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Rejected Children and Their Friends: A Shared Evaluation of Friendship Quality?

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Past research of the link between sociometric status and friendship quality has been focused only on the focal children's perceptions. Children's perceptions, however, may differ from those of their friends. In a sample of 369 children (second to fifth grade), the concordance between children's and their friends' perceptions of various relationship features was examined as a function of children's sociometric status. Rejected children's perceptions showed considerably lower correlations with their friends' perceptions than did average and popular children's perceptions. Furthermore, rejected children's friends perceived their friendships, on average, less positively than rejected children themselves. Popular children's friends perceived their friendships, on average, more positively than popular children themselves. Average children's mean perceptions did not differ from those of their friends.

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A good integration into the peer network is critical for children's development (Hartup, 1992, 1996; Newcomb & Bagwell, 1996; Sullivan, 1953; Youniss, 1980). Children who are rejected by the majority of their peers often display negative social behavior, show serious deficits in social cognition, and are at risk of adjustment problems in later life (Asher & Coie, 1990; Parker & Asher, 1987). However, being rejected by the majority of one's peers does not necessarily mean to be completely without friends, and the support of a single close friendship can compensate for at least some of the disadvantages that may result from peer rejection (Parker & Asher, 1993; Sanderson & Siegal, 1995; Vernberg, 1990). Notably, the notion of a compensatory effect of friends usually refers to supportive friendships of high quality (Sullivan, 1953). The existing evidence suggests, however, that rejected children's friendships are of lower quality than the friendships of accepted children (McGuire & Weisz, 1982; Parker & Asher, 1993; but see Patterson, Kupersmidt, & Griesler, 1990, for an exception).

Typically, studies investigating the quality of low-accepted or rejected children's versus accepted children's friendships have focused on the children's own perceptions of the quality of their friendships (Patterson et al., 1990; Parker & Asher, 1993). Because there are two partners in a dyadic relationship, however, there are also two views of the relationship that may not necessarily correspond (Buhrmester, 1990; Parker & Asher, 1993). As has been argued by peer researchers, a large perceptual discrepancy between partners regarding friendship quality may indicate problems in interpersonal understanding and friendship interaction (e.g., Bukowski & Hoza, 1989; Parker & Asher, 1993).

The issue of perceptual concordance or discrepancy may be especially important during middle childhood, as children place increasing emphasis on shared intentions and emotions with their friends but have not yet overcome the exclusive concern with their own as opposed to their friends' subjective experiences in the relationship (Selman, 1980). During that stage, discrepant perceptions may be a source of conflict between friends, because they may lead to unfulfilled expectations and frustrations, especially on the part of the person evaluating the relationship more favorably. In line with that notion, Furman (1996) has argued that children's perceptions of their relationships are likely to shape the course of those relationships. Thus, a strong disagreement of perceptions could endanger a child's friendships in the long run. This may be especially problematic for rejected children, who not only have fewer chances of establishing dyadic friendships than accepted children (Bukowski, Hoza, & Boivin, 1993; Parker & Asher, 1993) but also may depend on dyadic friendship relations more than accepted children to compensate for their negative status in the peer group.

Notably, differences in the perception of just one friendship may not necessarily imply a problem in a child's overall friendship relations. In contrast, a general failure of recognizing problems in one's relationships, as would be reflected, for example, by a systematic discrepancy between a child's and his or her friends' perceptions throughout several relationships, may indeed indicate severe difficulties in interpersonal understanding. Therefore, in addition to children's own perceptions, the degree of agreement with their friends' perceptions of their relationships may be an important aspect to consider when comparing rejected children's friendships with those of accepted children. To this end, in the present study, the relationship between peer status and friendship quality was examined with the focus on the general degree of perceptual concordance that rejected, average, and popular children show with their mutual friends regarding various qualitative features of their relationships.

Individuals' perceptions of their relationships are related to the interactional patterns within their relationships, such as the degree of intimate disclosure or conflict between partners (Furman, 1996). As demonstrated by Funder and Harris (1986), individuals who exhibit prosocial interactional patterns also are more likely to accurately perceive and evaluate other persons' social behavior. In line with this finding, rejected children, who display a considerable degree of inappropriate interpersonal behavior (Coie & Dodge, 1988; Coie, Dodge, & Coppotelli, 1982; Newcomb & Bukowski, 1984), have been shown to be less skillful at interpreting social behavior than are average and popular children (Dodge, Murphy, & Buchsbaum, 1984). In contrast, popular children, who display higher levels of prosocial behavior than other children (Coie et al., 1982), have been shown to demonstrate even more highly developed social cognitive interpretation skills than average children (Dodge et al., 1984).

The differences among the sociometric groups in interpersonal understanding also may transfer to the degree of interpersonal perceptual correspondence within the children's friendship relations. In consequence, the correlations between rejected children's and their friends' perceptions of their relationships should be considerably lower than those between average children and their friends. In contrast, the correlations between popular children's and their friends' perceptions of their relationships should be somewhat higher than those between average children and their friends. Contrary to the correlations between children's and their friends' perceptions of the same friendship feature, however, the correlations among the various friendship features within a given perspective (e.g., between closeness and conflict as rated by the children themselves) should not necessarily differ with peer status. Essentially,

such correlations reflect children's perceptions of friendship as a complex construct of interrelated subaspects, and rejected children's conceptions of friendship have been found to be similar to those of accepted children (Bichard, Alden, Walker, & McMahon, 1988).

