender interact in the prevalence of relational aggression, physical aggression, and prosocial behavior?

CHAPTER THREE

Method

Participants

Participants in this study included approximately seventeen teachers of 145 eight to ten year old students (54 males, 91 females) from Ireland and approximately three teachers of 56 eight to ten year old students (29 males, 27 females) from Puerto Rico. The students were rated by their classroom teachers on the Children's Social Behavior Scale- Teacher Form (CSBS-T, Crick, 1996). The Irish sample included approximately twelve schools and the Puerto Rico sample included students from approximately three schools. The number of CSBS-T's completed by each Puerto Rican teacher ranged from 13 to 30 forms, with an average of 19 forms per teacher. The number of CSBS-T's completed by each Irish teacher ranged from 5-18 forms, with an average of 9 forms per teacher. Informed consent was collected from the teachers before participation began. No information was collected about teacher age, gender, or experience. No parental consent was collected due to the fact that no personally identifying information being collected for the students (only age, sex, and cultural information were collected for the students). Permission from principals at each school was obtained before information was collected from teachers. Approval from the Western Kentucky University Institutional Review Board was received before any research was conducted (HS12-002).

Measures

The Children's Social Behavior Scale- Teacher Form (CSBS-T, Crick, 1996) was used to measure physical aggression, relational aggression, and prosocial behavior. This

measure was designed to be used with children in the third through sixth grades. The CSBS-T is comprised of sixteen items divided into three scales (see Appendix). The overt aggression scale includes four items that assess physical and verbal aggression, the relational aggression scale includes five questions that assess harming or negatively manipulating peer relationships, and the prosocial scale includes four items about such things as helping others (Crick, 1996). Crick (1996) found this assessment instrument to have a Cronbach alpha of .83 for relational aggression, .94 for overt physical aggression, and .90 for prosocial behavior (Crick, 1996). The current study found this assessment instrument to have a Cronbach alpha of .93 for relational aggression, .94 for physical aggression, and .89 for prosocial behavior.

The first three items of the CSBS-T for this study assessed demographic information including age, sex, and culture of the child. The remaining thirteen items required the participant to rate statements about a child on a 5-point Likert scale where “1” means this is never true of this child and “5” means this is almost always true of the child. No descriptors were provided for ratings “2”, “3”, or “4”. All measures were rated by the teachers in English.

Procedure

School psychologists who are members of the International School Psychology Association were asked to participate and locate teachers who could complete the scale. The Children’s Social Behavior Scale – Teacher form (Crick, 1996) was then distributed to school psychologists who obtained permission from the school principals and then distributed the scales to the participating teachers. In order for teachers to have familiarity with the students and to give the children time to display typical behaviors, the

data were collected during the second half of the school year. Each teacher completed the measure for each student in his or her classroom. Ten to fourteen days were given for the teachers to complete the rating scale for every student in their classroom.

Data Analysis

Three research questions were used in order to analyze the data. Research question I asks if differences in the prevalence of relational aggression, physical aggression, and prosocial behavior exist in the ratings of students from Puerto Rico and Ireland. Research question II asks if boys are more physically aggressive than girls and are girls more relationally aggressive than boys in Puerto Rico and Ireland. Research question III asks if culture and gender interact in the prevalence of relational aggression, physical aggression, and prosocial behavior.

CHAPTER FOUR

Results and Discussion

Results

Three 2 (culture) by 2 (gender) analyses of variance (ANOVAs) were performed on each of the following dependent variables: relational aggression, physical aggression, and prosocial behavior. The results of these analyses are reported below, organized by dependent variable.

Relational Aggression

Relational aggression scores were subjected to a 2 (culture: Ireland, Puerto Rico) by 2 (gender) analysis of variance. All effects were considered statistically significant at the .05 significance level. In relational aggression, a main effect of culture was found, $F(1,197) = 8.90, p < .01$, with Puerto Rican students rated as more relationally aggressive than Irish students (see Table 1). Gender scores in relational aggression did not yield a main effect, $F(1,197) = 2.02, p > .05$, and no significant interaction was found, $F(1,197) = 2.09, p > .05$.

Physical Aggression

Physical aggression scores were subjected to a 2 (culture: Ireland, Puerto Rico) by 2 (gender) analysis of variance. All effects were considered statistically significant at the .05 significance level. In physical aggression, a main effect of gender was found, $F(1,197) = 62.09, p < .01$, with males rated as more physically aggressive than females (see Table 2). Cultural scores in physical aggression did not yield a main effect, $F(1,197) = 2.65, p > .05$, and no significant interaction was found, $F(1,197) = 3.40, p > .05$.

Prosocial Behavior

Prosocial behavior scores were subjected to a 2 (culture: Ireland, Puerto Rico) by 2 (gender) analysis of variance. All effects were considered statistically significant at the .05 significance level. In prosocial behavior, a main effect of culture, $F(1,197) = 31.72$, $p < .01$, was found with Irish students being rated as displaying more prosocial behaviors than Puerto Rican students (see Table 1). A main effect of prosocial behavior was also found in gender, $F(1,197) = 7.67$, $p < .01$, with females rated as displaying more prosocial behaviors than males (see Table 2). Although these are important findings, the main focus is on the significant interaction found in prosocial behavior, $F(1,197) = 4.57$, $p < .05$. Post-hoc results revealed a significant differences between Puerto Rican females and Irish females, $p < .01$, with Irish females displaying more prosocial behaviors than Puerto Rican females; a significant difference between Irish males and females, $p < .05$, was also found with Irish females displaying more prosocial behaviors than Irish males (see Table 5).

