

Parents' Child-Rearing Style and Child's Sociometric Status

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This study examined relationships between parents' child-rearing style, the child's prosocial behavior, and the child's sociometric status. The sample consisted of 112 children (6-11 years of age) and both their parents. Parental behavior in the interaction with the child was observed at home when parents and child worked together in 2 structured tasks. Factor analyses of parental behavior revealed that 2 factors, Authoritative/Democratic and Authoritarian/Restrictive, can be found in the subsamples of mothers and fathers. These 2 dimensions of maternal and paternal behavior appeared to be predictive of both the child's prosocial behavior and sociometric status. Results are discussed in terms of the possible link between parent and peer systems.

A child's acceptance by a peer group plays an important role in his or her social and personality development. Peer rejection seems to be a reasonably stable phenomenon (Coie & Dodge, 1983; Rogosch & Newcomb, 1989) and is predictive of later social maladjustment (Cowen, Pederson, Babigian, Izzo, & Trost, 1973; Parker & Asher, 1987). Most of the research concerned with the determinants of a child's sociometric status in the peer group have focused primarily on children's behavioral and social cognitive characteristics. The role that parents may play in the development and maintenance of their child's sociometric status was generally ignored, although it is logical to assume that at least some of a child's social skills necessary for successful interaction with peers are learned through the parent-child interactions (Hartup, 1979).

Several studies showed that a child's sociometric status in the peer group is related to socialization factors present in the parent-child system (Finnie & Russell, 1988; MacDonald, 1987; MacDonald & Parke, 1984; Parke et al., 1989; Peery, Jensen, & Adams, 1985; Putallaz & Heflin, 1990; Roopnarine & Adams, 1987). Very few studies, however, examined the mediating link in this relationship. What aspects of social competence do children learn in the parent-child setting that transfer directly or indirectly to their relationship with peers? One possibility that has been examined in recent research is that parent-child interaction influences children's sociometric status by affecting the child's social cognitive (or processing) skills, including social problem solving (Pettit, Dodge, & Brown, 1988; Putallaz, 1987) and the child's expectations of the outcome of social strategies (Hart, Ladd, & Burleson, 1990).

However, in the context of the family, the child acquires not only many of the social cognitive skills, but also a behavioral pattern that might be important for a successful adaptation to

the world of peers. In the present study we concentrate on the child's prosocial behavior as a major behavioral variable that could mediate the relationship between parental child rearing and the child's sociometric status. Prosocial behavior was defined as "behaviors that are positively responsive to others' needs and welfare" (Radke-Yarrow & Zahn-Waxler, 1986, p. 208). This aspect of the child's behavior was selected as a mediating link for several reasons. First, although prosocial behavior is not the only behavioral factor related to the sociometric status, it is one that has been most consistently found as a correlate of successful peer relationships in all age groups (Coie, Dodge, & Kupersmidt, 1989; Mize & Ladd, 1988). Second, findings suggest that children's selection of liked and disliked peers depends more heavily on perceived positive qualities than on perceived negative qualities; that is, popular and rejected children are more likely to differ on positive than on negative characteristics and behavioral quality (Bukowski & Newcomb, 1984; Hartup, Glazer, & Charlesworth, 1967; Masters & Furman, 1981). Third, virtually all of the explanations of prosocial behavior have assumed that it is socialized behavior (Bar-Tal, 1976; Staub, 1978, 1979). Child-rearing studies showed that parents play an important role in the development of children's prosocial disposition and behavior (see for review, Radke-Yarrow, Zahn-Waxler, & Chapman, 1983). Because we wanted in this study to examine the mediating link in the relationship between parental child rearing and the child's sociometric status, it seems reasonable to focus on a behavioral characteristic that is related to the child's sociometric status but that is at the same time also related to differential child rearing.