Investigating the correlations between children's and their friends' views of their relationships taps the amount of concordance, or the degree of parallelism, between the partners' perceptions on an individual level. For example, the expected lower correlations between rejected children's and their friends' perceptions would indicate that positive evaluations from a given child's point of view are seldom reciprocated by positive evaluations from the friends' point of view. Such possible low correlations, however, would not indicate the actual level of rejected children's ratings compared with those of their friends. Thus, despite low parallelism on the individual level, rejected children, on the average group level, may perceive their friendships in the same way as their friends. Relatedly, a high parallelism (i.e., correlation) between average and popular children's and their friends' ratings does not necessarily imply that, on the average group level, those children's perceptions are the same as their friends' ratings. Such information can only be obtained through inspection of the means of children's and their friends' ratings, which may reveal general trends of perceptual discrepancy on a group level and also would indicate the directionality of such a discrepancy (e.g., whether a more or a less positive perception of friendship quality exists from the children's perspective compared to their friends' perspective). In addition, the examination of mean ratings across sociometric groups allows comparison of rejected children's friendship perceptions with those of average and popular children, as well as comparison of rejected children's friends' ratings to the ratings of average and popular children's friends. Therefore, in addition to correlations, children's and their friends' mean ratings of their relationships were examined as a function of sociometric status.

Based on findings by Parker and Asher (1993), it would be expected that rejected children generally perceive most qualitative features of their friendships less positively than do both average and popular children, who should not differ in their ratings of friendship quality. Findings by Patterson et al. (1990), however, suggest that rejected children should not differ from average and popular children in how they perceive the quality of their friendships. Whether the friends of rejected, average, and popular children display similar mean ratings of the quality of their relationships as the children themselves, depends on the extent to which children of a specific sociometric status are friends with children of the same status. Thus, some researchers (e.g., Ladd, 1983; Putallaz &

Gottman, 1981) have suggested that children of similar sociometric status tend to mainly befriend each other. In that case, perceptual biases as well as social behavioral and cognitive characteristics that might influence the partners' evaluations of each other are likely to be shared between children of a particular sociometric status and their friends. Consequently, no mean level differences would be expected between children's and their friends' perceptions of the various aspects of their relationships.

In contrast to the previous scenario, findings by Rizzo (1988) suggest that children are friends with others irrespective of others' sociometric status. In that case, factors such as perceptual biases and social behaviors and cognitions may be less shared between children of a particular sociometric status and their friends. Consequently, differences may emerge between children's and their friends' mean perceptions of their relationships. For rejected children, such mean differences might emerge as more positive perceptions of their friendships compared with their friends' perceptions. This expectation is based on a number of related arguments. First, as shown by Berscheid, Graziano, Monson, and Dermer (1976), the perception of another person's behavior increases in positivity as the perceiver's dependence on the perceived person increases. Consequently, because rejected children have limited access to friendships, compared with average and popular children (Bukowski et al., 1993; Parker & Asher, 1993), rejected children may assign higher importance to their friendships than do their friends and therefore perceive their friendships more positively. Second, some evidence indicates that rejected children display social behavioral deficits even in interaction with their friends (Austin, 1985; Rizzo, 1988), which might elicit less positive evaluations of friendship quality from their friends. Third, because knowledge of a child's peer status may bias others' interpretations and evaluations of a child's behavior (Hymel, Wagner, & Butler, 1990; Waas & Honer, 1990), the negative bias toward rejected children's behaviors also may be apparent in their friends' evaluations.

The pattern of potential mean differences between popular children's and their friends' perceptions of the quality of their friendships might be opposite to the one expected for rejected children. Specifically, the positive bias toward popular children's behaviors (Hymel et al., 1990) might lead to markedly positive perceptions of relationship quality by their friends. Also, because popular children display highly developed social skills (Coie et al., 1982; Crick & Dodge, 1994), their friends may view the relationships with popular children as a highly rewarding and satisfying experience, and, consequently, in a very positive way. No mean-level differences in perceived friendship quality should emerge between average

status children and their friends, however, because (a) previous work did not show a specific perceptual bias toward average children (Hymel et al., 1990), and (b) differential social behaviors and cognitions between average children and their friends should be leveled out.

METHODS

Participants

Children from Grade 2 through Grade 5 ($N = 369$; 34 boys, 41 girls in Grade 2; 36 boys, 52 girls in Grade 3; 58 boys, 46 girls in Grade 4; 48 boys, 54 girls in Grade 5) participated in the study. These children were part of an original sample of 746 Caucasian boys and girls in 33 classrooms of four primary schools located in two eastern districts of Berlin, Germany. The schools were located in middle-class neighborhoods. For each child, parental consent was obtained prior to data collection.

Measures

Children's sociometric status. After training, the children's teachers supervised the sociometric nomination procedure (see Coie et al., 1982). The participation rate for the sociometric testing was at least 90% in each class. Each child nominated three children in the classroom he or she liked most and three he or she liked least. Each child had access to a classroom roster to ensure equal salience. The total number of positive and negative nominations received were calculated for each child and standardized within the classroom. In addition, social impact scores (positive plus negative nominations) and social preference scores (positive minus negative nominations) were computed for each child and again standardized within classroom. Positive and negative nominations as well as the social impact and the social preference scores were used to identify children for the five social status groups as described by Coie et al. (1982). Of the 746 children in the initial sample, 90 (12%) were classified as being rejected, 335 (45%) as average, 110 (15%) as popular, 29 (4%) as neglected, and 20 (3%) as controversial. The remaining 162 children (21%) could not be classified. The relative number of children in each of these groups is comparable to the relative percentages obtained in other studies (e.g., Coie et al., 1982; Coie & Dodge, 1988; Dodge, 1983; Kupersmidt & Coie, 1990; Patterson et al., 1990). Because of the ambiguous nature of the unclassified group and the small sample sizes of the neglected and controversial groups, the focus of the present study was on the popular, average, and rejected children.

