ABSTRACT

AN EVALUATION OF THE RELATIONSHIP BETWEEN PEER REJECTION AND
RECIPIROCATED FRIENDSHIPS

by Melissa Ann Maras

The purpose of this study was to compare quantity of reciprocated friendships for rejected aggressive-disruptive and rejected sensitive-isolated children. Results indicated that rejected aggressive-disruptive children had significantly more reciprocated friendships than rejected sensitive-isolated children. However, results suggested a significant number of rejected children were described as both aggressive-disruptive and sensitive-isolated. This group did not differ from rejected aggressive-disruptive or rejected sensitive-isolated children for number of reciprocated friendships. The discussion addresses possible reasons for these findings and proposes potential clinical and research implications.
AN EVALUATION OF THE RELATIONSHIP BETWEEN PEER REJECTION AND RECIPROCATED FRIENDSHIPS

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Peer status is a significant predictor of healthy developmental outcomes for children. Peer status refers to the relative social status of a child in relation to his/her peer group (e.g., popular, rejected). Research suggests children who are rejected by their peers might experience later psychological maladjustment. The rejected classification can be subdivided into two distinct categories: aggressive-disruptive and sensitive-isolated. Rejected children identified as aggressive-disruptive or sensitive-isolated demonstrate distinct cognitive and behavioral attributes. While short and long-term outcomes for both subtypes of rejected children may be negative, research indicates friendships may serve a protective function (Hodges, Boivin, Vitaro, & Bukowski, 1999; Parker & Asher, 1993). The purpose of this study is to compare the reciprocated friendships of rejected aggressive-disruptive and rejected sensitive-isolated children.

Research over the past several decades has established significant associations between peer status and emotional and behavioral adjustment (Lopez & DuBois, 2005). As such, children who are liked by the group are considered “accepted,” whereas children who are disliked by the group are considered “rejected” (Landau & Milich, 1990). Investigators have extended this rubric to distinguish five discrete classifications of peer status using social impact and social preference (Landau & Milich, 1990; Schaffer, 1994). Positive (best friend) and negative (liked least) peer nominations are typically used to calculate social impact and social preference. Social impact suggests the degree of positive and negative attention the individual attracts. Social impact is calculated by combining best friend and liked least nominations. Social preference is a measure of likeability. This is calculated using the difference between best friend and liked least nominations (e.g., children who receive more best friend nominations than liked least nominations are more likeable) (Landau & Milich, 1990; Schaffer, 1994). Thus, peer status is two-dimensional classification that accounts for how much a person is noticed by their peers (visibility) and also how much the person is liked by their peers (likeability) (Newcomb, Bukowski, & Pattee, 1993).

Children classified as popular are noticed and generally liked by their peers, and thus are selected more often as a best friend. Children classified as controversial (many best friend nominations and many least liked nominations) gain the attention of their
peers, but it is not clear if this attention is positive or negative (Schaffer, 1994). Only a small portion of any peer group will be classified as controversial and research suggests this is the least stable peer status (Cillessen, Bukowski, & Haselager, 2000; Newcomb et al., 1993). Children who are classified as neglected are rarely selected by peers as a best friend or as being least liked. Finally, children who are rejected are selected by peers as being least liked.

Children’s relationships with their peers serve an important function in healthy socio-emotional and behavioral development (Bagwell, 2004). Children develop social understanding through interactions with peers. These skills include cooperation, reciprocal exchange, and appropriate self-disclosure (Buhrmester, 1990; Hartup, 1996; Masten, 2005). Children who lack these skills might be ostracized by their peers and, in turn, miss opportunities to develop competencies in this area. This destructive cycle might explain the compelling association between peer status and later adjustment (Landau & Milich, 1990). Peer status has been demonstrated to be a strong predictor of later school performance and psychological maladjustment (Rubin, Coplan, Helson, Cheah, & Lagace-Seguin, 1999).

Much of the literature on peer status has focused on associations between popular, average, and rejected peer status and emotional and behavioral adjustment. Peer rejection is associated with several indices of maladjustment, including juvenile delinquency, school drop-out, unhealthy family relationships, low school engagement, poor academic performance, psychiatric hospitalization, conduct problems, and substance abuse (Bagwell, Schmidt, Newcomb, & Bukowski, 2001; Kupersmidt & Coie, 1990; Landau & Milich, 1990; Ollendick, Weist, Borden, & Greene, 1992; Parker & Asher, 1987; Parkhurst & Asher, 1992). In contrast, popular peer status is linked to better short-term and long-term academic success, as well as emotional and behavioral competence (Masten & Coatsworth, 1998; Parker & Asher, 1987).

