# A Developmental Analysis of the Relation between Peer Acceptance and Both Interpersonal Understanding and Perceived Social Self-Competence

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KURDEK, LAWRENCE A., and KRILE, DONNA *A Developmental Analysis of the Relation between Peer Acceptance and Both Interpersonal Understanding and Perceived Social Self-Competence* CHILD DEVELOPMENT, 1982, **53**, 1485–1491 This report explored the relation between children's peer acceptance and both interpersonal understanding and perceived social self-competence in samples of children grade 3–8 In addition, it examined correspondences between pairs of mutual friends, unilateral friends, and nonfriends for these 2 variables Interpersonal understanding showed significant developmental increases, girls performed significantly better than boys Children's favored peer status was related to high levels of both interpersonal understanding and perceived social self-competence, with the relation between peer acceptance and interpersonal understanding being stronger for older than for younger children Compared with unilateral friends and nonfriends, mutual friends were more similar to each other on both interpersonal understanding and perceived social self-competence Results are interpreted in light of recent conceptual and methodological advances in the study of children's peer relations

Much recent work in the area of social cognitive development has addressed the issue of what social cognitive skills are related to effective interpersonal competence When compared with unpopular children, popular children have been found to be more adept at knowing how to initiate a friendship, communicating effectively, integrating themselves into a group conversation, knowing of peer norms and values, inferring and vicariously experiencing others' affective states, constructing alternative interpersonal goals, monitoring their social impact, and matching their social skills to the demands of a particular situation (Asher & Renshaw 1981, Gottman, Gonso, & Rasmussen 1975, Ladd & Oden 1979, Marcus 1980, Peery 1979, Rubin 1972) That social cognitive skills have a causal relation to interpersonal competence has been demonstrated by social skills training studies (Conger & Keane 1981, Urbain & Kendall 1980, Weissberg, Gesten, Rapkin, Cowen, Davidson, Flores de Apodaca, & McKim 1981)

Although these studies have forged a closer merger between social cognition and social behavior (cf Dweck 1981), several issues remain Four are addressed in the two studies described in this report First, while there is evidence that mature social cognitive development is related to favored peer status, further information is needed on the specific social cognitive skills that contribute to this relation (Conger & Keane 1981) Selman (1980, 1981) has formulated a developmental model of children's interpersonal understanding, which describes qualitative changes in conceptions both of individuals as psychological organisms and of close friendships The studies reviewed above hint at the importance of these areas and provide the rationale for systematically studying the extent to which interpersonal reasoning is related to favored peer status

A second issue concerns the use of self-report measures in the social skills literature Despite long-standing views that self-perception may be related to how one sees oneself as perceived by others (Mead 1934, Selman 1980), there are few reliable and valid self-report inventories used in the social skills literature (Green & Forehand 1980) An area of self-evaluation particularly relevant to children's peer status is perceived social self-

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competence (Harter 1982) A child with a positive social self-image may be likely to approach and be approached by others, whereas a child with a negative social self-image may be reticent to initiate social contact and may even elicit rejecting behavior from others (Fine 1981, Putallaz & Gottman 1981) In both studies in this report we explored the relation between perceived social self-competence and actual peer acceptance

A third issue is based on Dweck's (1981) speculations that children's friendships are based on psychological similarity There is consistent evidence that similarity or complementarity in attitudes, ideals, and values are related to interpersonal attraction and relationship stability in adults (Bentler & Newcomb 1978, Hill, Rubin, & Peplau 1979), but study of similarity in children's friendships has revolved around concrete dimensions such as age, sex, size, and physical maturity or attractiveness rather than more abstract psychological dimensions (cf Davitz 1955, Hartup 1970) Here we explored the possibility that children who nominate each other as friends (mutual friends) would be more similar to each other in levels of interpersonal understanding and perceived social self-competence than pairs of children in which either one child did not reciprocate the friendship nomination of the other child (unilateral friends) or a child nominates another child as someone he or she would *not* want as a friend (nonfriends) [1] Similar levels of interpersonal understanding and perceived social self-competence might underscore the reciprocal effects these variables have in the friendship process