Reciprocal friendship nominations. Children's friendships were assessed within the Friendship Interview procedure (see later). Specifically, the children were asked to nominate all friends with whom they share activities both within and outside the classroom. Shared activities were emphasized as a qualifier of the friendship nomination because they have been shown to be a fundamental criterion of friendship (Hartup, 1993; Newcomb & Bagwell, 1995) and help reduce the occurrence of nominations based on desired as opposed to existing relationships. Children who had nominated each other on their respective list of friends were considered to be mutual friends. Because friends outside the school were not interviewed, only reciprocal within-school nominations could be assessed. Although this limitation reduces the universe of generalization, school friendships reflect a central part of children's social world (Kupersmidt, Burchinal, & Patterson, 1995).

Of the initial 746 children, 12% refused to participate in the Friendship Interview. Therefore, friendship data were available from 64 (71%) rejected, 92 (84%) popular, and 284 (85%) average status children. Of these children, 44 (69%) rejected, 85 (92%) popular, and 253 (89%) average children had at least one reciprocal friend in school. The lower percentage of rejected children with mutual friendships is in line with findings from previous studies (e.g., Ladd, 1983; Parker & Asher, 1993), indicating less accepted children's lower chance of establishing a mutual friendship as compared with the chance of accepted children. Children without reciprocal friendships did not differ from those with friends with respect to gender or grade level. Of the children who had mutual friendships, the mean number of reciprocal friends was 2.1 for the rejected children, 2.4 for average children, and 3.9 for popular children.

In line with findings by Rizzo (1988), rejected children established friendships not only with other rejected children but also with children from each sociometric group. Specifically, on average, only 5% of rejected children's friendships were with other rejected children, 1% were with neglected children, 46% with average status children, 4% with controversial children, 24% with popular children, and 20% were with unclassified children. Notably, these mean proportions were highly similar to the ones obtained for average and popular children, multivariate $F(12, 748) = 0.88, p = .66$. Specifically, on average, 8% of average children's friendships were with rejected children, 2% were with neglected children, 44% with average status children, 3% with controversial children, 22% with popular children, and 21% were with unclassified children. Finally, on average, 4% of popular children's friendships were with rejected children, 0% were with neglected children, 45% with average

status children, 4% with controversial children, 25% with popular children, and 22% were with unclassified children. The majority (89%) of children's mutual friendships were with same-sex peers.

Friendship quality. Friendship quality was assessed through the Friendship Interview (Krappmann et al., 1996), which was given to each child individually in a separate room during class time by trained interviewers. After nominating all friends with whom they shared activities both within and outside the classroom, the children were asked to characterize the relationship with each nominated child with respect to 19 different items. These measures were derived on the basis of previous research on children's friendship characteristics (Oswald & Krappmann, 1984), and, similar to other studies (e.g., Berndt, Hawkins, & Hoyle, 1986; Berndt & Perry, 1986), they assess affective evaluations of the partner as well as the prevalence of specific friendship interactions as indicators of several underlying qualitative features of friendship. Specifically, the measures were designed to reflect five underlying features: closeness, fun, conflict, visits at home, and play encounters. The 19 Friendship Interview items, their response format, and their respective underlying factors are listed in the appendix. Children were asked to respond to the items using either a 4-point scale (e.g., 1, *never*, to 4, *often*) or a dichotomous response format. Little, Brendgen, Wanner, and Krappmann (1999) demonstrated good internal consistency and measurement equivalence across different sociocultural contexts for this five-factor structure.

After standardizing each item to obtain equal scaling, a child's ratings of the first three nominated and reciprocated friendships were averaged for each item. Thus, for each child in the sample, his or her systematic or typical estimation of each of the 19 friendship characteristics across several relationships was obtained. The ratings were limited to the average of a given child's first three mutual friendships because only 25% of the children had more than three mutual friends. The same procedure was used to obtain the child's three mutual friends' assessments of friendship quality with the child. Specifically, for each item, the three friends' ratings of the relationship with the focal child were averaged. These friends were the same ones that the focal child's self-report ratings were averaged for. Thus, obtained for each child in the sample was the most salient friends' typical (i.e., average) evaluation of each specific characteristic of friendship quality with the child. Using this procedure, any existing bias in the average friendship perception (i.e., a systematically more or less positive view of friendship quality as compared with the friends' views) can be assessed for each target child. A further advantage is that redundancies are avoided (see later), thereby

maintaining sufficient sample size for the analytic procedures.¹ For children with only two mutual friends (28%), ratings were averaged across these two friendships. For children with only one mutual friend (27%), information about this single friendship was kept. Among those children with only one mutual friend, however, there were 22 dyads where the two partners had only received reciprocated friendship nominations from each other, but not from any other child they had nominated. To avoid duplicate, dependent information in these cases (each child would have a self-report and friend-report score referring to the same single friendship), one partner of each of these dyads was randomly excluded from the sample.² As a result, the final sample sizes used in the analyses were 243 for the average group (116 boys, 127 girls), 41 for the rejected group (22 boys, 19 girls), and 85 for the popular group (38 boys, 47 girls).