Peer rejected children can demonstrate widely varying behavioral patterns. Some rejected children are viewed by peers as being very aggressive and disruptive (Gifford-Smith & Brownell, 2003). Rejected aggressive-disruptive children are often described as being hypersensitive, immature, withdrawn, emotionally labile, and impulsive (Coie & Koeppl, 1990; Newcomb et al., 1993). Recent literature has suggested
that some rejected children are sensitive and isolated, rather than aggressive and disruptive (Cillessen, van Ijzendoorn, van Lieshout, & Hartup, 1992; Schaffer, 1994).

Rejected children who are aggressive-disruptive versus sensitive-isolated may be different from each other cognitively and behaviorally (Boivin & Begin, 1989; Parkhurst & Asher, 1992; Schaffer, 1994). For example, rejected aggressive-disruptive children overestimate their athletic, academic, and behavioral competence. In contrast, rejected sensitive-isolated children tend to underestimate their competence in these areas (Boivin & Begin, 1989). On the behavioral side, some children who are rejected by peers may be perceived as being especially aggressive and disruptive; others who are rejected may be especially sensitive and isolated. These varying cognitive and behavioral patterns provide a possible explanation for the finding that rejected aggressive-disruptive children are more likely to develop externalizing symptoms including deviant, anti-social behaviors later in life (Kupersmidt & Coie, 1990; Rubin, LeMare, & Lollis, 1990). In comparison, rejected sensitive-isolated children are more likely to develop symptoms of internalizing disorders such as depression or anxiety later in life (Rubin et al., 1990).

Although considerable research has focused on rejected children, there are still many questions about the contributions of gender and age to the associations between rejection and adjustment. Race also is an important variable to consider in investigating possible relationships between rejection and adjustment. However, racial minority/majority status becomes complicated when using a classroom sociometric technique. Classroom racial proportions should be considered when examining the effect of racial minority identification on social status (Kistner, Metzler, Gatlin, & Risi, 1993). Race was not included as a demographic variable of interest in the current study for this reason.

Most of the literature addressing rejection and aggression has focused exclusively on boys (Gifford-Smith & Brownell, 2003). This is may be due to the relatively low base-rate of overt forms of aggression (e.g., physical and verbal) demonstrated by girls (Maccoby & Jacklin, 1980). Most research has ignored the complexity of aggression, focusing solely on physical and verbal aggression and ignoring relational aggression (see Crick & Bigbee, 1998 and Werner & Crick, 2004 for exceptions). The dearth of research on rejection and aggression in girls may affect
clinical interventions for rejected girls because programs are predicated on research conducted with male-only populations. Clearly, more research is needed to fill in gaps left by early researchers who only studied boys (Underwood, 2001).

Finally, research suggests that the relationship between behavior and status might change throughout development (Cillessen & Mayeux, 2004; Coie, Dodge, & Copetelli, 1982). For example, younger children might have a more negative perception of aggressive-disruptive behavior than adolescents leading to a different association between this type of behavior and peer rejection. Unfortunately, most studies of peer rejection utilize samples from a restricted age range (Boivin & Begin, 1989; Volling, MacKinnon-Lewis, Rabiner, & Baradaran, 1993; Yoon, Hughes, Cavell, & Thompson, 2000), although meta-analyses have contributed significantly to the field (Newcomb et al., 1993). More research concerning the function of aggression as related to sociometric status over development would be useful.

While peer rejection has been associated with significant negative outcomes, some empirical work has suggested that friendship(s) may buffer children from some of the adverse effects of poor peer relationships (Hodges et al., 1999; Parker & Asher, 1993). Both quantity of and quality might be important in understanding the protective function of friendships (Bukowski, Hoza, & Boivin, 1994; Erdley, Nangle, Newman, & Carpenter, 2001). Researchers suggest reciprocity is one component of quality (Asher & Parker, 1996; Buhrmester, 1996; Little, Brendgen, Wanner, & Krappman, 1999). A clear relationship has been demonstrated between peer status and reciprocated friendships. Children and adolescents classified as rejected have significantly fewer friendships and reciprocated friendships than their peers classified as popular or average (Parker & Asher, 1993).