The socialization research showed that certain parental practices (a high degree of parental affection and democratic child rearing) may stimulate the child's positive orientation toward others (Radke-Yarrow et al., 1983). The child's prior experience in situations when he or she required help seems to be especially important for the development of prosocial behavior and for interactions with peers that involve helping behavior. Parental reactions to their children's distress and need for help were found to be related to the child's prosocial behavior (Zahn-Waxler, Radke-Yarrow, & King, 1979) and to the child's social

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competence (Roberts & Strayer, 1987). For these reasons, we wanted to examine actual parental behavior in a situation in which the child required parental help. Such a situation was created by presenting the child with a task that was too difficult for him or her to solve alone. We assumed that children who are being adequately helped and supported by their parents in such situations are more likely to display positive social behavior in interaction with their peers, that is, that children's experience at home would be carried forward to their peer relationships in a school setting. On the other hand, such a task, as a potentially mild frustrating situation for a child, might increase the likelihood that parents would use some controlling strategies to prevent a child from going off the task, and parental control is also crucial in terms of the development of children's social competence (Putallaz & Heflin, 1990; Radke-Yarrow et al., 1983).

Both components of parental behavior, support and control, are incorporated in the two major parenting styles (i.e., parental dominant mode of interaction with their children) identified in child-rearing literature: *authoritative/democratic* and *authoritarian/restrictive* parenting (Baumrind, 1971, 1982; Maccoby & Martin, 1983). Authoritative parents attempt to direct the child in a rational, issue-oriented manner by explaining the reasons for setting up the rules. They recognize the child's individuality, encourage verbal give-and-take, and engage together with the child in joint decision making. Another aspect of authoritative parenting is a high degree of warmth or acceptance. Authoritarian parents, on the other hand, exhort the child to follow rules without explanation, restrict the child's autonomy, and reserve decision making for themselves only. They also tend to be less responsive and accepting toward their child.

Because of the evidence indicating that the patterns rather than separate dimensions of parental behavior might be more relevant in the socialization research (i.e., more predictive of the child's behavior), we first examine whether more broadly conceptualized patterns (authoritative/democratic and authoritarian/restrictive) can be identified in parental behavior during the interaction with the child.

Second, we examined relationships between parents' child-rearing style, the child's prosocial behavior, and the child's sociometric status. We expected that authoritarian parenting would relate negatively to the child's prosocial behavior and sociometric status, whereas authoritative child-rearing style would show positive relationship with the child's prosocial behavior and sociometric status.

Finally, we compared three possible models of the relationship between parents' child-rearing style, the child's prosocial behavior, and the child's sociometric status.

The first model hypothesizes that the impact of child rearing on the sociometric status is completely indirect and is entirely mediated by the child's prosocial behavior. If this model is valid, no residual path of influence leading from child rearing to sociometric status should be found after partialling out the effects of the child's prosocial behavior.

The second model proposes that child rearing will have both direct and indirect effects on the child's sociometric status. According to this model, prosocial behavior should partially mediate the relationship between child rearing and sociometric status. Given the fact that the child's status in a peer group has multiple causes and that prosocial behavior is not the only fac-

tor that might affect sociometric status and might be affected by child rearing, this model appears to be more realistic than the first one. If this model is valid, then prosocial behavior should significantly decrease the relationship between child rearing and sociometric status, rather than eliminating this relationship altogether (Baron & Kenny, 1986).

The third model examines the hypothesis that parents' child-rearing style affects both the child's prosocial behavior and his or her sociometric status, but the relationship between prosocial behavior and sociometric status is spurious, owing to their common association with child rearing. If this model is valid, then prosocial behavior would not predict sociometric status after partialling out the effects of child rearing.

In the first model the child's prosocial behavior is seen as a true mediator, that is, as a necessary component of that relationship. In the second model, prosocial behavior is a potent mediator; however, it is only part of the explanation of the relationship between child rearing and sociometric status. Finally, in the third model, prosocial behavior is not a mediator; after eliminating the effects of child rearing, prosocial behavior has no effect on sociometric status. Because of evidence indicating that differential patterns of maternal and paternal behavior are associated with their children's social competence (MacDonald, 1987; MacDonald & Parke, 1984; Parke et al., 1989), these models were tested separately for each parent.