Factor scores were computed, separately for the self-rated and the friend-rated domain, by averaging the aggregated items that pertained to a specific factor (see the appendix). Satisfactory internal consistency was obtained for those factors that consisted of several items, both for the self-rated and the friend-rated domain: self-rated closeness, $\alpha = .81$ for the average group, $.78$ for the popular group, and $.79$ for the rejected group; self-rated fun, $\alpha = .53$ for the average group, $.43$ for the popular group, and $.69$ for the rejected group; self-rated conflict,

¹ A potential limitation of this procedure is that by aggregating across more than one friendship the correlations across the partners' perspectives might be attenuated. To test the possibility of attenuation, correlations between the self- and the friend-ratings were computed separately for the first, second, and third mutual friendship across the whole sample. For closeness, the correlation between the self- and friend-rating varied between $.25$ and $.35$ in the three friendships; for fun, the correlation between the self- and friend-rating varied between $.18$ and $.21$ in the three friendships; for conflict, the correlation between the self- and friend-rating varied between $.23$ and $.26$ in the three friendships; for play encounters, the correlation between the self- and friend-rating varied between $.33$ and $.34$ in the three friendships; for visits, the correlation between the self- and friend-rating varied between $.51$ and $.66$ in the three friendships. The similarity of those correlations suggest that no attenuation of data has occurred as a result of the aggregating procedure.

² Notably, even the random exclusion of one partner from exclusive dyads does not provide complete independence of the data, which could not be achieved without severe loss of participants, rendering analyses impossible. The aggregation procedure across several friends, however, avoids duplicate information. Moreover, the investigation of a random subsample of 30 triplets (for children with two friends) or quartets of friends (for children with three friends) in the study sample revealed *no* occurrence of a case where the three (or four) children mutually nominated only each other. Often, reciprocal friends were part of other sociometric groups than the three groups investigated and therefore did not occur as focal children to account for self-ratings. Consequently, the results of the study are probably not overly attenuated by a lack of independence of the data.

alpha = .72 for the average group, .66 for the popular group, and .83 for the rejected group; self-rated visits, alpha = .64 for the average group, .70 for the popular group, and .61 for the rejected group; friend-rated closeness, alpha = .82 for the average group, .73 for the popular group, and .72 for the rejected group; friend-rated fun, alpha = .64 for the average group, .55 for the popular group, and .75 for the rejected group; friend-rated conflict, alpha = .76 for the average group, .69 for the popular group, and .75 for the rejected group; friend-rated visits, alpha = .60 for the average group, .72 for the popular group, and .63 for the rejected group.

RESULTS

Correlational Patterns

Following the procedure suggested by Rowe, Vazsonyi, and Flannery (1994) for group comparisons regarding the covariations among observed variables, potential differences among the three sociometric groups concerning the correlations among the self-rated and the friend-rated friendship features were tested using the LISREL VIII software package (Jöreskog & Sörbom, 1993). In this procedure, correlation matrices of the observed variables are tested for equivalence across groups through nested-model comparisons. Specifically, a baseline model was estimated first where all correlations varied freely across groups. The effects of gender and grade were controlled. Next, a constrained model was estimated where specific correlations of interest were constrained to be equal across groups. For example, to test whether the correlations among corresponding self- and friend-ratings of the friendship features were equal across sociometric groups, cross-group equality constraints were placed on each corresponding correlation in the correlation matrices of the three groups. The difference in the χ^2 -fit statistics between this constrained model and the previous unconstrained model was then tested for statistical significance. For such multivariate tests, a significance criterion of $p < .05$ was used. A nonsignificant difference in the χ^2 -fit statistics between the constrained model (i.e., with cross-group equality constraints) and the unconstrained model (i.e., without equality constraints) of the covariations among the variables would indicate that the correlations do not differ significantly across the groups. In contrast, a significant χ^2 -difference would indicate that at least one of the cross-group equality constraints is untenable. The source of the model misfit was identified through examination of the tolerance statistics (i.e., standardized residuals and modification indices) associated with each constrained coefficient (see Jöreskog & Sörbom,

1993). Each coefficient with high tolerance statistics was then freely estimated in consecutive models, and the fit of these newly specified models was again compared with the fit of the previous unconstrained model. Table 1 presents the consecutive steps of the nested-model comparisons, indicating which types of correlations were found to significantly differ across groups and which types of correlations were found to be invariant across groups. In Table 2, the partial correlation coefficients among the variables controlling for gender and grade are presented separately for popular, average, and rejected children, indicating which specific correlations were similar and which were different across groups in the nested-model tests.

In general, and in line with expectations, the children's self-rated perceptions of the various features of friendship quality did not correlate highly with their friends' perceptions. Even more importantly, as indicated by the χ^2 -difference tests, many of these correlations differed significantly among the three peer status groups. Specifically, the results suggested that, as expected, rejected children showed markedly lower agreement with

Table 1. Summary of the Nested-Model Tests for Cross-Group Equality of Correlations

Model	<i>df</i>	χ^2	Δdf	$\Delta\chi^2$	<i>p</i>	Decision
1. Freely estimated model (no equality constraints)	30	0.00				
2. Correlations among corresponding self-ratings and friend-ratings equal across groups	40	19.34	10	19.34	< .05	rejected
3. Four correlations freely estimated in the rejected group and one correlation freely estimated in the popular group ^a	35	6.91	5	6.91	<i>ns</i>	accepted
4. Correlations among self-rated factors equal across groups	55	29.25	20	22.34	<i>ns</i>	accepted
5. Correlations among friend- rated factors equal across groups	81	59.95	26	30.70	<i>ns</i>	accepted
6. Correlations among remaining self-rated and friend-rated factors equal across groups	115	94.48	34	34.53	<i>ns</i>	accepted

Note. The first model is tested against the freely estimated model without equality constraints; the others are each tested against the respective previously accepted model.