Unfortunately, the aggressive-disruptive and sensitive-isolated subtypes within the rejected peer status group have not been compared to ascertain whether children in these subtypes differ in number of reciprocated friendships. Given their different behavioral and cognitive attributes, it is feasible that they would differ in number of reciprocated friendships. For example, research suggests that some rejected children hover on the fringes of the peer group and use risky, disruptive techniques to become part of the group (Newcomb et al., 1993). This lack of skills probably relates to the ability of
these rejected children to make and keep close friendships. Children who are rejected and sensitive-isolated are characterized more by social withdrawal and therefore have a different set of skills and social deficits which may, by extension, affect their ability to form close, lasting friendships (Rubin et al., 1990). Additionally, the contribution of gender and age to differences in reciprocated friendships for these two subtypes has not been examined.

The current study compared number of reciprocated friendships for rejected aggressive-disruptive and rejected sensitive-isolated children. It was hypothesized that rejected sensitive-isolated children would have significantly more reciprocated friendships than rejected aggressive-disruptive children. Preliminary analyses examined the influence of age and gender on classification and quantity of reciprocated friendships.

Method

Data Archive

Participants

Participants for the current study were drawn from a large database collected from 1990 to 1997 examining the peer relationships of children with chronic illnesses (i.e., cancer, sickle cell disease, hemophilia, or juvenile rheumatoid arthritis (Noll et al., 1996; Vannatta, Garstein, Short, & Noll, 1998). These children were identified through a large tertiary pediatric hospital serving as the major child health care provider in the region. Although classrooms (grade 2-12) were selected for participation based on the presence of a child with a chronic illness, the majority of participants (approximately 96%) were children without an identified chronic illness. Identified classrooms were drawn from a range of public, private, and parochial schools representing socioeconomically diverse urban and suburban areas. There was an over-sampling of African-American children because of the associations between sickle cell disease and African-American descent (Zeller, Vannatta, Schafer, & Noll, 2003).

Measures and Procedure

Revised Class Play. The Revised Class Play (RCP; Masten, Morrison, Pellegrini, 1985) is a peer-nomination technique in which children assign their classmates to roles in a hypothetical play. Children were given a class roster that listed all their
same-sex classmates (to prevent gender stereotyping) and told to select one child for each role in the play. The same child could play multiple roles in the play. Children could not cast themselves in any role. Previous research has suggested the roles can be used to identify four internally consistent subscales (Zeller et al., 2003). These four subscales include “Leader” (i.e., someone who other people listen to), “Prosocial” (i.e., someone who is polite), “Aggressive-Disruptive” (i.e., someone who teases other children), and “Sensitive-Isolated” (i.e., someone who likes to be alone rather than with others).

**Three Best Friendships.** Participants were asked to identify their three best friends within the classroom, using a roster listing all classmates in that classroom. The number of reciprocal friendships for each participant was calculated from these nominations. A participant was considered to have a reciprocated friendship if any of their three best friend choices reciprocally nominated them. Research has demonstrated this nomination technique to be a reliable predictor of peer acceptance (Bukowski & Hoza, 1989).

**Like Rating Scale.** Participants completed a rating-scale measure of likeability for every classmate in the participating classroom. Participants were given a roster listing every participant in the classroom and requested to rate all classmates on a 5-point Likert scale where five indicates *like that child a lot* and one indicates *don’t like that child a lot.* Tallies of “1” ratings received by each participant were used to represent the Liked Least score. Research has shown this method to be a reliable and stable measure of peer acceptance (Asher & Dodge, 1986; Asher, Singleton, Tinsley, & Hymel, 1979; Ladd, 1981).

**Present Study**

**Participants.** Participants in the present study were drawn from four data sets within the larger database: children with cancer, children with sickle cell disease, children with juvenile rheumatoid arthritis, and children with a sibling with sickle cell disease. This participant pool consisted of 5013 children (9% 2nd graders, 16% 3rd graders, 24% 4th graders, 23% 5th graders, 18% 7th graders, and 10% 8th graders) and included 2477 males and 2535 females. Approximately 55% of this sample was Caucasian and 30% African-American. Information regarding race was missing for 10% of the children. The sample was further reduced by eliminating all participants without complete data on all
measures. Because data on the RCP was recorded only for girls or boys depending on the
gender of the target child, approximately half the participants from each classroom were
eliminated. The resulting subset of 2074 children was utilized in the current study.
Demographics of the reduced participant pool were not significantly different from the
original sample in terms of sex, race, or grade.