Method

Subjects

The sample consisted of 112 children (6 to 11 years of age) and both their parents, who were selected from an original pool of 1,158 children attending first, third, or fifth grade of 22 elementary schools in The Netherlands. The target child in the study was selected on the basis of sociometric test results and was classified as either popular ($N = 58$) or rejected ($N = 54$) in the peer group by using the sociometric nomination method administered at school and the classification criteria suggested by Coie, Dodge, and Coppotelli (1982). There were 29 boys and 29 girls in the popular group and 28 boys and 26 girls in the rejected group. We sent families a letter describing the study and requesting their involvement. Approximately 40% of the contacted families agreed to participate. The participating families came predominantly from middle or higher social class.

Measures

Sociometric status. Each child was asked to name three classmates whom he or she liked most and then three whom he or she liked least. The total amount of positive nominations (the acceptance score) and negative nominations (the rejection score) received by each child were calculated and were transformed into standardized scores. Each child was also assigned a social preference score (the sum of a child's standardized acceptance score minus his or her standardized rejection score), which was calculated and standardized within each classroom.

The criteria for selection into two status groups were as follows. The *popular* group consisted of children whose preference score was greater than 1.0, acceptance score was greater than 0, and rejection score was less than 0. The *rejected* group consisted of children who received a social preference score less than -1.0, a rejection score greater than 0, and an acceptance score less than 0.

Prosocial behavior measures. The child's prosocial behavior in a peer group was assessed in this study by teachers and by peers. Teacher

ratings are often used as a valid and reliable method of estimating differences in the naturally occurring prosocial behaviors of children at school. Teachers as a source of information are more likely than peers to report on specific aspects of social behavior, but they might put more emphasis on the child's interactions with adults than with peers. Peers, on the other hand, have better access to relevant peer situations but they are, especially in the case of younger children, only capable of describing the general nature of their relationship in more global, relational terms, such as being helpful. These overall helpfulness nominations were found to be highly related to measures of peer acceptance (Ladd & Oden, 1979). Because teacher ratings and helpful peer nominations could assess different aspects of the child's prosocial behavior, we included both measures as an indication of the child's behavior in interaction with peers.

Immediately following the two sociometric items, children were asked to nominate three classmates who are the most helpful (in general) to other children in the class. The total number of helpful nominations received by each child was calculated and standardized within each classroom. This standardized score was used as a measure of helpfulness according to peers.

Another measure of children's prosocial behavior in a peer group consisted of teachers' reports. For each child who participated in the study, the teachers completed the Prosocial Behaviour Questionnaire developed by Weir and Duveen (1981). The questionnaire consists of 20 items to be rated on a 5-point scale according to how descriptive each item was of a given child. The items included a number of interpersonal behaviors (helping, sharing, giving, cooperating, and responding to distress) whose common theme is a concern for others (e.g., "Will try to help someone who has been hurt," "Shows sympathy to someone who has made a mistake," or "Offers to help other children who are having difficulty with a task in the classroom"). The internal consistency (Cronbach's alpha) for teachers' report was .94. Each child was assigned a mean score on 20 items as a measure of prosocial behavior according to a teacher.

Observational measures. The observation session took place at subjects' homes during early evenings when both parents and the target child were present at home. Mothers and fathers were observed at the same time while working together with the child on two puzzles: Wiggly block (a wooden jigsaw cube consisting of nine blocks) and Tangram puzzle (consisting of seven geometrical pieces that could be put together to form different figures). Both puzzles were quite difficult for the child to complete alone, so parental help was required for successful completion. Parents were instructed to provide whatever help they felt their child needed, but they were asked not to touch the pieces of the puzzle, because the child should do this by herself or himself. Each of these two tasks lasted until the child completed the puzzle or when 10 min had elapsed. If the child completed both puzzles within less than 20 min, another Tangram puzzle was presented to ensure that the observation time for each family was at least 20 min.

During the observation, the observer noted the frequency of two nonverbal categories of parental behavior: *nonverbal support* (nonverbal approval, physical affection, laughter, smiling, brief utterances indicating positive mood, or positive tension release) and *nonverbal negative* (physical takeovers, brief utterances indicating negative mood, annoyance, disapproval, or negative tension release).