The final issue explored in this pair of studies is developmental trends in the relation between social skills and peer acceptance Most studies investigating this relation have combined children of various ages in a single group, precluding the discovery that certain social skills are more predictive of children's peer status at one developmental period than at another (cf Conger & Keane 1981, Dweck 1981, Putallaz & Gottman 1981) Given that older children's friendship concepts are more psychologically based (Selman 1981), we asked if interpersonal understanding would be a stronger predictor of peer acceptance in older than in younger children Perceived social self-competence does not undergo similar dramatic developmental changes (Harter 1982), so we did not expect it to relate differentially to the peer status of younger and older children

We restricted our sample to third through eighth graders because children in this age interval can be given group-administered measures We collected data from two samples Sample 1 was third through eighth graders who completed an interpersonal understanding measure focused primarily on conceptions of individuals as psychological organisms For these children, peer acceptance was assessed by both positive and negative peer nominations Sample 2 was an independent replication sample for which we refined measures of interpersonal understanding and peer status The fourth- through seventh-grade children in this sample completed an interpersonal understanding measure focused on both conceptions of individuals and notions of close friendships For these children, peer acceptance was assessed by peer ratings and by both positive and negative peer nominations Several authors have reported that peer ratings are more sensitive indexes of peer status than peer nominations (Green, Forehand, Beck, & Vosk 1980, Hallinan 1981)

## Method

*Subjects*

Sample 1 was composed of 34 third graders (17 boys, 17 girls, mean age = 8 58 years), 34 fourth graders (21 boys, 13 girls, mean age = 9 69 years), 41 fifth graders (21 boys, 20 girls, mean age = 10 65 years), 17 sixth graders (7 boys, 10 girls, mean age = 11 75 years), 39 seventh graders (18 boys, 21 girls, mean age = 12 67 years), and 45 eighth graders (19 boys, 26 girls, mean age = 13 80 years) All 210 children were white and middle class and attended the same Catholic grammar school

Sample 2 was composed of 30 fourth graders (16 boys, 14 girls, mean age = 10 19 years), 24 fifth graders (9 boys, 15 girls, mean age = 11 11 years), 18 sixth graders (9 boys, 9 girls, mean age = 11 90 years), and 31 seventh graders (14 boys, 17 girls, mean age = 13 07 years) Like the children in sample 1, all 103 children in sample 2 were white and middle class and attended the same Catholic grammar school.

[1] A balanced analysis would have included the issue of similarity between children who chose each other as nonfriends (mutual nonfriends) However, such reciprocity occurred too infrequently (a mean of 1 2 mutual nonfriends pairs across all grade/sex groups) to carry out the analysis

*Materials and Procedure*

Three measures were group administered in one session to children in both samples in their respective classrooms in the following standard order

*Interpersonal understanding*—After viewing a 6-min sound filmstrip about a boy's interpersonal dilemma, children in sample 1 wrote their answers to 10 questions, derived from Selman (1980), which were read aloud Eight questions covered the individuals domain of interpersonal understanding (two questions each on subjectivity, self awareness, personality, and personality change) and two questions covered the friendship domain and focused on conflict resolution [2] For each question, responses and justifications were coded as representing one of three broad developmental levels derived from Selman (1980) Percentage of perfect agreement ([number of agreements − number of disagreements / total possible number of judgments] × 100) between two independent ratings of all protocols was 98% Given the high internal consistency of the total score (Cronbach's $\alpha = 75$), a summary score was used in all analyses

For the children in sample 2, the assessment of the friendship domain was expanded to include aspects of friendship formation, closeness and intimacy, trust and reciprocity, jealousy and exclusion, and friendship termination Two questions were included for each aspect The scoring of the total 20 responses and justifications was revised to reflect each of Selman's five levels of interpersonal understanding Percentage of perfect agreement between two independent ratings of all protocols was 96% (Cronbach's $\alpha = 69$ for the total score)