Table 1

Group Means for Puerto Rican and Irish Students

Relational Aggression		Physical Aggression		Prosocial Behavior	
Puerto Rican ^a	Irish ^b	Puerto Rican ^a	Irish ^b	Puerto Rican ^a	Irish ^b
$M = 2.63$	$M = 2.13$	$M = 2.00$	$M = 1.64$	$M = 3.08$	$M = 3.93$
$SD = 1.00$	$SD = 1.07$	$SD = 1.11$	$SD = 0.94$	$SD = 0.79$	$SD = 0.93$
$SE^c = 0.13$	$SE^c = 0.09$	$SE^c = 0.15$	$SE^c = 0.08$	$SE^c = 0.11$	$SE^c = 0.08$

^a $n = 145$. ^b $n = 56$. ^cStandard Error of Mean.

Table 2**Group Means for Males and Females**

	Relational Aggression		Physical Aggression		Prosocial Behavior	
	Male ^a	Female ^b	Male ^a	Female ^b	Male ^a	Female ^b
<i>Means</i>	2.38	2.19	2.33	1.33	3.34	3.93
<i>SD</i>	1.06	1.07	1.13	0.63	0.94	0.92
<i>SE^c</i>	0.12	0.10	0.12	0.06	0.10	0.08

^a*n* = 83. ^b*n* = 118. ^cStandard Error of Mean.

Table 3**Group Means for Relational Aggression in Puerto Rican and Irish Males and Females**

Puerto Rican		Irish	
Males ^a	Females ^b	Males ^c	Females ^d
<i>M</i> = 2.86	<i>M</i> = 2.39	<i>M</i> = 2.13	<i>M</i> = 2.13
<i>SD</i> = 0.99	<i>SD</i> = 0.97	<i>SD</i> = 1.02	<i>SD</i> = 1.10
<i>SE^c</i> = 0.18	<i>SE^c</i> = 0.19	<i>SE^c</i> = 0.14	<i>SE^c</i> = 0.12

^a*n* = 29. ^b*n* = 27. ^c*n* = 54. ^d*n* = 91. ^eStandard Error of Mean.

Table 4**Group Means for Physical Aggression in Puerto Rican and Irish Males and Females**

Puerto Rican		Irish	
Males ^a	Females ^b	Males ^c	Females ^d
$M = 2.64$	$M = 1.31$	$M = 2.16$	$M = 1.34$
$SD = 1.07$	$SD = 0.66$	$SD = 1.13$	$SD = 0.62$
$SE^e = 0.20$	$SE^e = 0.13$	$SE^e = 0.15$	$SE^e = 0.07$

^a $n = 29$. ^b $n = 27$. ^c $n = 54$. ^d $n = 91$. ^eStandard Error of Mean.

Table 5**Group Means for Prosocial Behavior in Puerto Rican and Irish Males and Females**

Puerto Rican		Irish	
Males ^a	Females ^b	Males ^c	Females ^d
$M = 3.03$	$M = 3.12$	$M = 3.51$	$M = 4.18$
$SD = 0.72$	$SD = 0.86$	$SD = 1.01$	$SD = 0.79$
$SE^e = 0.13$	$SE^e = 0.17$	$SE^e = 0.14$	$SE^e = 0.08$

^a $n = 29$. ^b $n = 27$. ^c $n = 54$. ^d $n = 91$. ^eStandard Error of Mean.

Discussion

According to teacher reports, Puerto Rican students were rated significantly higher in relational aggression than Irish students ages 8 to 10 years old; however there was no cultural significant difference for the ratings of physical aggression. Irish students were rated as having more prosocial behaviors than Puerto Rican students in this age group. This study suggests that cultural differences exist in relational aggression and prosocial behavior, but not in physical aggression. These results support the research question of whether cultural differences would exist in relational aggression and prosocial behaviors, but not in physical aggression. These findings are consistent with Walker's (2010) findings of cultural differences in relational aggression and prosocial behaviors, but inconsistent with Walker's findings of cultural differences in physical aggression. It is important to note that these data only represent 8 to 10 year old students; therefore, the current results may not generalize to other age groups in these cultures.

