
Relational Aggression in Relation to Friendship Quality in Female Dyads

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Abstract

Understanding relational aggression within adolescent relationships can provide information about reasons why teens engage in antisocial or prosocial behavior, and may lead to better solutions for controlling deviant acts. Likewise, knowledge of relational aggression within friendships can assist therapists, teachers, and parents in developing tools to help teens stop relational aggression. This study seeks to understand how high levels of mutuality contribute to relational aggression in a friendship and to perceptions of the quality of that friendship. Those same high levels of relational aggression and closeness, however, can lead either to prosocial or deviant behavior in adolescent friendships. Data for the study consist of videotaped interactions of 138 female participants, aged 16 to 17, engaged in the Peer Interaction Task. Project Alliance, a psychological organization from a University of Oregon affiliate, the Child and Family Center, collected and controls the data, which is part of a larger study.

Relationships among children, and both the reputation and status of children in peer groups, are important for social and emotional development (Zimmer-Gembeck, Geiger, & Crick, 2005). Children thrive on the relationships that they develop throughout childhood and adolescence, and through those relationships they often develop key traits and abilities that they carry with them throughout their formative years. Past studies have shown that the friendships young children attain in their first years in school (i.e. preschool, kindergarten), often contribute to their language abilities (Bonica, Arnold, Fisher, and Zeljo, 2003), self-representations (Moretti, Holland, and McKay, 2001), and also to their emotional development. Professionals in the psychological field believe that friendships greatly impact decision-making processes and behaviors in children, preadolescents, and adolescents. Moreover, behavior changes and consistencies of a child or adolescent have been directly linked to the behavior exhibited within a peer group or dyadic relationship. Such behavior is highly influential to an individual as it often explains the rules of normative, prosocial, and deviant behavior within peer groups and dyadic relationships (Brendgen, Vitaro, and Bukowski, 2000).

Understanding behavior of children and adolescents is crucial in understanding all forms of emotional responses that often hinder performances in school, within families, and in the broader society. One such behavior that has been particularly caustic in most social situations is aggression, especially overt aggression, which consists of behaviors such as hitting, kicking, physical, or verbal threatening intended to harm another through physical damage or the threat of such damage (Grotperter and Crick, 1996). In contrast, relational aggression includes behaviors such as spreading rumors to damage

status, or giving someone the silent treatment, all of which harm others by manipulating their relationships (Grotmeter and Crick, 1996). Although both forms of aggression are often present at schools and within many child and adolescent relationships, a general distinction exists between the two forms. Primarily, males use overt aggression whereas females use relational aggression. Many studies have found that males do use some forms of relational aggression and that females use overt aggression, but the results of those studies show that girls engage in relational aggression largely because it focuses on emotions and language—key components of female behavior (Bonica, Arnold, Fisher, et al., 2003).

Until recently, girls have been perceived as less prone to aggression than boys. Consequently, research in developmental psychopathology and delinquency has focused almost exclusively on identifying the precursors and consequences of aggressive behavior in boys alone (Moretti, Holland, and McKay, 2001). It is now apparent, however, that females are engaging in aggressive behaviors and are using these behaviors to control and dominate relationships and friendships. Crick and Grotmeter found significantly high rates of relational aggression among preadolescent girls that continued throughout high school and college (1996). Similarly, Bonica, Arnold, Fisher, and Zeljo discovered evidence of relational aggression beginning in preschool with children ages 3 to 5 and increasing throughout grade school (2003).

Because friendship and peer relationships are so significant to a child's development, it is natural to assume that friends could influence one another using relational aggression. Because of its intimate nature, relational aggression provides its users with the tools to control many aspects of others' lives. In doing so, the one using

relational aggression is able to maintain many relationships with multiple people and often do not suffer from a lack of friendships. Thus, intimate exchanges with friends may be especially predictive of relational aggression, especially with girls because of the high emotionality expressed within female friendships (Murray-Close, Ostrov, and Crick, 2007).