*Peer status nomination*—Children in sample 1 were asked to think of same-sex peers who were in the same grade at their school This task was facilitated by all classmates' being present in the same room For each of 10 questions, children were asked to write down the first and last names of two children These questions represented positive and negative nominations from areas including friend, playmate, free-time partner, work mate, and best friend The total number of both positive and negative nominations was derived from each area Because the number of children at each grade level varied, these two scores were converted to $z$ scores on the basis of each grade-sex group The number of positive and negative nominations was consistent across the five content areas (mean $r$'s = 58 and 78, respectively), so only total positive and total negative nomination scores were retained

For children in sample 2, similar procedures were followed with the exception that positive and negative nominations were obtained only for the areas of playmate, workmate, and best friend The frequency of positive and negative nominations was again highly consistent across these areas (mean $r$'s = 78 and 79, respectively), so only total positive and total negative nomination $z$ scores (based on each grade-sex group) were retained In addition, children in sample 2 rated each same-sex classmate on a five-point scale (1 = don't like to, 5 = like to a lot) in response to the questions "How much do you like to play [work] with this boy [girl] at school?" All play ratings were completed first Because the play and work ratings were highly correlated ($r = 93$), a total peer rating score was derived by summing the play and work ratings

On the basis of children's positive or negative nominations in the friend and best friend content areas, three classroom friendship groups were identified in both samples mutual friendship (child A nominated child B in one or both of the above areas and child B also nominated child A), unilateral friendship (child A nominates child B, but child B does not reciprocate), and nonfriendship (child A nominates child B as someone he or she does *not* want to have as a friend) Children were not included more than once in each friendship pair Because children nominated two classmates in each category, one child was randomly selected for each friendship pair

*Perceived social self-competence*—This measure is part of Harter's (1979) Perceived Competence Scale for Children Each of seven items in this measure is a pair of statements reflecting opposing views of oneself in the area of social competence (e g, "Some kids find it hard to make friends BUT for other kids it's pretty easy") All items were read aloud to the children who first had to decide which of the items in the pair better described them, and then had to rate whether that item was "sort of true" or "really true" of them Each item was then scored on a four-point scale For the total composite score Cronbach's $\alpha = 79$ and 68 for samples 1 and 2, respectively

[2] A more detailed description of the measures is available upon request from the first author

## Results

### *Developmental Trends and Sex Differences*

For both sample 1 and sample 2, significant developmental increases were found for interpersonal understanding, $r$'s = 63 and 34, respectively, $p < 001$ Developmental trends for social self-competence and peer nominations or ratings were nonsignificant In both samples, girls had higher interpersonal understanding scores than did boys, $r$'s = 27 and 51 for samples 1 and 2, respectively, $p <$ 001 For both samples, sex differences were nonsignificant on the social self-competence score and the peer-nomination scores However, girls (as assessed in sample 2 only) received higher peer ratings, $r = 26$, $p < 01$, than did boys

### *Relation between Peer Acceptance and Both Interpersonal Understanding and Social Self-Competence*

Partial correlations (controlling for age) between positive and negative peer nominations and both interpersonal understanding and perceived social self-competence are presented for all children in sample 1 as well as for younger children (grades 3–5) and older children (grades 6–8) at the top of table 1 Partial correlations (controlling for age) between both peer nominations and peer ratings and both interpersonal understanding and perceived social self-competence are presented in the bottom of table 1 for all children in sample 2 as well as for younger (grades 4–5) and older (grades 6–7) children (In both samples, zero-order Pearson correlations were virtually identical to the partial correlations and, therefore, are not presented )

For all of the children in sample 1, interpersonal understanding and perceived social self-competence were better predictors of positive than of negative peer nominations The strength of the significant relations, however, was not very high Children who received positive nominations tended to have high levels of interpersonal understanding and saw themselves as socially competent Developmental trends in the strength of the relations were assessed here and in all later analyses by means of Fisher $r$–$z$ transformations The relation between interpersonal understanding and positive peer nominations was stronger for the older than for the younger children, $z = 2\,93$, $p < 01$

Correlations involving children's negative peer nominations were also not very high for either the total sample or each developmental level For the total sample, negative nominations were related to low interpersonal understanding Developmental trends in the pattern of relations were nonsignificant