After the observation session, the observer completed six rating scales separately for mother and for father. For the development of these rating scales, a variety of concepts was selected from socialization literature and studies on parent-child interaction. Each rating scale was a 5-point scale, provided with detailed description of 2 points on the scale (low-high). The rating scales for parental behavior were *warmth* (the degree to which the parent displays affection, positive regard, and provides emotional support); *responsiveness* (the parent's readiness or ability to recognize, interpret, and adequately respond to

the child's signals); *power assertion* (the degree to which the parent exercises power to obtain compliance from the child); *induction* (giving reasons and explanations for requiring a change of child's behavior); *demandingness* (the extent to which the parent demands from the child to act maturely and independently); and *restrictiveness* (the degree to which the parent imposes strict rules and prohibitions and puts limits to the child's behavior).

The tapes from a previous study on mother-child interaction during the solving of Wiggly-block puzzle were used for an extensive observers training. Before the family visit, the observers' agreement for the categories of nonverbal behavior and the ratings was above .80. Observers who visited the families were blind to the sociometric status of the child. The tape recordings of the observation session were later rated by another rater as an additional precaution to check rater agreement for rating scales. Interrater reliabilities for each scale were between .64 to .92.

A tape recording was made of verbal interaction, which was later transcribed and coded. Based on previous research and on the observations from the pilot study, nine categories for parental verbal behavior were defined. The unit of analysis used for coding was parental utterance. All of the behaviors recorded for parents were their interactions with the child. The protocols were scored by two independent coders, who were blind to the child's sociometric status classification (overall Cohen's kappa is .84).

The parental verbal behavior coded included the following categories (the Cohen's kappa values for each category are in parentheses): *positive remarks-task* (.93): positive remarks or verbal reward related to the task behavior (e.g., "It is good" or "That is OK"); *positive remarks-person* (.91): positive remarks about personal functioning of the child (e.g., "You are doing well" or "Smart boy."); *support* (.91): offering help, support, active concern, sympathy, and encouragement (e.g., "It is difficult, isn't it?" "We are going to make it," or "Shall I hold it for you?"); *prohibitions* (.85): negative commands or restrictions (e.g., "Don't do that" or "Don't touch it"); *directives* (.81) explicit or implicit commands or orders—the child is not given freedom of choice (e.g., "Put it down" or "You must take this one"); *negative remarks-task* (.66): negative remarks related to the task behavior (e.g., "It is not good"); *negative remarks-person* (.67): negative remarks about personal functioning of the child (e.g., "You are not trying" or "You are so clumsy"); *suggestions* (.89): vague instructions in a nonimperative manner, allowing the child freedom of choice; questions stimulating the child to think about the solution (e.g., "Maybe you should try to find corners first" or "How should the block at the corner look like?"); and *providing information* (.90): explanations on how something works or should be done (e.g., "This is the block that comes in the middle, because it has two right sides.>").

Because analysis of parental verbal and nonverbal behavior indicated no significant difference in frequencies and type of interaction between the two puzzles, the data from both tasks were combined in further analysis.

Results

Factor Analysis of Parental Behavior Variables

To reduce the number of variables entered into the analysis, we first factor analyzed 17 variables of parental behavior (6 rating scales and 11 behavioral categories). Principal components factor analyses were conducted separately for the mother and father data. In both subsamples the analyses isolated two factors. In the subsample of mothers, the two-factor solution accounted for 52.4% of the variance, whereas the same two factors explained 57.3% of the variance in the subsample of fathers. The factor loadings based on Varimax rotation and the

Table 1
Factor Loadings of Observational Variables in
Subsamples of Mothers and Fathers

| Variable | Mothers | Fathers |
|-------------------------------------|---------|---------|
| Factor 1: Authoritative/Democratic | | |
| Positive remarks–person | .40 | .49 |
| Support | .71 | .66 |
| Suggestions | .74 | .85 |
| Positive remarks–task | .69 | .82 |
| Providing information | .59 | .76 |
| Induction | .78 | .69 |
| Warmth | .72 | .52 |
| Responsiveness | .75 | .57 |
| Demandingness | .65 | .52 |
| Nonverbal support | .42 | |
| Factor 2: Authoritarian/Restrictive | | |
| Negative remarks–person | .51 | .67 |
| Prohibitions | .77 | .63 |
| Nonverbal negative | .58 | .60 |
| Directives | .75 | .74 |
| Negative remarks–task | .74 | .70 |
| Power assertion | .71 | .73 |
| Restrictiveness | .73 | .85 |
| Positive remarks–task | .49 | |
| Providing information | .55 | |
| Nonverbal support | | –.54 |
| Warmth | | –.69 |
| Responsiveness | | –.68 |
| Demandingness | | –.49 |