Although apparent in group settings, relational aggression is also present within dyadic relationships. Recent research has stressed the importance of assessing the qualities of children's friendships (Grotperter and Crick, 1996), because the quality of a friendship can expose hidden aggression, fear, anger, or other emotions. With the intimate nature of female relationships, females may experience more maladjustment issues within a friendship, such as a lack of self-acceptance, poor self-esteem, anger, or depression. Moreover, friends often can influence the behaviors or feelings of each other. If one friend has been experiencing bouts of anger or depression, it is quite possible that those feelings could hinder or enhance feelings within a friendship and ultimately determine whether the other friend will have similar emotional issues. Thus, close friends in a dyadic relationship can influence one another to act within normative, antisocial, or prosocial behavior.

Considerable evidence suggests that adolescent problem behavior is embedded within friendship networks. Aggression, delinquency, substance use, and early sexual intercourse are some of the behaviors witnessed in these networks (Poulin, Dishion, and Haas, 1999). Thus, understanding friendship quality among dyads is imperative for understanding early problem behavior, including deviancy and relational aggression. Friendship quality regarded as high within dyads can contribute to similarities in behaviors

that range from normative to antisocial. Repeatedly, girls have reported higher levels of positive friendship quality in their same-sex friendships than boys, and females often show more disclosure and agreement in friendships than boys (Brendgen, Markiewicz, Doyle, & Bukowski, 2001). Among youth who have been identified as at risk for delinquent behavior, peers can strongly support the development of each others' deviance in part by training one another in deviant behavior patterns (Allen, Porter and McFarland, 2006).

Hypotheses

Friendship quality rests on such things as whether two people like each other's company, share similar interests, or have other relative similarities. Given that view, the central research hypothesis suggests that if relational aggression is present in the friendship, then the quality of the friendship between the target child and the peer would be negatively affected. By extension, if antisocial females in dyadic relationships have higher levels of relational aggression and if friendships with high levels of relational aggression affect the quality of a dyadic relationship, then relational aggression between female friends should be correlated positively with friendship quality. Similarly, friendships with high levels of relational aggression will not have strong friendship quality, and at least one of the peers will exhibit relational aggression. Therefore, the target child will have higher levels of relational aggression than the peer. Further, if the target child shows signs of relational aggression, then the peer will also exhibit similar characteristics of relational aggression, such as depression, anger, and poor social networks.

Methodology

Participants

The study investigated relational aggression in interactions among adolescents using questionnaires completed by assessors, coders, and the adolescents themselves. It is part of the larger Project Alliance study, a multiwave, longitudinal intervention study of 999 adolescents and their families in a large Pacific Northwest city. Project Alliance intended to assist adolescents in the prevention of problem behaviors by supporting middle-school families within selected neighborhoods. Project Alliance 1 is a follow-up study of 999 young adults and their families who participated in family-centered services in the Portland, Oregon, school district middle schools from 1996 through 1998. Only a portion of the data from Project Alliance 1 is used to explore relational aggression.

From the full sample, 138 female participants were selected from Wave 6 (ages 16-17) based on their self-reported antisocial behavior. A secondary analysis explores the subjects' observational and recorded data. The adolescents involved in Project Alliance were identified as either high risk, no risk, or at-risk based on the questionnaires completed by their sixth-grade teachers. The sub-sample consists of fifty seven no risk, forty eight at-risk, and thirty three high-risk adolescents. The reported ethnicities of the selected group were: 42.2% European Americans, 31.9% African American, 2.2% Native American, 5.8% Hispanic Latinos, 3.1% Asian Americans, 1.1% Pacific Islanders, 2.8% other specific ethnicities, 3.1% European/African Americans, and 7.8% other ethnic combinations.

All participants were surveyed annually with a variety of instruments that assessed problem behaviors, socioeconomic

adjustment, and social functioning. Questionnaires regarding problem behavior at home and in school were given to the participant and her teacher. The answers from the both the participant and the teacher helped determine the participant's problem behavior as well as her social functioning, or whether she can function normally with other people. Responses from parents about how much money the family accrued each year by working or by receiving extra financial help through federal agencies or from alternate means determined the socioeconomic status of the child. Participants also completed videotaped observations that took place at a research institute and for which subjects were paid.