^aModel 3 represents a just-fitting model after the five freely estimated correlations have been separately tested for cross-group equality in consecutive nested-model tests. Information on which specific correlations differed significantly across sociometric groups is given in the text and in Table 2.

Table 2. Correlations Among the Self-rated and Friend-rated Friendship Factors for Average, Popular, and Rejected Children

Factor	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Average group (<i>n</i> = 243)										
1. S-closeness	1.00									
2. S-fun	.46**	1.00								
3. S-conflict	-.44**	-.03	1.00							
4. S-play	.26**	.17**	-.12(*)	1.00						
5. S-visit	.24**	.19**	-.01	.05	1.00					
6. F-closeness	.34**	.20**	-.08	.15*	.17**	1.00				
7. F-fun	.18**	.21**	.03	.11(*)	.26**	.50**	1.00			
8. F-conflict	-.12(*)	-.01	.16*	.01	.14*	-.48**	-.14*	1.00		
9. F-play	.16*	.20**	-.02	.35**	.10	.26**	.23**	-.10	1.00	
10. F-visit	.12(*)	.17*	.15*	.05	.59**	.33**	.34**	.08	.12(*)	1.00
Popular group (<i>n</i> = 85)										
1. S-closeness	1.00									
2. S-fun	.22*	1.00								
3. S-conflict	-.33**	-.07	1.00							
4. S-play	.30**	.09	-.15	1.00						
5. S-visit	.07	.24*	.11	-.03	1.00					
6. F-closeness	.22*	.15	-.17	.07	.03	1.00				
7. F-fun	.03	.25*	.03	.18(*)	.22*	.28*	1.00			
8. F-conflict	-.15	-.03	.39** ^d	.05	.19(*)	-.42**	.19(*)	1.00		
9. F-play	.23*	.16	-.06	.42**	.07	.09	.22*	.12	1.00	
10. F-visit	.01	.22	-.05	.06	.72**	.19(*)	.23*	.17	.09	1.00
Rejected group (<i>n</i> = 41)										
1. S-closeness	1.00									
2. S-fun	.46**	1.00								
3. S-conflict	-.52**	-.28(*)	1.00							
4. S-play	.23	.12	.02	1.00						
5. S-visit	.27	.44**	-.09	.18	1.00					
6. F-closeness	.03 ^d	.18	-.10	-.08	.21	1.00				
7. F-fun	-.27	.07 ^d	.24	-.15	.18	.32*	1.00			
8. F-conflict	-.11	-.12	.22	.09	.05	-.49**	-.02	1.00		
9. F-play	.27(*)	.36*	-.17	.20 ^d	.26	.21	.10	-.03	1.00	
10. F-visit	-.12	.01	.14	-.14	.44** ^d	.47**	.61**	-.01	-.05	1.00

Note. S = self-rated; F = friend-rated. Partial correlations are provided controlling for gender and grade effects.

^d Coefficient differs significantly from the corresponding coefficient in the other two groups as indicated by a χ^2 -difference test at $p < .05$ (see text and Table 1).

(*) $p < .10$. * $p < .05$. ** $p < .01$. All p -values refer to the test of statistical difference from zero for the respective correlation coefficient.

their friends' perceptions than average and popular children. Thus, rejected children's perceptions regarding closeness and fun in their friendships did not correlate with their friends' perceptions ($r = .03$ and $r = .07$, *ns*, respectively). In contrast, both average and popular children's ratings of closeness and fun positively correlated with those of their friends ($r = .34$ and $r = .21$, $ps < .001$, in the average group; $r = .22$ and $r = .25$, $ps < .01$, in the popular group). Furthermore, the correlations between children's and their friends' ratings regarding the frequency of play encounters and mutual visits were lower in the rejected group ($r = .20$, *ns*, and $r = .44$, $p < .001$, respectively) than the corresponding correlations in the average and the popular group ($r = .35$ and $r = .59$, $ps < .001$, in the average group; $r = .42$ and $r = .72$, $ps < .001$, in the popular group). Notably, the χ^2 -difference tests showed that these correlations differed significantly (i.e., $p < .05$) in the rejected group from the corresponding correlations in the average and the popular group, whereas the corresponding correlations in the latter two groups did not significantly differ from each other.

In contrast to those disparities, the χ^2 -difference tests showed that the correlation between rejected children's and their friends' ratings with respect to conflict did not differ significantly from the corresponding correlation between average children's and their friends' ratings ($r = .22$, *ns*, in the rejected group, and $r = .16$, $p < .05$, in the average group), although this correlation was not statistically different from zero in the rejected group. That correlation, however, was higher in the popular group ($r = .39$, $p < .05$), and the χ^2 -difference tests indicated that this correlation in the popular group differed significantly (i.e., $p < .05$) from the corresponding correlation in the average and the rejected groups. As mentioned previously, however, average and popular children did not significantly differ from each other on any of the other correlations between corresponding self- and friend-ratings.

In contrast to the differences with respect to children's own and their friends' ratings of the same friendship features, the χ^2 -difference tests indicated no significant differences among the three sociometric groups with respect to the remaining correlations. Specifically, children's self-ratings of the positive friendship features (i.e., closeness, fun, play, and visits) were generally positively correlated with each other and negatively related to children's self-ratings of conflict. Similarly, friends' ratings of the positive friendship features were generally positively correlated with each other and negatively related to friends' ratings of conflict. The correlations among children's and their friends' ratings regarding noncorresponding friendship features (e.g., between self-rated closeness and friend-rated

fun) followed the same pattern. Thus, across the self-rated and the friend-rated perspective, ratings of positive friendship features were generally positively correlated with each other and negatively correlated with conflict ratings. Again, as indicated by the respective χ^2 -difference test, those correlations were not significantly different for rejected, average, and popular children.