Note. Only factor loadings $\geq .40$ are reported.

labels for each factor are presented in Table 1. An inspection of Table 1 indicates a high degree of similarity between the solution across sample, that is, comparable factor structure can be found in subsamples of mothers and fathers.

The first factor, Authoritative/Democratic, which had high positive loadings of the variables including positive remarks–person, support, suggestions, positive remarks–task, providing information, induction, warmth, responsiveness, demandingness, and nonverbal support (only for mothers) appeared to tap parental tendency to be authoritative or democratic in the interaction with the child. The second factor, Authoritarian/Restrictive, seemed to indicate authoritarian or restrictive parental style because of the high positive loadings of the variables negative remarks–person, prohibitions, nonverbal negative, directives, negative remarks–task, power assertion, and restrictiveness, and, in the subsamples of fathers, the high negative loadings of the variables nonverbal support, warmth, responsiveness, and demandingness.

We then computed the factor scores for each subject using the short regression method. These factor scores were used in subsequent analyses as measures of parental behavior.

Status Differences in Child's and Parent's Measures

To examine whether popular and rejected children differ in prosocial behavior, we conducted a multivariate analysis of variance (MANOVA). Wilk's criterion was used as the estimate of

multivariate effects. A significant multivariate effect for the child's status was found for the prosocial behavior measures, $F(2, 109) = 31.03, p < .001$. Univariate tests showed significant differences between popular and rejected children for both peer nominations, $F(1, 110) = 28.94, p < .001$, and teacher ratings of prosocial behavior, $F(1, 110) = 39.96, p < .001$, with popular children exhibiting more prosocial behavior than rejected children.

Next, we examined whether parents of popular and parents of rejected children differ in their child-rearing styles. A significant multivariate effect of status emerged for both maternal, $F(2, 109) = 57.58, p < .001$, and paternal, $F(2, 109) = 59.91, p < .001$, behavior measures. An examination of the univariate results showed that parents of popular children tended to be more democratic/authoritative: mothers, $F(1, 110) = 65.97$ and fathers, $F(1, 110) = 22.93$, both $ps < .001$, when interacting with the child. Parents of rejected children, on the other hand, were found to score higher on the authoritarian/restrictive factor: mothers, $F(1, 110) = 17.76$ and fathers, $F(1, 110) = 59.52$, both $ps < .001$.

Intercorrelations Between Parental Child-Rearing, Child's Prosocial Behavior, and Sociometric Status

In the next step of analyses, the relationships between parental behavior, child's prosocial behavior, and his or her sociometric status were examined. The intercorrelations between these variables are presented in Table 2.

As can be seen in Table 2, parental behavior measures were associated in the expected direction with the child's measures: teacher ratings, helpful peer nominations, and sociometric status. Authoritarian/restrictive parents seemed to have children who were rejected by their peers and who were viewed by teacher and peers as less prosocial. On the other hand, authoritative/democratic parenting appeared to be associated with a child being prosocial and popular in a peer group. Sociometric status seemed to be related to the child's prosocial behavior as assessed by both peers and teachers. Those two measures of the child's behavior in a classroom—helpful peer nominations and the teacher ratings of the child's prosocial behavior—were also significantly related.