Procedure

The dyadic interactions between the two adolescents, or the target child and the peer, were captured with videotaped observations in what is referred to as the Peer Interaction Task. The taped interactions took place at the Child and Family Center of Portland and consisted of seven trials (TC Problem, Peer Problem, Substance Use, Goals, Relationships, Friends, and Planning a Party). Each adolescent participant completed a questionnaire prior to beginning the Peer Interaction Task. The adolescents were given the Peer Relations Questionnaire (PRREL), which has items describing the friend and the overall friendship. The Friendship Quality questions were measured using a Likert scale, with a score of "1" corresponding with an answer of "never" and a score of "5" corresponding with "very often."

An assessor gave instructions for each of the seven tasks to each dyad in the study. During each the assessor left the room so that the participants could discuss the task privately and without interruption. The assessors who instructed the dyads during the

Peer Interaction Task completed several questionnaires and surveys on the behavior and interactions among the adolescents. The Peer Impressions (PIMP) was given to each assessor after the Peer Interaction Task. The assessor then recorded impressions about the target child, the peer, and the two adolescents as friends, meaning how the both the target child and the peer interacted together. The questions corresponding to friendship quality from the PIMP were measured using a Likert scale, with a score of "1" corresponding with an answer of "very true" and a score of "5" corresponding with "not at all true."

Observers, or coders, using the Topic Code, coded the videotaped dyadic interactions between the adolescents in each task. All codes were scored based on verbal and physical content. After coding all seven tasks, the observers were asked to complete a questionnaire regarding their impressions of the adolescents individually and as dyads. The Peer Interaction Task Coder Impressions (COIMP) was given to each person who viewed and coded the dyad. The relational aggression questions from the COIMP were measured using a Likert scale, with a score of "1" corresponding with an answer of "not at all" and a score of "5" corresponding with "very much."

Results

Four variables and related hypotheses formed the core of the research: the reported friendship quality between the peer and target child, positive qualities in both the peer and target child, assessor scores on relational aggression in both the target child and the peer, and coder impressions of relational aggression in the dyad. Paired samples t-tests were used to examine the relationship between the scores of the target child and the peer.

Results 1: Friendship Quality between the Friends.

The first hypothesis rested on the assumption that the target child and the peer would rate her friendship quality differently. Comparing the target child's (TC) reported friendship quality score on the PRREL to the peer's (P) reported score offered a way to test that assumption. A paired-samples t-test (Table 3) revealed that the friendship quality score rated by the TC was not significantly different from that reported by the P, $t(131) = -.793, p = .429$. The mean friendship quality score of the target child rating of the friendship quality ($M = 4.13$) (see Table 1) was lower, though not significantly, than the mean score of the peer rating of the friendship quality ($M = 4.16$).

Results 2: Positive Qualities Between the Friends.

The second hypothesis extended the first and focused more on the assumption that the target child and the peer would rate the positive qualities of the friendship differently. The test for this second hypothesis compared the positive friendship qualities score of the TC to that of the P from the PRREL. A paired-samples t-test (Table 3) revealed no significant differences in the reported positive qualities from the target child and the peer, $t(131) = -.303, p = .762$. The mean positive quality score of the TC's rating of the peer ($M = 4.41$) (see Table 1) was lower, though not significantly, than the mean score of the P's rating of the TC ($M = 4.43$).

Results 3: Coder Impressions of Relational Aggression in Dyadic Relationship.

People other than the friends were involved in this research. The third hypothesis assumed that the coder would score the target child and the peer differently. That idea was tested using coders'

scores from Task 6 on the COIMP. A paired samples t-test (Table 3) revealed a marginally significant difference between the coder's evaluation of relational aggression in TCs ($M = 1.2304$) (Table 1) and the levels of relational aggression assigned to Ps ($M = 1.2841$), $t(137) = -1.706$, $p = .090$.

Results 4: Assessor Impressions of Dyad's Friendship.

Finally, the assessors may have rated the TC and P differently. The test for this hypothesis compared assessor impression scores for the TC and P from the PIMP. The results revealed no significant difference in levels of relational aggression between the TC ($M = 4.4414$) and P ($M = 4.4537$), as assessed by the project assessor, $t(107) = -.306$, $p = .760$ (Tables 1 and 3).