Mean-Level Patterns

Because rejected, average, and popular children were not mainly friends with children of the same sociometric status, but showed rather similar patterns of friendship affiliations across sociometric groups (see earlier description), we investigated potential mean differences between children's and their friends' perceptions of the various features of friendship quality. To test potential mean differences with respect to children's and their friends' ratings of closeness, fun, conflict, play, and visits, a 3 (sociometric status) \times 2 (source of rating, self vs. friends) MANCOVA with repeated measures on the last factor was performed. Consistent with the previous tests regarding the correlational pattern, gender and grade were included in the analysis as covariates. The results revealed a significant overall main effect of sociometric status, $F(10, 722) = 3.96$, $p < .001$, and an interaction effect between sociometric status and source of rating, $F(10, 722) = 3.86$, $p < .001$. Univariate tests indicated that both the main effect of sociometric status and the interaction effect between sociometric status and source of rating were related to the ratings of closeness (all $ps < .001$), $F(2, 364) = 14.53$, for the main effect, and $F(2, 364) = 10.68$, for the interaction effect, and to the rating of conflict, $F(2, 364) = 8.22$, for the main effect, and $F(2, 364) = 8.75$, for the interaction effect. Furthermore, the interaction effect between sociometric status and source of rating was related to the rating of fun, $F(2, 364) = 5.40$, $p < .01$. No main or interaction effects involving sociometric status were shown with respect to children's and their friends' ratings of play encounters and mutual visits.

To clarify the interaction between sociometric status and source of rating, nine repeated measures ANCOVAs were performed to test the effect of source of rating separately on the rating of closeness, fun, and conflict for the three sociometric groups. As in previous analyses, gender and grade were included as covariates. The results revealed that rejected children's friends perceived their friendships to be significantly less close, $F(1, 38) = 10.27$, $p < .01$, less fun, $F(1, 38) = 6.94$, $p < .05$, and more quarrelsome, $F(1, 38) = 7.21$, $p < .05$, than did the rejected children themselves. In contrast, popular children's friends believed their friend-

ships were closer, $F(1, 82) = 7.90$, $p < .01$, and involved less conflict, $F(1, 82) = 15.07$, $p < .001$, than did the popular children themselves. Perceived fun did not differ. For the average group, the results revealed no effect of source of rating on either closeness, fun, or conflict, indicating that average children and their friends did not differ in their mean ratings of those features of friendship quality.

As a further way of breaking down the interaction between sociometric status and source of rating, six ANCOVAs were conducted to test the effect of sociometric status separately on the self-ratings and the friend-ratings of closeness, fun, and conflict. As before, gender and grade were included as covariates. The results revealed no effects of sociometric status on any of the self-rated friendship features, indicating that rejected, average, and popular children did not differ significantly in their personal views of the quality of their friendships. In contrast, children's sociometric status had a significant effect on the friends' ratings of closeness, $F(2, 364) = 25.99$, $p < .001$, the friends' ratings of fun, $F(2, 364) = 4.13$, $p < .05$, and the friends' ratings of conflict, $F(2, 364) = 16.31$, $p < .001$. Subsequent simple contrasts with average children as the reference group showed that rejected children's friends perceived their friendships to be less close than did average children's friends ($p < .001$), who, in turn, perceived their friendships to be less close than did popular children's friends ($p < .001$). Furthermore, rejected children's friends perceived their friendships as comprising less fun than did

Table 3. Observed Means, Standard Deviations, and Adjusted Means of the Self-rated and Friend-rated Friendship Factors for Average, Popular, and Rejected Children

Factor	Average group			Popular group			Rejected group		
	M	SD	M (adj.)	M	SD	M (adj.)	M	SD	M (adj.)
S-closeness	.04	.86	.04	.07	.77	.08	-.16	.94	-.16
F-closeness	-.02	.89	-.02	.33	.60	.33 ^d	-.79	.79	-.79 ^d
S-fun	.01	.75	.00	.00	.70	.01	.18	.95	.18
F-fun	.01	.74	.01	.01	.57	.03	-.31	.88	-.32 ^d
S-conflict	.07	.81	.06	-.07	.67	-.06	-.01	1.05	-.02
F-conflict	.01	.83	.01	-.37	.63	-.37 ^d	.48	.85	.48 ^d
S-play	-.07	1.09	-.06	.15	.90	.13	-.08	1.09	-.08
F-play	.03	.95	.04	.03	.89	.01	-.07	1.03	-.07
S-visit	.04	1.03	.04	-.10	1.03	-.07	-.08	1.03	-.10
F-visit	.11	.97	.10	-.16	.96	-.13	-.26	.97	-.28

Note. S = self-rated; F = friend-rated. All values are based on z-standardized scores.

^dFriend-rated mean coefficient differs significantly from the corresponding self-rated coefficient within a given sociometric group and also from the corresponding friend-rated coefficient in the other two sociometric groups (see text).

average children's friends ($p < .001$), who did not differ from popular children's friends in that respect. Finally, rejected children's friends perceived their friendships as more quarrelsome than did average children's friends ($p < .001$), who, in turn, perceived their friendships as more quarrelsome than did popular children's friends ($p < .001$). The observed means, standard deviations, and adjusted means of the various friendship features are presented separately for the three sociometric groups, in Table 3.