According to teacher reports, Puerto Rican and Irish males were rated significantly higher in physical aggression than Puerto Rican and Irish females ages 8 to 10 years old. Teachers' reports also rated females to be significantly higher in prosocial behaviors than males. These results answer the research question that gender differences do exist in physical aggression and prosocial behavior. These findings are consistent with the results found by Walker (2010) where gender differences existed among 9 to 10 year old Hungarian students, with the males being more physically aggressive and the females displaying more prosocial behaviors. The current study found no significant differences in gender in the area of relational aggression answering the research question

that gender differences are not found in relational aggression. Current results are also consistent with Walker (2010) who also did not find significant differences in gender when examining relational aggression in Hungarian students. The current study is consistent with other research which has found males to be more physically aggressive, but inconsistent with the research that has found females to be more relationally aggressive (Bowie, 2007; Janoski, 2005; Ostrov & Crick, 2007). The differences in the findings on relational aggression and gender between the current study and other studies may be due to the differences in the cultures used for the studies. It is also important to note that although Puerto Rico is a United States territory, it is not part of the continental United States and has its own unique culture separate from United States culture.

Due to the limited amount of research in cultural differences in the styles of aggression, it is important to note that this was the first study of cultural differences using an Irish and Puerto Rican sample to look at cultural differences in relational aggression in 8 to 10 year old students. This research, as well as research by Walker (2010), only analyzed students from Europe and a United States territory. Future research ideas would be to examine a wider variety of cultures including students from the continental United States and Europe, as well as students from other cultures that are not in Europe (such as Asian or South American cultures). Additional research ideas could examine how the cultures' view set gender roles and how community values impact the differences in the forms of aggression.

When examining the results of this study it is important to consider the sample used in this study. Due to the small sample sizes, these samples may not fully represent the Irish and Puerto Rican cultures as a whole and therefore caution should be used when

generalizing these data to the entire culture. Furthermore, the samples were not randomly selected, but instead chosen on a basis of known contacts, and more contacts were willing to participate from Ireland than Puerto Rico. Although the samples were collected from two cultures, many cultures with different values were not selected for this study; therefore the results would be difficult to generalize to other cultures. From a Western perspective, it is easy to assume that the forms of aggression displayed are the same around the world, but to better understand other countries' values and cultures, it is important to understand the prevalence and role of aggression in other cultures. With a better understanding of aggression and prosocial behaviors in other countries, it is easier to understand how a culture has an impact on these behaviors.

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Appendix

Children's Social Behavior Scale (Crick, 1996)

Children's Social Behavior Scale – Teacher Report (Ireland)

1. Age: 1 = 7 years 2 = 8 years 3 = 9 years 4 = 10+ years
2. Sex: 1 = Female 2 = Male
3. Culture: 1 = Native Irish 2 = Not Native Irish (Please indicate country of origin on rating form)
4. This child says supportive things to peers.
5. When this child is mad at a peer, s/he gets even by excluding the peer from his or her clique or play group.
6. This child hits or kicks peers.
7. This child tries to cheer up peers when they are upset or sad about something.
8. This child spreads rumors or gossips about some peers.
9. This child initiates or gets into physical fights with peers.
10. When angry at a peer, this child tries to get other children to stop playing with the peer or to stop liking the peer.
11. This child is helpful to peers.
12. 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.
13. This child threatens to hit or beat up other children.
14. When mad at a peer, this child ignores the peer or stops talking to the peer.
15. This child pushes or shoves peers.
16. This child is kind to peers.

Children's Social Behavior Scale – Teacher Report (Puerto Rico)

1. Age: 1 = 7 years 2 = 8 years 3 = 9 years 4 = 10+ years
2. Sex: 1 = Female 2 = Male
3. Culture: 1 = Native Puerto Rican 2 = Not Native Puerto Rican (Please indicate country of origin on rating form)
4. This child says supportive things to peers.
5. When this child is mad at a peer, s/he gets even by excluding the peer from his or her clique or play group.
6. This child hits or kicks peers.
7. This child tries to cheer up peers when they are upset or sad about something.
8. This child spreads rumors or gossips about some peers.
9. This child initiates or gets into physical fights with peers.
10. When angry at a peer, this child tries to get other children to stop playing with the peer or to stop liking the peer.
11. This child is helpful to peers.
12. 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.
13. This child threatens to hit or beat up other children.
14. When mad at a peer, this child ignores the peer or stops talking to the peer.
15. This child pushes or shoves peers.
16. This child is kind to peers.

Children's Social Behavior Scale – Answer Sheet

Circle Appropriate Answer

Demographic Information

1. 1 2 3 4
2. 1 2
3. 1 2 _____

- | | Never
True | | | | Almost Always
True |
|-----|---------------|---|---|---|-----------------------|
| 4. | 1 | 2 | 3 | 4 | 5 |
| 5. | 1 | 2 | 3 | 4 | 5 |
| 6. | 1 | 2 | 3 | 4 | 5 |
| 7. | 1 | 2 | 3 | 4 | 5 |
| 8. | 1 | 2 | 3 | 4 | 5 |
| 9. | 1 | 2 | 3 | 4 | 5 |
| 10. | 1 | 2 | 3 | 4 | 5 |
| 11. | 1 | 2 | 3 | 4 | 5 |
| 12. | 1 | 2 | 3 | 4 | 5 |
| 13. | 1 | 2 | 3 | 4 | 5 |
| 14. | 1 | 2 | 3 | 4 | 5 |
| 15. | 1 | 2 | 3 | 4 | 5 |
| 16. | 1 | 2 | 3 | 4 | 5 |