Data Reduction

Sociometric Technique. A data reduction technique was used to transform best
friend nominations and “one” ratings on the like rating scale into Liked Most (LM) and
Liked Least (LL) scores (Asher & Dodge, 1986) used to calculate Social Preference (SP)
and Social Impact (SI) score in a widely used sociometric technique (Brendgen, Little, &
Krappman, 2000; Coie et al., 1982; Rogosch & Newcomb, 1989). The Liked Most (LM)
score was computed for each child from the number of best friend nominations he/she
received. The Liked Least (LL) score was computed for each child by tallying all the total
number of “one” scores each child received on the Like Rating Scale. The LL and LM
scores were standardized within gender within class (Asher & Dodge, 1986). Previous
research has determined this strategy provides a stable and reliable measure of peer status

The LM and LL scores were used to calculate a social preference (SP) and
Social Impact (SI) score for each child (Coie et al., 1982). Scores were standardized
within gender within class. Students with social preference scores greater than 1.0, LM
scores greater than 0, and LL scores less than 0 were classified as popular. Students with
social impact scores greater than 1.0, LM scores greater than 0, and LL scores greater
than 0 were classified as controversial. The average group included students who
received a social preference/social impact score greater than -.5 and less than .5.
Students with social impact scores less than 0, LM scores less than 0, and LL scores less
than 0 were classified as neglected. Students with a social preference score less than –1.0,
LM scores less than 0, and LL scores less than 0 were classified as rejected.

Utilizing this technique, 1178 of the 2074 children were classifiable as Popular,
Controversial, Average, Neglected, or Rejected. This subset of 1178 children (8% 2nd
graders, 17% 3rd graders, 23% 4th graders, 24% 5th graders, 19% 7th graders, and 10% 8th
graders) was 47% male and 53% female. Approximately 59% of these children were
Caucasian, 33% African-American, and 1% Other. Information regarding race was missing for 6% of this sample. Demographics of this subset were similar to those of the participant pool. Of this subset, 24% (281 children) were classified as popular, 22% (256 children) as rejected, and 51% (595 children) as average. This distribution is comparable to similar classification conducted in prior research (Boivin & Begin, 1989; Brendgen et al., 2000; Parker & Asher, 1993; Rogosch & Newcomb, 1989). Demographics within each classification were comparable to that of the larger data archive and reduced database. Data for children classified as popular, average, or rejected were utilized for the current analyses.¹

**Aggressive-Disruptive and Sensitive-Isolated.** Children classified as rejected were further divided into four subcategories using the Aggressive-Disruptive and Sensitive-Isolated subscales from the Revised Class Play (Masten et al., 1985). A median split based on the combined sample of popular, average, and rejected children was used for both scales, and children were identified as being high or low on the aggressive-disruptive (AD) and sensitive-isolated (SI) subscales. The 256 rejected children were separated into four separate groups depending on their high/low status on both subscales: high aggressive-disruptive and high sensitive-isolated status (HiADSI), high aggressive-disruptive and low sensitive-isolated status (HiADLoSI), low aggressive-disruptive and high sensitive-isolated status (LoADHiSI), and low aggressive-disruptive and low sensitive-isolated status (LoADSI). One hundred and forty-nine of the 256 rejected children were identified as both aggressive-disruptive and sensitive-isolated (HiADSI). Twenty-seven were identified as being only aggressive-disruptive and 78 were identified as being only sensitive-isolated. Only two children were identified as being neither aggressive-disruptive nor sensitive isolated (LoADSI). Because of the small sample size of the LoADSI group, this group was eliminated from all subsequent analyses. An alternate method using cut-off scores ½ Standard Deviation above and below the mean on each subscale yielded a small sample size for two cells (Table 1). The small sample size of one of these cells limited comparisons between HiADLoSI and LoADHiSI children. All analyses were completed with subgroups classified using the median split method.
Results