DISCUSSION

With respect to the goal of this study, the examination of rejected versus accepted children's friendship quality as perceived from both the children's own and their friends' perspectives, the present data provide some new insights on the links between peer status and friendship quality. In addition to comparing rejected and accepted children's own perceptions of the quality of their friendships, we examined the general degree of perceptual concordance that rejected, average, and popular children show with their mutual friends regarding the quality of their relationships. To this end, we compared the correlations between the children's own and their friends' perceptions of specific features of friendship quality, which reflect the degree of perceptual concordance, or the degree of parallelism, of children's and their friends' ratings on an individual level. In addition, we compared the mean ratings of specific features of friendship quality as given by children and their friends, which provide information about the actual value of children's and their friends' ratings and reflect the degree of perceptual concordance on a group level rather than on an individual level. Taken together, the findings indicate that accepted (i.e., average and popular) children's positive views about the quality of their friendships were generally supported by their friends, whereas this was not the case for rejected children.

As expected, the correlations among the various friendship features as rated by the children themselves did not differ with peer status and they were also quite similar to the correlations among the various friendship features as rated by the children's friends. This finding indicates that children's perceptions of friendship as a complex construct of interrelated subaspects may be rather impervious to children's peer status. This result is also consistent with the finding that rejected children's cognitive conceptions of friendship do not differ significantly from those of accepted children (Bichard et al., 1988). In contrast to those correlational similarities among the sociometric groups within a given perspective, the correlations between the children's own and their friends' perceptions of the

various features of their relationships varied considerably with children's peer status.

Essentially, for both popular and average children, high ratings of a given friendship feature from their own perspective were usually related to high ratings of that feature from their friends' perspective. Notably, except for the perception of conflict, the correlations between popular children's and their friends' perceptions of their relationship were not significantly different from those between average children and their friends. This correlational pattern suggests that, as expected, socially well-adapted children (i.e., those of popular and average status) share a certain degree of mutuality with their friends in their thoughts and emotions about their friendships (Youniss, 1986). This mutuality was not true for rejected children. In fact, the degree of correspondence between rejected children's and their friends' perceptions of friendship quality was so incongruent that the correlations between rejected children's and their friends' perceptions regarding closeness and fun in their relationships were basically zero. In addition, with respect to the remaining friendship features, the correlations between rejected children's and their friends' perceptions were markedly lower on the whole than the corresponding correlations for average and popular children. Those findings support the notion that the deficits in social cognitive skills exhibited by rejected compared to accepted children (e.g., Dodge et al., 1984; Feldman & Dodge, 1987) may transfer to the level of interpersonal understanding within the children's friendship relations.

A similarly compelling picture was revealed by children's and their friends' mean ratings of the various friendship features, which reflect the amount of perceptual concordance on a group level rather than on an individual level. In line with findings by Patterson et al. (1990), and in contrast to findings by Parker and Asher (1993), rejected, average, and popular children did not differ significantly in their mean perceptions of friendship quality. The concordance of the present results with the Patterson et al. (1990) study may be due to the fact that these authors classified the sociometric groups according to the procedure described by Coie et al. (1982), as was done in the present study. In contrast, Parker and Asher (1993) classified their three sociometric groups along a unidimensional measure of peer acceptance, so that the low-accepted group did not explicitly distinguish between rejected and neglected children. As suggested by the results of the Patterson et al. (1990) study, neglected rather than rejected children may display significantly lower ratings of their friendship quality than their accepted peers. This notion is further supported by the markedly high variability of friendship quality within the low-accepted group in the Parker and Asher study.

In contrast to rejected children's own ratings, rejected children's friends, many of whom were not rejected themselves (see also Rizzo, 1988), systematically rated most features of their friendships considerably less positive than did the rejected children themselves. Rejected children's friends' lower ratings may result, on the one hand, from a negative reputational bias held against rejected children (Hymel et al., 1990; Waas & Honer, 1990). On the other hand, rejected children's friends may assess the quality of their friendships less favorably because rejected children may display behavioral deficits even in their friendship interactions, of which rejected children themselves might not be aware. For example, Austin (1985) found that some rejected children more frequently acknowledge and defer to their friends' opinions and actions than do accepted children. Because negotiating among contrasting ideas is an important and stimulating experience in children's interactions with peers (Piaget, 1948; Youniss, 1980, 1986), such overly compliant behavior may actually enervate or bore their friends. As a result, those rejected children may consider their friendships to be close, but their friends hold a less positive view. Most rejected children, however, display rather aggressive, noncompliant styles of social interaction (Asarnow & Callan, 1985; Cantrell & Prinz, 1985; Coie & Dodge, 1988; Coie et al., 1982; Crick & Dodge, 1994; Dodge, 1986), which may have led to less positive views of the relationships from their friends' perspective. For example, this aggressive tendency may lead to aberrant forms of fun (e.g., physical violence as part of practical jokes against others) that are generally not acceptable within the peer group. Thus, although rejected children may believe that their activities are fun, their friends may view their behavior as inappropriate and out-of-line. By the same token, rejected children's aggressive style of social interaction and conflict resolution, which might seem appropriate from the rejected children's own point of view and therefore not solicit increased rates of self-perceived conflict, may be reflected in their friends' higher ratings of conflict within their relationships.

For popular children, a reversed pattern may be in effect. First, the reputational bias in social perception may lead popular children's friends to perceive the relationships with them in an especially favorable light. Second, given the highly developed social skills of popular children (Coie et al., 1982; Crick & Dodge, 1994; Dodge, 1986), being friends with a popular child might indeed be a very rewarding experience, which might be reflected in their friends' positive evaluations. It should be noted, however, that despite those differences between popular children's and their friends' perceptions of closeness and conflict on a group (i.e., mean) level, they still showed a reasonable amount of parallelism with respect

to those as well as other friendship features on the individual (i.e., correlational) level.