In the next set of analyses, we computed multiple correlations to examine the predictability of the child's sociometric status from each set of predictors. First, we examined the predictability of the child's sociometric status from the two prosocial behavior measures. Children's prosocial behavior (judged by their teachers and by their peers) accounted for a significant proportion of variance in sociometric status ($R = .60, p < .001$). Second, multiple correlations were computed between sociometric status and parental child-rearing style. Child's sociometric status was significantly predicted from both maternal and paternal behavior (for mothers, $R = .72$; for fathers, $R = .72$, both $ps < .001$). These results indicate that authoritative parents tended to have children who are popular with their classmates. On the other hand, children who were rejected in a peer group were more likely to have authoritarian/restrictive parents.

In further analyses the predictability of each of the prosocial behavior measures from parental child-rearing measures was

Table 2
Intercorrelations Between Parental Behavior and Child's Prosocial Behavior and Sociometric Status

| Variable | 1 | 2 | 3 | 4 | 5 |
|--|-------|--------|--------|--------|--------|
| 1. Authoritative/Democratic | — | .00 | .14 | .19* | .41** |
| 2. Authoritarian/Restrictive | .00 | — | -.36** | -.36** | -.59** |
| 3. Helpfulness (peer nominations) | .35** | -.20* | — | .31*** | .46*** |
| 4. Prosocial behavior (teacher report) | .33** | -.11 | .31** | — | .52*** |
| 5. Sociometric status | .61** | -.37** | .46** | .52** | — |

Note. Results for mothers are below the diagonal, results for fathers are above the diagonal.

* Intercorrelations for these child variables are the same above and below the diagonal.

* $p < .05$. ** $p < .001$.

assessed. The prosocial behavior according to teachers was significantly predicted from both maternal ($R = .35, p < .01$) and paternal behavior measures ($R = .41, p < .001$). Examination of the magnitudes of the beta coefficients suggested that for mothers this effect was attributable to authoritative parenting style ($\beta = .33, p < .001$), whereas for fathers the effect was mostly due to the authoritarian parenting ($\beta = -.36, p < .001$). The beta coefficient for authoritarian parenting for mothers did not reach significance ($\beta = -.11, ns$). The authoritative parenting for fathers was marginally significant ($\beta = .19, p < .10$). Similar results were obtained for the second child behavior measure, helpful peer nominations. Maternal behavior made a significant contribution to the prediction of helpfulness according to peers ($R = .41, p < .001$). Again, this was due to the effect of the authoritative/democratic factor ($\beta = .35, p < .001$), whereas the authoritarian style made a small, marginally significant contribution ($\beta = -.20, p < .10$). Child's helpfulness was also significantly predicted by paternal behavior ($R = .38, p < .001$), especially by the authoritarian factor ($\beta = -.36, p < .001$). The beta coefficient for authoritative parenting was not significant ($\beta = .14, ns$). Thus, mothers who were more democratic and accepting had children who exhibited more prosocial behavior in a peer group. The more restrictive the father was, the less likely the child was to behave in a prosocial manner toward his or her peers.

Testing the Models

To test the first model hypothesizing that the relationship between child rearing and the child's sociometric status is completely mediated by the child's probehavior in interaction with peers, we conducted a stepwise regression analysis, separately for mothers and for fathers. The measures of the child's prosocial behavior were entered first into each regression equation, followed by the parental behavior scores. If the first model were correct—that is, if the child's prosocial behavior completely mediated the relationship between child rearing and the child's sociometric status—then parental behavior scores should not contribute significantly to sociometric status after the variation caused by prosocial behavior is partialled out. The results of the regression analyses are presented in Table 3.

As shown in Table 3, the prosocial behavior measures in the first step accounted for a significant proportion of variance in the criterion. However, subsequent entry of the parental behav-

ior measures significantly increased the accuracy with which the child's sociometric status could be predicted. Thus, the data were not consistent with the first model. After the effect of prosocial behavior was removed, parental child rearing still accounted for a significant proportion of variance in the child's sociometric status. In other words, a residual direct path connected child rearing and sociometric status.

Examination of the changes in the magnitude of the beta coefficients showed that the effects of child rearing were less when prosocial behavior was controlled than when child rearing alone predicted the child's sociometric status. This suggested that some mediation did take place. The mediating effect of prosocial behavior was greater for mothers' authoritative style (a change from .61 to .47) and fathers' restrictiveness (-.59 to -.45) than for mothers' restrictiveness (-.37 to -.31) and fathers' authoritative/democratic style (.41 to .34). These findings seem to support the second model, proposing that child rearing had both direct and indirect influence on the child's sociometric status.