Primary Analysis

To compare reciprocated friendships of HiADSI, HiADLoSI, and LoADHiSI children, a one-way between groups ANOVA was conducted. Results revealed a non-significant main effect of group on number of reciprocated friendships ($F(2, 253) = 2.116, p = .123$). However, to fully address the current hypothesis, pairwise comparisons were conducted revealing that HiADLoSI children have significantly more reciprocated friendships ($M = -.681, SD = .590$) than LoADHiSI children ($M = -.941, SD = .659$) ($t(103) = 2.06, p < .05$). Number of reciprocated friendships for HiADSI children ($M = -.875, SD = .505$) did not differ significantly from HiADLoSI ($p = .103$) or LoADHiSI ($p = .405$) children (Table 2).

To examine possible grade and gender effects on group and reciprocated friendships, a between-groups ANOVA was conducted. Grade, gender and group were entered as independent variables with number of reciprocated friendships as the dependent variable. Results revealed no significant interaction between group (HiADSI, HiADLoSI, LoADHiSI), grade, and gender ($F(8, 253) = 335, p = .952$). There was no significant main effect for grade ($F(5, 253) = .122, p = .987$) or gender ($F(1, 253) = 2.321, p = .129$).

To more fully address gender influences, a between-groups ANOVA was performed with gender and group entered as independent variables and number of reciprocated friendships as the dependent variable. Examining gender and group without grade as an additional variable allowed for larger cell sizes. Results revealed no significant interaction between group (HiADSI, HiADLoSI, LoADHiSI) and gender ($F(3, 253) = 144, p = .866$), nor a significant main effect of gender ($F(1, 253) = 2.210, p = .138$).

Additional Analyses

To investigate differences in reciprocated friendships between peer groups statuses (Popular/ Average/ Rejected), a one-way between groups ANOVA was conducted. Results revealed a significant main effect of peer group status on number of reciprocated friendships ($F(2, 1131) = 355.7, p < .001$). Post-hoc pairwise comparisons revealed that children classified as popular had significantly more reciprocated
friendships \((M = .907, SD = .695)\) than children classified as either average \((M = -.149, \ SD = .891)\) or rejected \((M = -.874, SD = .574)\).

A between-groups ANOVA was conducted to examine possible grade and gender effects on status and reciprocated friendships. Grade, gender and status were entered as independent variables with number of reciprocated friendships as the dependent variable. Results revealed no significant interaction between status (Popular, Rejected, and Average), grade, and gender \((F(10, 1131) = .417, p = .939)\) in predicting number of reciprocated friendships. There was no significant main effect for grade \((F(5, 1131) = .451, p = .813)\) or gender \((F(1, 1131) = 1.402, p = .237)\) on number of reciprocated friendships.

Discussion

The current study examined quantity of reciprocated friendships for children identified as rejected aggressive-disruptive and rejected sensitive-isolated. The subtypes of the rejected peer status were distinguished using the Aggressive-Disruptive and Sensitive-Isolated subscales of the Revised Class Play (RCP; Masten et al., 1985). Grade and gender influences were also explored. It was hypothesized that among rejected children, those children who are identified as being sensitive-isolated but not aggressive-disruptive \((\text{LoADHiSI})\) have significantly more reciprocated friendships than do children who are aggressive-disruptive but not sensitive-isolated \((\text{HiADLoSI})\).

Results indicated a significant difference between rejected subtypes for number of reciprocated friendships. Children who were identified as being aggressive-disruptive but not sensitive-isolated \((\text{HiADLoSI})\) had significantly more reciprocated friendships than children who were sensitive-isolated but not aggressive-disruptive \((\text{LoADHiSI})\). A significant number of rejected children \((58\%)\) were identified as both aggressive-disruptive and sensitive-isolated \((\text{HiADSI})\). Analyses revealed that this group did not differ from the sensitive-isolated or aggressive-disruptive subtypes for number of reciprocated friendships. The influence of gender and grade on number of reciprocated friendships for \text{HiADLoSI, HiADLoSI, and HiADSI} children also was investigated. There was no significant interaction between group, grade, and gender in predicting
number of reciprocated friendships, nor were there significant main effects of gender or grade.