Notably, although children's and their friends' ratings of the frequency of play encounters and mutual visits did not always agree as indicated by the correlational pattern, no difference was found in the mean ratings of those features of friendship from the children's own and their friends' perspective, or between sociometric status groups. This finding suggests that the less favorable views of rejected children's friends or the more positive views of popular children's friends regarding their relationships do not seem to be related to differences in the frequency of meetings—on average, all three sociometric groups reportedly played with and visited their friends equally often. Rather, the findings support the notion that the difference between rejected and popular children's friends' perceptions of their relationships indeed may be based on either (a) general perceptual biases toward rejected and popular children, or (b) actual behavioral differences exhibited by those two groups in their friendship interactions.

Overall, the results strongly underline the importance of considering both friends' perspectives when studying the quality of children's friendships (Buhrmester, 1990). In this regard, the study demonstrates that both correlational as well as mean-level differences between children's own and their friends' perceptions can be valuable and sensitive indicators of the degree of perceptual agreement among friends.

Some limitations of the present study need to be pointed out, however, along with suggestions for further research. First, complete independence of the data could not be achieved in the present study due to sample size restrictions. Clearly, future studies with larger samples should be designed to replicate the present findings based on completely independent self-ratings and friend-ratings. Second, the possibility exists that the observed perceptual differences between rejected children and their friends are especially pronounced in our East Berlin sample. Because approximately 95% of the primary-school children in East Berlin attended public day care centers together with their classmates after school until late in the afternoon (Zwiener, 1991), school friends spent much time together, whereas access to friends outside the school setting may have been limited. As a consequence, nonrejected children may have been more likely to maintain school friendships with rejected children than would be the case in other socioenvironmental settings. At the same time, the proposed mechanisms underlying the perceptual discrepancies between rejected children and their friends are likely to be enhanced in this social setting. Future researchers should investigate whether the present findings, especially with respect to children's friendship patterns and mean differences between children's and their friends' perceptions, repli-

cate to the same extent in a different social context where children's peer relationships are less strongly concentrated within the school.

Another issue that may be addressed in future studies is the substantial heterogeneity among rejected children, because this may influence the perceptions of their friendships (e.g., Cillessen, van IJzendoorn, van Lieshout, & Hartup, 1992; French, 1988; Parkhurst & Asher, 1992). For example, aggressive-rejected children display self-serving and positive perceptions, but the opposite is true for withdrawn-rejected children (Boivin & Begin, 1989; Parkhurst & Asher, 1992). Consequently, the aggressive subgroup also may express more positive views about the quality of their friendships, whereas the withdrawn subgroup may hold a more pessimistic view. Those potential differences between subgroups of rejected children may have been concealed in the present study. In addition, future studies with larger samples should be addressed to possible moderating effects of gender or age.

Despite the limitations of the present study, the results provide a further key to understanding the social challenges of rejected children. Specifically, the lack of correspondence in perceived friendship quality between rejected children and their friends highlights yet another potential risk factor in the social world of rejected children. Not only are rejected children, by definition, unfavorably viewed by their peers in general, but so too is the quality of their friendship unfavorably perceived by their friends, even though they mutually consider each other to be friends. Thus, rejected children not only seem to be prone to difficulties in their relations with the peer group as a whole, but their problems also seem to permeate their dyadic friendship relations. Notably, the cross-sectional data used in the present study do not reflect a causal relationship between children's peer status and their friends' perceptions of their relationships. For example, rejected children's personal and behavioral characteristics and the fact that their peer status is known to their friends may influence their friends' perceptions of the quality of their relationships. On the other hand, rejected children's friends may talk to other children about problems in their friendships, thereby contributing to rejected children's low reputation. Thus, rejected children's problems in their peer group and their dyadic friendships may mutually influence each other.

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Appendix

FRIENDSHIP INTERVIEW FACTORS AND ITEMS WITH RESPONSE FORMATS

Closeness

- How often (1, *never*; 2, *seldom*; 3, *sometimes*; 4, *often*)
- ... do you share secrets with this child?
 - ... do you reconcile easily with this child after a fight?
 - ... does this child encourage you when you are sad?
 - ... does this child defend you against others?
- How much do you like this child? (1, *hardly at all*; 2, *somewhat*; 3, *much*; 4, *very much*)
- Would you take this child on a vacation? (1, *yes*; 0, *no*)
- Indicate level of relationship (1, *playmate*; 2, *friend*; 3, *good friend*; 4, *best friend*)

Fun

- How often (1, *never*; 2, *seldom*; 3, *sometimes*; 4, *often*)
- ... do you fool around with this child?
 - ... do you play jokes with this child?
 - ... do you develop good ideas about what to do with this child?

Conflict

- How often (1, *never*; 2, *seldom*; 3, *sometimes*; 4, *often*)
- ... do you quarrel with this child?
 - ... do you disagree with this child?
 - ... are you mad at this child?
 - ... do you call each other names with this child?

Visits

- Have you recently visited this child at home? (1, *yes*; 0, *no*)
- Has this child recently visited you at home? (1, *yes*; 0, *no*)

Have you recently slept over at this child's home? (1, *yes*; 0, *no*)

Has this child recently slept over at your home? (1, *yes*; 0, *no*)

Play Encounters

How often do you meet this child outside school?

(4, *often*; 3, *sometimes*; 2, *seldom*; 1, *never*)