The results for sample 2 are of note in that stronger relations were obtained for peer ratings than for peer nominations For the total sample, positive nominations were related to high perceived social self-competence while negative nominations were related to low interpersonal understanding and low perceived social self-competence High peer ratings were related to both high interpersonal understanding and perceived social self-competence Developmental trends in the pattern of relations were nonsignificant although there was a trend, consistent with the findings of sample 1, for a stronger ($p < 10$) relation between interpersonal understanding and peer ratings for older than for younger children

### *Degree of Similarity between Children in Friendship-Type Pairs*

Partial correlations, controlling for age, between children in the three friendship groups on interpersonal understanding and perceived social self-competence are presented in table 2 for the total sample and for younger and older children in samples 1 and 2 A general trend emerged across both samples mutual friends are more similar to each other than are either unilateral friends or nonfriends This trend was particularly true for older children

For sample 1, correlations for the total sample showed a high correspondence between mutual friends on both interpersonal understanding and perceived social self-competence Similar correspondences were not obtained for unilateral friends or nonfriends, with the exception that unilateral friends showed some similarity in level of social self-competence Fisher $r$–$z$ transformations did not reveal significaht differences in the size of the correlations obtained between mutual friends and either unilateral friends or nonfriends for either the total sample or for younger children However, for the older children, mutual friends showed a stronger similarity on interpersonal understanding than either unilateral friends or nonfriends, $z$'s = 2 06 and 2 69, respectively, $p < 05$

For all of the children in sample 2, mutual friends, as opposed to unilateral friends and nonfriends, were similar on both interpersonal understanding and social self-competence Fisher $r$–$z$ transformations revealed the correlations involving interpersonal understanding and social competence to be significantly

PARTIAL CORRELATIONS (Controlling for Age) BETWEEN PEER NOMINATION AND PEER RATINGS AND BOTH INTERPERSONAL UNDERSTANDING AND PERCEIVED SOCIAL SELF-COMPETENCE FOR SAMPLE 1 AND SAMPLE 2

| VARIABLE | TOTAL SAMPLE | | | YOUNGER CHILDREN | | | OLDER CHILDREN | | |
|---|---|---|---|---|---|---|---|---|---|
| | Positive | Negative | Rating | Positive | Negative | Rating | Positive | Negative | Rating |
| | | | | | Sample 1 | | | | |
| Interpersonal understanding | 25*** | − 12* | | 16* | − 10 | | 38*** | − 13 | |
| Perceived social self-competence | 13* | − 07 | | 09 | − 05 | | 18* | − 21* | |
| *N* | | 217 | | | 115 | | | 102 | |
| | | | | | Sample 2 | | | | |
| Interpersonal understanding | 13 | − 25** | 41*** | 06 | − 32** | 27* | 21 | − 14 | 57*** |
| Perceived social self-competence | 40*** | − 24** | 42*** | 54** | − 28* | 57*** | 26* | − 20 | 33* |
| *N* | | 103 | | | 54 | | | 49 | |

*$p < 05$
**$p < 01$
***$p < 001$

TABLE 2

PARTIAL CORRELATIONS (Controlling for Age) BETWEEN MUTUAL FRIENDS, UNILATERAL FRIENDS, AND NONFRIENDS ON INTERPERSONAL UNDERSTANDING AND PERCEIVED SOCIAL SELF-COMPETENCE FOR TOTAL SAMPLE AND YOUNGER AND OLDER CHILDREN IN SAMPLES 1 AND 2

| VARIABLE | MUTUAL FRIENDS | | | UNILATERAL FRIENDS | | | NONFRIENDS | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Younger | Older | Total | Younger | Older | Total | Younger | Older |
| | | | | | Sample 1 | | | | |
| Interpersonal understanding | 32** | 20 | 43** | − 04 | − 07 | 00 | − 01 | − 04 | 02 |
| Perceived social self-competence | 28* | 00 | 54*** | 19* | 00 | 34** | 01 | 08 | − 15 |
| *N* | 62 | 29 | 33 | 140 | 73 | 67 | 91 | 54 | 41 |
| | | | | | Sample 2 | | | | |
| Interpersonal understanding | 65*** | 63* | 77*** | 24* | 14 | 24 | 17 | 33 | − 26 |
| Perceived social self-competence | 63*** | 57* | 61* | 08 | − 27 | 38 | − 11 | − 29 | 00 |
| *N* | 34 | 17 | 17 | 51 | 30 | 21 | 39 | 23 | 16 |