The current hypothesis was not supported for several possible reasons. Although there was a significant difference in number of reciprocated friendships between HiADLoSI and LoADHiSI children, the direction of that difference was opposite of the predicted relationship between the subtypes. Aggressive-disruptive children (HiADLoSI) had more reciprocated friendships than children who were only sensitive-isolated (LoADHiSI). Further examination of the individual items comprising the Sensitive-Isolated subscale of the RCP suggests one possible reason for this finding. Several of these items are directly related to friendships and social engagement. For example, one item asks the child participant to identify “Someone who has trouble making friends” while another asks the child to select “Someone who would rather play alone than with others.” Rejected children from the current study who were identified as being sensitive-isolated (HiADSI or LoADHiSI) may have fewer social skills and more difficulty making friends than children who are not sensitive-isolated (HiADLoSI). This skill deficiency may result in the formation of fewer reciprocated friendships.

In addition, the current study was conducted to compare the reciprocated friendships of two behaviorally distinct subtypes of rejected children (aggressive-disruptive and sensitive-isolated). Previous research has supported the existence of behaviorally distinct subtypes (Boivin & Begin, 1989; Parkhurst & Asher, 1992; Schaffer, 1994). However, researchers suggest that most rejected children lack social skills (Newcomb et al., 1993). Thus, children identified as aggressive-disruptive in this study most likely have significant social and peer problems as well. This may explain why over half the rejected children (58%) in this sample were identified as both aggressive-disruptive and sensitive-isolated.

It is the combination of aggressive-disruptive and sensitive-isolated behavior, rather than aggressive-disruptive behavior alone, that is generally associated with rejected peer status (Cillessen et al., 1992). Research has shown that that aggressive behavior alone does not predict negative peer status. For example, as children identified as controversial exhibit levels of aggression similar to rejected children, but possess some social skills that compensate for their less socially-favored behavior (Newcomb et al.,
1993). Perhaps the small subset of rejected children in the current study who were identified as being only aggressive-disruptive are behaviorally different than rejected children who are only sensitive-isolated or aggressive-disruptive and sensitive-isolated, resulting in them having more reciprocated friendships. Behaviors measured by the Sensitive-Isolated subscale of the RCP may lend clues regarding these differences.

Alternately, research does support the distinct classification of a rejected subtype that is characterized by withdrawal, social shyness, submissiveness, and isolation in the absence of aggressive or disruptive behavior (Cillessen et al., 1992; Parkhurst & Asher, 1992; Rubin et al., 1990). Behavioral descriptors of this subtype, however, vary. Rubin et al. (1990) proposed that this subtype is behaviorally characterized by social withdrawal that may not influence peer status in elementary or middle school, but may lead to peer rejection in high school. However, results from the current study suggest that there may be a strong association between sensitive-isolated behavior and peer rejection in elementary and middle school. These results indicate that most rejected children exhibit some behavior that may be associated with social withdrawal.

Moreover, researchers seem to differ in their emphasis on the stereotypically submissive, “victim” behavior that children in this subtype may exhibit. These children are sometimes described as shy children with negative self-perceptions while, alternately, they are described as being “easy targets” for victimization and actively ostracized by the peer group (Cillessen et al., 1992; Parkhurst & Asher, 1992). While these profiles are not mutually exclusive, more specific descriptions are necessary to better understand this subtype of rejected children.

One possible way to more carefully describe the behavioral characteristics of this subtype is to distinguish between passive withdrawal (e.g., shyness, social anxiety) and active isolation (e.g., peer rejection). In fact, researchers have acknowledged that social withdrawal is not a homogeneous pattern of behaviors (Rubin et al., 1992). If most rejected children can be described as socially withdrawn regardless of aggressive or disruptive behavioral characteristics, the distinction between passive withdrawal and active isolation within and between subtypes should be explored.

Interestingly, Younger & Daniels (1992) used the RCP to elicit descriptions of differences between passive withdrawal and active isolation behaviors. For example, for
the item “Someone who has trouble making friends,” the description of passive
withdrawal suggested “He keeps to himself, he’s shy and doesn’t want to bother people.”
In contrast, for the same item, the description of active isolation suggested “He has
trouble making friends because he’s mean” (Younger & Daniels, 1992). Despite these
findings, recent research has revealed that some items on the RCP may not accurately
represent distinct Aggressive-Disruptive and Sensitive-Isolated factors (Zeller et al.,
2003). For example, the item used to assess for “shyness” was not discretely associated
with any factor of the RCP and did not load strongly on the Sensitive-Isolated factor.
Because Rubin et al. (1992) suggest that passive withdrawal is partially characterized by
shyness, these findings support further exploration of the definitions and utility of passive
withdrawal and active isolation as distinct behavioral categories.