However, the possibility exists that parental child-rearing style affects both sociometric status and prosocial behavior and that impact of prosocial behavior on sociometric status is an artifact of their common association with the parental child-rearing style (third model). This would be the case if the effect of prosocial behavior on sociometric status ceased to exist after partialling out the effects of child rearing. To examine this model, we performed another series of multiple regression analyses. The reverse order of entry was used, that is, the parental behavior measures were entered first, followed by the prosocial behavior measures (Table 4).

After partialling out the variation caused by the parental style (maternal as well as paternal), the child's prosocial behavior still significantly predicted the child's sociometric status. That is, the child's prosocial behavior accounted for unique variance in the sociometric status, above and beyond that predicted by parental child-rearing style. The third model, thus, did not receive support.

Discussion

This study provided further evidence of differences in the parent-child interaction of popular and rejected children. The general presence of strong differences lends further support to the notion that popular and rejected children have different

Table 3
Summary of Multiple Regression Analyses Predicting Sociometric Status From Child's Prosocial Behavior and Parental Child-Rearing Behavior

| Predictors | β | Multiple R | R ² change | F |
|-------------------------------------|---------|------------|-----------------------|--------|
| Child's prosocial behavior | | | | |
| Helpfulness (peer nominations) | .33 | | | |
| Prosocial behavior (teacher report) | .41 | .60 | .36 | 31.03* |
| Parental child-rearing behaviors | | | | |
| Mothers | | | | |
| Authoritative/Democratic | .47 | | | |
| Authoritarian/Restrictive | -.31 | .78 | .25 | 34.73* |
| Fathers | | | | |
| Authoritative/Democratic | .34 | | | |
| Authoritarian/Restrictive | -.45 | .78 | .24 | 33.41* |

* $p < .001$.

family experience. The overall analysis of parental behavior indicated that the parents of popular children are more likely to adopt an authoritative/democratic style when interacting with their children, that is, to use indirect and persuasive verbal strategies such as suggestions and explanations and to provide more support, encouragement, and positive reinforcement. They seem to be more sensitive to the child's signals and more involved with their child. Parents of rejected children tend to endorse an authoritarian/restrictive style. They tend to display fewer positive emotions in response to their child and are more likely to criticize their child's personal functioning and task behavior, without providing information why something is wrong and how it should be done. When trying to influence the child's behavior, they rely on direct commands, prohibitions, and physical takeovers, doing the task for their children rather than aiding the children to discover their own solutions.

Parental child-rearing style was linked not only to the child's sociometric status, but also to the child's social behavior in a peer group. The results concerning the relationship between parental behavior and the child's prosocial behavior are consistent with some previous findings (Eisenberg-Berg & Mussen,

1978; Hoffman & Saltzstein, 1967; Mussen, Harris, Rutherford, & Keasey, 1970; Staub, 1979). Democratic child rearing and a positive affectionate relationship seem to foster the child's prosocial development.

The first model that we tested to examine the link between parents' child rearing, child's prosocial behavior, and sociometric status suggested that the impact of child rearing on sociometric status would be completely indirect, being mediated entirely by the child's prosocial behavior. Little support was found for this model. Authoritative and authoritarian parenting seem to be linked both indirectly and directly to sociometric status. Regarding the indirect link, it is possible that a warm and supportive parent models an interactional style that a child imitates, not only in the context of parent-child relationship but also in other settings (e.g., school). The parents who interact with their child in a more democratic style and whose relationship with the child is based on mutual give-and-take might better prepare their child for reciprocity, which characterizes the peer relationships. On the other hand, restrictive parents may provoke negative responses of the child (Kuczynski, Kochanska, Radke-Yarrow, & Girnius-Brown, 1987) or may effec-