Discussion

To explore dyadic relationships and determine whether friendship quality is directly related to relational aggression in adolescent female behavior, we focused on scores and score differences from several different measurement tools. We analyzed differences in scores between members of each dyad, and differences in scores from assessors and coders who completed separate questionnaires. All those efforts were part of the attempt to understand the dyadic relationships among adolescent females and better recognize the interpersonal dynamics that may lead to relational aggression. While no significant effects were found between the dyad and assessor scores, marginally significant effects were found with the coder impressions scores. The analysis of the Friendship Quality Among Friends section of the PRREL suggested that both the target child and the peer rated the friendship quality similarly, signifying no real difference in the friendship. Similarly,

analysis of the Positive Qualities Among Friends revealed no significant differences in the scores of either the target child or the peer indicating that both adolescents viewed the positive qualities similarly. Assessor Impressions of the Friendship showed that the adolescents were alike in their friendship, as no significant differences were found suggesting a negative or positive friendship. Coder Impressions of Relational Aggression did reveal slightly significant results, as the Peers were, on average, rated as more relationally aggressive during the Relationships Task than target children, suggesting that the peers exhibited more relationally aggressive behavior during the task.

Given the diversity in the sub-sample, the general expectation was for a wider array of scores, with some scores indicating differences in friendship quality interpretations. Overall, however, our expectations were not confirmed. We theorized that perhaps the friends both used relational aggression as a way to attract other friends with similar characteristics, or found that relational aggression was a major component in the friendship. If relational aggression were considered to be a component of positive friendship quality, then neither friend would look upon it as negative and would not score it as such. Similarly, if relational aggression were a factor in creating friendships, then a friendship rich in relational aggression would not appear poor to those involved.

The differentiation between friendship quality and relational aggression are congruent with findings from previous research studies showing that social support and connections within friendships are crucial to the development of quality in adolescent friendships (Stanton-Salazar and Spina, 2005; Stiles & Raney, 2004; Cillessen et al., 2005). Continual social support, whether it

is negative or positive, aids the adolescent in basic social needs. Instead of being left alone or singled out, the teen is able to find assistance and guidance from other friends who exhibit similar behavior. If two friends are relationally aggressive against a third person, their coalition may be strengthened (Grotmeter and Crick, 1996). Thus, relationally aggressive friends may perceive their friendships as higher in quality rather than lower. It does not matter in this context whether the actor's behavior is assessed via self reports or reports from teachers, peers, or other observers (Cillessen et al., 2005). Similarly, physically and emotionally aggressive adolescents may have poor relationships with everyone, including their friends. Relational aggression, however, is associated with certain positive outcomes such as perceived popularity and social prominence in adolescence (Cillessen and Mayeux, 2004) or with strengthened coalitions (Grotmeter and Crick, 1996).

Although the interactions between the dyads did not show poor friendship quality with respect to relational aggression, a study by Cillessen et al. (2005) may provide more insight to help understand the effects of dyadic interactions among adolescents. The Cillessen et al. study looked at the predictors of friendship quality in adolescents, with particular emphasis on dependence among the adolescents. Further, it looked at the actor effect (the effect of an actor's behavior on his or her view of the relationship) in determining relationship behavior. For example, aggressive adolescents may rate their friendships as high in conflict, perhaps reflecting hostile attribution biases. In contrast, the partner effect refers to the effect of an actor's behavior on the partner's view of the relationship (Cillessen, et al. 2005). In other words, aggressive adolescents may have friends who rate their friendship as high in

conflict, which may accurately reflect the actor's general aggressive tendencies. It does not matter in this context whether the actors' behavior is assessed via self report or the report of another observer. The logic is identical in each case. Adolescents who were seen as physically and relationally aggressive by the peer group did not necessarily report more conflict in their friendships and did not have low reports of friendship quality (Cillessen, et al. 2005).