*$p < 05$
**$p < 01$
***$p < 001$

stronger for mutual friends than for either unilateral friends or nonfriends, $z$'s ranging from 2.36 to 2.58, $p < .05$. Differences in the strength of the relations for the three kinds of friendships for older and younger children were nonsignificant, although a trend ($p < .10$) was found (similar to the finding in sample 1) for older children in mutual friendships to be more similar on interpersonal understanding than older children in either unilateral friendships or nonfriendships.

## Discussion

### *Developmental Trends and Sex Differences in Interpersonal Understanding and Perceived Social Self-Competence*

The developmental trends and sex differences obtained in these two studies are consistent with those obtained in previous reports. The strong developmental trend evidenced in children's interpersonal understanding as assessed by the group-administered task designed for these studies is similar to that revealed through individually administered comprehensive interviews (Selman 1980). The high internal consistency of this task, as well as its ease of administration and scoring, makes it a good candidate for becoming one of the few standardized social cognition tasks appropriate for a wide developmental span (cf. Enright, Franklin, & Manheim 1980). The finding that girls have higher levels of interpersonal understanding is consistent with Hoffman's (1977) conclusion that girls, more than boys, are socialized both to be attentive to the needs of others and to put themselves in another person's position.

### *Correlates of Peer Acceptance*

Generally, our results indicate that children with favored peer status had high levels of interpersonal understanding and perceived social self-competence. Further evidence of the importance of these skills for children's peer relations was obtained from our analyses of correspondences between mutual friends, unilateral friends, and nonfriends on these variables. Compared with both unilateral friends and nonfriends, mutual friends were more similar on interpersonal understanding and perceived social self-competence. Taken together, these findings further reinforce the existence of a link between social cognition and peer group status (cf. Asher & Renshaw 1981, Gottman et al. 1975, Ladd & Oden 1979, Marcus 1980, Peery 1979, Rubin 1972). Given the data base on the relation between specific social cognitive skills and peer status, further work can address the issue of the relative importance of these skills in a multivariate framework.

The exact nature of the relation between peer status and both interpersonal understanding and perceived social self-competence also needs further investigation. Theorists in this area are in agreement that peer relations, especially relations with friends, afford children the opportunity to become interpersonally sensitive, experience intimacy, achieve mutual understanding, and in general acquire skills for later interpersonal adjustment (Piaget 1965, Selman 1980, Sullivan 1953, Youniss 1980). These writers also stress that the critical components of children's friendships are mutual respect and cooperation, which enable children to appreciate individuals as sharing common thoughts, feelings, motives, and intentions. Our findings provide strong support for these views and underscore the need to view the relation between social cognition and peer status as a reciprocal one. While being able to understand both the psychological nature of individuals and the dynamics of friendship (interpersonal understanding) and to perceive oneself as having well-developed social skills (perceived social self-competence) may facilitate the unfolding of the friendship process, it also seems plausible that similarly developed skills on the part of one's friend may further enhance development in these areas (cf. Gottman et al. 1975).

Our examination of developmental trends in the correlates of peer acceptance revealed older children's peer acceptance to be more closely linked to level of interpersonal understanding than was that of younger children. This finding provides some support for the view that social cognitive correlates of peer status may shift with developmental level (cf. Dweck 1981, Putallaz & Gottman 1981). The shift evidenced in this study, however, seems to have been one of degree rather than kind, since interpersonal understanding was significantly related to younger children's peer acceptance. For older children, this pattern was more robust. With maturity, children's friendships become more psychologically based (Selman 1981), and the individuals and friendship-dynamics aspects of interpersonal understanding investigated here may provide a solid social cognitive base from which such friendships might develop. In addition, it seems likely that older children's experiencing close mutual friendships might further advance the development of interpersonal understanding.

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