Recent research also does not support the distinction between passive
withdrawal and active isolation in predicting long-term outcomes for rejected children
(Josie, 2005). In a study examining associations between passive withdrawal,
reciprocated friendships, and later internalizing symptoms, Josie (2005) revealed that
children with higher internalizing symptoms in childhood are more likely to continue to
report these symptoms into early adulthood. However, neither social withdrawal nor
friendships appeared to moderate the stability of these symptoms from childhood to early
adulthood (Josie, 2005). More research is needed to explore similarities and differences
between passive withdrawal and active isolation in association to reciprocated friendships
and long-term outcomes.

The current study reinforces the necessity of utilizing a two-dimensional model,
including aggressive-disruptive and sensitive-isolated dimension, to fully understand
rejected children. Most previous research has focused on a one-dimensional model
focused solely on aggression (French, 1988; French, 1999; Newcomb, Bukowski, &
Pattee, 1993). Almost 70% of the current sample was identified as aggressive-disruptive
(HiADLoSi or HiADSI), while a majority (90%) was sensitive-isolated (HiADSI or
LoADHiSI) and over half the sample (58%) was both aggressive-disruptive and
sensitive-isolated (HiADSI). This two-dimensional model is also important in
understanding clinical implications for the rejected children and designing important
clinical interventions.
Clinical and Educational Implications

The purpose of this study was to investigate the reciprocated friendships of rejected children. Research has shown that friendship might be a significant protective factor for rejected children (Hodges et al. 1999; Parker & Asher, 1993). Given the relationship between peer rejection and negative long-term outcomes, sociometric research can contribute to the ongoing development of clinical interventions designed for this population.

The results of this study suggest that regardless of distinctive behavioral characteristics, almost all rejected children lack reciprocated friendships in comparison with their popular or average peers. Moreover, most rejected children were identified as being sensitive-isolated regardless of aggressive-disruptive status. It is clear that most rejected children would benefit from appropriate prevention and/or intervention services focused on fostering social skills and building friendships. However, as described above, rejected children exhibit a heterogeneous set of behaviors. Some rejected children are aggressive, some are withdrawn, and some are aggressive and withdrawn. In addition, social withdrawal does not describe a consistent pattern of behaviors (i.e., passive withdrawal and active isolation).

Unfortunately, there has been an overemphasis in the field on programs targeted at reducing problematic aggressive behavior. The strong correlations between early peer rejection/aggression and delinquency and conduct problems suggest that interventions for aggressive, rejected children are important (Ollendick et al., 1992). Some programs have been successful in addressing aggressive behaviors (see Smokowski, Fraser, Day, Galinsky, & Bacallao, 2004 for a prevention-focused school-based program). However, fewer programs have been offered to rejected children who are not aggressive, and many of these programs have been unsuccessful (Lochman, Coie, Underwood, & Terry, 1993). Lochman et al. (1993) found that a social skills program with a strong cognitive-behavior component was effective in reducing aggressive behavior, improving peer status, and increasing prosocial peer interactions. Rejected children who were not aggressive demonstrated no behavioral or peer status improvement (Lochman et al., 1993). Due to the prevalence of skills-based, cognitive-behavioral approaches to fostering social skills and decreasing problem behaviors, research should focus on identifying alternative
prevention/ clinical interventions for rejected children who are not aggressive. For example, school-wide, expanded mental health efforts that focus on school climate and building-wide policies may be more effective in reaching non-aggressive rejected children (e.g., Olweus Bullying Prevention Program; Olweus, Limber, & Mihalic, 2000).

Limitations

One possible limitation of the current study was the classification system used to identify subtypes of rejected children. Unfortunately, no additional measures of aggression, disruption, isolation, or withdrawal were available to examine the validity of using the aggressive-disruptive and sensitive-isolated subscales of the RCP. The RCP has been used to identify socially withdrawn and aggressive children with success (Hughes, Meehan, & Cavell, 2004). However, more research is needed to validate the classification methodology used in this study.