Similarly, Hawley, Little, and Card (2007) and Cillessen and Mayeux (2004) discussed how friendship dynamics and relational aggression correlate with social prominence, and how social status may contribute to self-reported friendship quality in adolescents. Recent work has shown that while social prominence and social preference may overlap, they have highly distinct features (Cillessen & Rose, 2005). Social prominence, or perceived popularity, for example, appears to be positively associated with relational aggression, an association that becomes stronger as children progress from the fifth to ninth grade (Cillessen and Mayeux, 2004).

A weakness of the present study was the use of only a limited number of completed self report questionnaires in the effort to determine perceived relational aggression, such as anger, hostility or overt aggression displayed in the friendship. Although two self-reports did show results, more reports may have been effective in determining friendship quality, social connections, and peer relationships, all of which could be imperative in determining the existence and the extent of relational aggression. Similarly, the study focused solely on specific questions from the selected questionnaires. A more detailed look at all questions on all questionnaires may have strengthened the argument that females with high levels of aggression would have poorer friendships and

friends high in relational aggression. A replication of the present study with the consideration of all questionnaires and questions may provide better insight into the interpersonal dynamics of adolescent friendships.

In conclusion, relational aggression and friendship quality still seem to be interlinked in adolescent friendship. The construct of relational aggression within a friendship is of significant interest because it can help determine sociality within a friendship and deviant behavior in individuals. The study has important social and developmental implications for intervention and prevention research with parents of high-risk youth, as relational aggression can be disruptive to the developmental processes of adolescent relationships with friends and family.

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Tables

Table 1: *Sample Statistics for PRREL, COIMP, and PIMP.*

Paired Samples Statistics					
		Mean	N	Std. Dev.	Mean Std. Error
Pair 1	PRREL wv6 Child: Reported friendship quality with peer AVERAGE	4.1288	132	0.45613	0.03970
	PRREL wv6 Peer: Reported friendship quality with TC AVERAGE	4.1608	132	0.39750	0.03460
Pair 2	PRREL wv6 Child: Positive qualities in peer AVERAGE	4.4066	132	0.69445	0.06044
	PRREL wv6 Peer: Positive qualities in TC AVERAGE	4.4297	132	0.63973	0.05568
Pair 3	average of items 13-17 on COIMP for TC	1.2304	138	0.38957	0.03316
	average of items 13-17 on COIMP for Peer	1.2841	138	0.49453	0.04210
Pair 4	average of TC PIMP	4.4414	108	0.49782	0.04790
	average of PEER PIMP	4.4537	108	0.52647	0.05066

Table 2: *Correlations of PRREL, COIMP, and PIMP scores.*

Paired Sample Correlations				
		N	Correlation	Significance
Pair 1	PRREL wv6 Child: Reported friend-ship quality with peer AVERAGE & PRREL wv6 Peer: Reported friend- ship quality with TC AVERAGE	132	0.417	0.000
Pair 2	PRREL wv6 Child: Positive qualities in peer AVERAGE & PRREL wv6 Peer: Positive qualities in TC AVERAGE	132	0.143	0.103
Pair 3	average of items 13-17 on COIMP for TC & average of items 13-17 on COIMP for Peer	138	0.675	0.000
Pair 4	average of TC PIMP & average of PEER PIMP	108	0.667	0.000

Table 3 : *Paired Samples T-test for reported friendship quality and positive qualities (PRREL), COIMP scores and PIMP scores.*

Paired Samples Test									
		Paired Differences							
					95% Confidence Interval of Difference				
		Mean	Std. Dev.	Mean Std. Error	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	PRREL wv6 Child: Reported friendship quality with peer AVERAGE - PRREL wv6 Peer: Reported friendship quality with TC AVERAGE	-.03199	.46365	.04036	-.11182	.04785	-.793	131	.429
Pair 2	PRREL wv6 Child: Reported friendship quality with peer AVERAGE - PRREL wv6 Peer: Reported friendship quality with TC AVERAGE	-.02309	.87451	.07612	-.17366	.12749	-.303	131	.762
Pair 3	average of itemss 13-17 on COIMP for TC - average of items 13-17 on COIMP for Peer	-.05362	.36929	.03144	-.11579	.00854	-1.706	137	.090
Pair 4	average of TC PIMP - average of PEER PIMP	-.01235	.41874	.04029	-.09222	.06753	-.306	107	.760