Table 4
Summary of Multiple Regression Analyses Predicting Sociometric Status From Parental Child-Rearing Behavior and Child's Prosocial Behavior

| Predictors | β | R | R ² change | F |
|-------------------------------------|---------|-----|-----------------------|--------|
| Mothers | | | | |
| Parental child-rearing behaviors | | | | |
| Authoritative/Democratic | .61 | | | |
| Authoritarian/Restrictive | -.37 | .72 | .51 | 57.58* |
| Child's prosocial behavior | | | | |
| Helpfulness (peer nominations) | .28 | | | |
| Prosocial behavior (teacher report) | .13 | .78 | .10 | 13.83* |
| Fathers | | | | |
| Parental child-rearing behaviors | | | | |
| Authoritative/Democratic | .41 | | | |
| Authoritarian/Restrictive | -.59 | .72 | .52 | 59.93* |
| Child's prosocial behavior | | | | |
| Helpfulness (peer nominations) | .17 | | | |
| Prosocial behavior (teacher report) | .23 | .78 | .09 | 11.46* |

* $p < .001$.

tively suppress their child's negative behaviors (e.g., aggression) at home, but it is likely that these behaviors would seek outlets outside the home, particularly at school (Loeber & Dishion, 1984).

The results suggest that prosocial behavior is only part of the explanation for the association between parental child rearing and a child's sociometric status; that is, child rearing has an independent impact on sociometric status that was not accounted for by the child's prosocial behavior. Parents probably influence their child's sociometric status in a number of ways in addition to the aspect of social behavior assessed here. A variety of other behavioral skills (e.g., social approach pattern, initiating and maintaining relationships, and conflict resolution strategies), which are found as correlates of the child's sociometric status (Dodge, 1983), might also be learned within the family system. Given the importance of social cognition for social effectiveness, rejected children probably lack social cognitive as well as behavioral skills (Rubin, 1982). It is possible that parents influence not only the child's behavior, but also the way in which the child conceptualizes social relationships and interactional partners (adults as well as peers). Assessment of these social cognitive and behavioral variables, in addition to the child's prosocial behavior with peers, should lead to a better understanding of the processes by which parents affect their child's peer relationships.

It should be noted that this study examined concurrent relationships between parent-child interactions and measures of the child's social competence, and therefore, the question of the direction of effects still remains. For example, the behavioral differences between the parents could arise from genuine differences in the interactional style of the two groups of parents. An alternative explanation is that popular and rejected children differed in their behavior during the observation session, and the results for parents could have arisen from these differences. The model that we tested is intuitively appealing and consistent with prevailing theories of socialization. The statistical analysis, however, supported not only this "indirect-and-direct effects" model but also an alternative model that assumes that the child's characteristics have impact on parental interactional styles. Reliance on data collected at only one time limits the extent to which causal relationships can be investigated. In order to fully address this direction-of-effects issue an additional, longitudinal research is needed.

Nevertheless, an important contribution of this study consists of providing the evidence that both the child's prosocial behavior and the parents' child-rearing style should be considered when examining the child's success or failure in peer relationships. Previous research focused almost exclusively on the mothers' behavior. Our data point out that fathers play an important role in the child's development of social competence. The associations between paternal behavior and child's social competence with peers were as strong as the associations between maternal behavior and child's measures. Studies that also involved fathers came to similar results (MacDonald, 1987; MacDonald & Parke, 1984; Parke et al., 1989; Roopnarine, 1987). This stresses the importance of including fathers in any further socialization research.

Our findings highlight the importance of preventive and intervention programs for rejected children. First, even though

there is enough evidence that rejected children have more negative interactions with their peers and consequently do not profit from peer interaction in the way popular or average children do, the results of this study suggest that rejected children have more negative interactions with their parents as well. It seems that the whole social network of rejected children is characterized by unagreeable and conflictual relationships. This makes it obvious that the rejected children are twice at risk and that intervention efforts to help these children are necessary.

Second, when recommending the intervention strategies, it should be kept in mind that the problems rejected children experience in peer relationships may, at least in part, be related to the family system. The intervention that is directed only to an individual child (such as social skill training) may be only partially successful. If the quality of the parent-child interactions is not changed, it is possible that the child would soon be drawn back to his or her old behavior repertoire.

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