In addition while this study utilized a large dataset allowing for the identification of a significant sample of rejected children, all data were collected in school, suggesting possible context-specificity in relation to peer group status. Some children might struggle with their peer group at school but have adequate friendship networks in other contexts. Finally, the current study did not investigate the influence of race on classification or number of reciprocated friendships.

Research Directions

Although researchers studying peer relationships have made significant advances over the past two decades, more information is needed to understand specific associations within the complex, multilevel peer relationship system. Researchers should continue to focus on creating an integrative model examining factors across levels (i.e., peer group, dyadic relationships, individual characteristics) for children in all peer group statuses (Bukowski & Adams, 2004). Researchers should continue to explore the effects of race and gender on this complex peer relationship system across development.

Researchers also should further explore the utility of the Revised Class Play (Masten et al., 1985) as a tool for identifying rejected aggressive-disruptive and rejected sensitive-isolated children. The RCP should be used in tandem with measures of active isolation, passive withdrawal, and aggression from multiple informants to assess the validity of using this measure for identification.
References


Valerius, K. S., Vannatta, K., & Noll, R. B. *Peer perceptions of popular, rejected, controversial, neglected, and average children: Similarities and distinctions across behavioral and non-social attributes*. Unpublished manuscript.


Footnote

1 Prior research reports the limited stability of controversial and neglected peer group classifications (Cillessen et al., 2000; Newcomb et al., 1993). Furthermore, specific questions regarding each peer group status exist. The controversial status is the least stable of all peer group statuses. In addition, research indicates that that function of aggression may differ for children classified as controversial and rejected (Cillessen et al., 2000). Research also questions the valid discrimination between children classified as neglected and average (French, 1985; Newcomb et al., 1993; Rubin, Hymel, Lemare, & Rowden, 1989). The target population of interest in the current study was children classified as rejected. Because of lingering controversy surrounding the controversial and neglected statuses, only children classified as popular, average, or rejected were retained for analyses. Children classified as popular and average served as reference groups for a comparison of means for reciprocated friendships for rejected children.
Table 1

*Sample sizes of rejected subtypes using \( \frac{1}{2} \) Standard Deviation (N = 119) and Median split (N = 256)*

<table>
<thead>
<tr>
<th>Rejected Subtype</th>
<th>( \frac{1}{2} ) SD Split(^a)</th>
<th>Median Split(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Aggressive-Disruptive High Sensitive-Isolated (HiADSI)</td>
<td>53</td>
<td>149</td>
</tr>
<tr>
<td>High Aggressive-Disruptive Low Sensitive-Isolated (HiADLoSI)</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>Low Aggressive-Disruptive High Sensitive-Isolated (LoADHiSI)</td>
<td>50</td>
<td>78</td>
</tr>
<tr>
<td>Low Aggressive-Disruptive Low Sensitive-Isolated (LoADSI)(^c)</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

\( ^a \) Hi Aggressive-Disruptive > .447, Lo Aggressive-Disruptive < -.494, Hi Sensitive-Isolated > .447, Lo Sensitive-Isolated < -.493

\( ^b \) Aggressive-Disruptive *Mdn* = -.398, Sensitive-Isolated *Mdn* = -.326

\( ^c \) LoADSI children were excluded from all analyses because of small sample size.
Table 2
Sample sizes and means (SD) of reciprocated friendships of rejected subtypes using median split (N = 254)

<table>
<thead>
<tr>
<th>Rejected Subtype a</th>
<th>Median Split</th>
<th>Reciprocated Friendships b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mdn = -.398</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sensitive-Isolated Mdn = -.326</td>
<td></td>
</tr>
<tr>
<td>High Aggressive-Disruptive</td>
<td>149</td>
<td>-.875 (.505)</td>
</tr>
<tr>
<td>High Sensitive-Isolated (HiADSI)</td>
<td>27</td>
<td>-.681 (.590) c</td>
</tr>
<tr>
<td>High Aggressive-Disruptive</td>
<td>Low Sensitive-Isolated (HiADLoSI)</td>
<td>78</td>
</tr>
<tr>
<td>Low Aggressive-Disruptive</td>
<td>High Sensitive-Isolated (LoADHiSI)</td>
<td></td>
</tr>
</tbody>
</table>

a Aggressive-Disruptive Mdn = -.398, Sensitive-Isolated Mdn = -.326
b Number of reciprocated friendships was standardized by cohort and classroom.
c Means are significantly different at p < .05