

Loneliness in Children

Steven R. Asher; Shelley Hymel; Peter D. Renshaw

Child Development, Vol. 55, No. 4 (Aug., 1984), 1456-1464.

Stable URL:

http://links.jstor.org/sici?sici=0009-3920%28198408%2955%3A4%3C1456%3ALIC%3E2.0.CO%3B2-N

Child Development is currently published by Society for Research in Child Development.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/about/terms.html. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/journals/srcd.html.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.

Loneliness in Children

Steven R. Asher

University of Illinois at Urbana-Champaign

Shelley Hymel

University of Waterloo

Peter D. Renshaw

Murdoch University

ASHER, STEVEN R.; HYMEL, SHELLEY; and RENSHAW, PETER D. Loneliness in Children. CHILD DEVELOPMENT, 1984, 55, 1456–1464. Children experiencing difficulties in their peer relations have typically been identified using external sources of information, such as teacher referrals or ratings, sociometric measures, and/or behavioral observations. There is a need to supplement these assessment procedures with self-report measures that assess the degree to which the children themselves feel satisfaction with their peer relationships. In this study, a 16-item self-report measure of loneliness and social dissatisfaction was developed. In surveying 506 third-through sixth-grade children, the measure was found to be internally reliable. More than 10% of children reported feelings of loneliness and social dissatisfaction, and children's feelings of loneliness were significantly related to their sociometric status. The relationship of loneliness and sociometric status to school achievement was also examined.

Research focused on children who lack friends in school is growing rapidly. Given evidence that poor peer relations are predictive of serious adjustment problems in later life (see Hartup, 1983; Putallaz & Gottman, 1983), and given repeated documentation of the social skill deficits of children who lack friends (for a review, see Asher & Renshaw, 1981), investigators have sought to improve the peer relations of unpopular children through direct instruction in social skills (e.g., Gottman, Gonso, & Schuler, 1976; Gresham & Nagle, 1980; Ladd, 1981; LaGreca & Santogrossi, 1980; Oden & Asher, 1977). Children in this research typically are selected for participation based on external sources of information, most notably, teachers, peers, or unfamiliar adult observers (for a review, see Asher & Hymel, 1981). For example, many intervention studies with unpopular children use sociometric measures to select children who are least liked in their classrooms. In some studies, sociometric data are supplemented by direct observations of children's social interaction style.

One limitation of the intervention literature has been the absence of information concerning unpopular children's perspective about their own situation. To date, no attempt has been made to learn whether the children who are chosen for intervention feel lonely or are themselves dissatisfied with their social relationships. This contrasts with research with adults in which self-report measures, especially measures of loneliness, have been widely used to identify people having problems in social relationships (for an excellent review, see Peplau & Perlman, 1982).

The goals of the present research were to develop a reliable measure of children's feelings of loneliness and social dissatisfaction and to learn whether the children who are least accepted by their classmates are indeed more lonely. There are several reasons for learning whether low-status children are dissatisfied with their peer relationships. The argument could be made that some children, by virtue of normative selection criteria, have

The authors wish to thank the staff and students in the Urbana, Illinois, public schools for their cooperation in carrying out this research and Robert L. Geraci for his help in data collection and analysis. Reprints are available upon request from Dr. Steven Asher, Bureau of Educational Research, University of Illinois, 1310 S. Sixth Street, Champaign, Innois 61820; Dr. Shelley Hymel, Department of Psychology, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1; and Dr. Peter Renshaw, School of Education, Murdoch University, Western Australia, Australia 6150.

to be at the bottom of their class in terms of peer acceptance and are not necessarily unhappy with their social situation. Therefore, assessment of children's own feelings about their peer relations might be useful in identifying children for participation in intervention programs. Data on the child's perspective would also be useful in evaluating whether social-skill training decreases children's feelings of loneliness or social dissatisfaction and in determining whether intervention efforts are differentially successful as a function of children's feelings prior to training. There is also the possibility that children's feelings of loneliness will predict to later adjustment beyond the prediction that can now be made based on measures of children's participation in a social network. Finally, the phenomenon of loneliness in children merits investigation in its own right, since relatively little is known about the concerns and emotional lives of children. This study, therefore, was designed to provide a first step in this heretofore neglected area.

Method

Subjects.—Five hundred twenty-two children from third through sixth grade initially participated in the study. Of the 522 children in the original sample, 16 children had incomplete loneliness data, leaving a total of 506 children (243 females, 263 males) in the final sample. The children came from 20 classrooms in two schools in a moderatesize midwestern city in the United States.

Procedure.—A 24-item questionnaire was developed to assess children's feelings of loneliness and social dissatisfaction (see Table 1). The 16 primary items focused on children's feelings of loneliness (e.g., "I'm lonely"), feelings of social adequacy versus inadequacy (e.g., "I'm good at working with other children"), or subjective estimations of peer status (e.g., "I have lots of friends"). The other eight items focused on children's hobbies or preferred activities (e.g., "I like to paint and draw"; "I watch TV a lot"). These eight "filler" items were included to help children feel more open and relaxed about indicating their attitudes about various topics.

Children responded to each of the 24 items by indicating on a five-point scale how much each statement was a true description of themselves (i.e., always true, true most of the time, true sometimes, hardly ever true,

TABLE 1

QUESTIONNAIRE ITEMS

- 1. It's easy for me to make new friends at school.
- 2. I like to read.
- 3. I have nobody to talk to.4
- 4. I'm good at working with other children.
- 5. I watch TV a lot.
- 6. It's hard for me to make friends.^a
- 7. I like school.
- 8. I have lots of friends.
- 9. I feel alone.ª
- 10. I can find a friend when I need one.
- 11. I play sports a lot.
- 12. It's hard to get other kids to like me.
- 13. I like science.

- 14. I don't have anyone to play with.
- 15. I like music.
- 16. I get along with other kids.
- I feel left out of things.^a
- 18. There's nobody I can go to when I need help.
- I like to paint and draw.
- 20. I don't get along with other children.
- 21. I'm lonely.a
- 22. I am well-liked by the kids in my class.
- 23. I like playing board games a lot.
- 24. I don't have any friends.a

NOTE.—Items 2, 5, 7, 11, 13, 15, 19, and 23 were classified as hobby or interest items.

^a Items for which response order was reversed in scoring.

not true at all). The scale was administered in a group testing session in each classroom by a male experimenter (the third author). Children were first trained in use of the rating scale by responding to several activity preference statements (e.g., "I like roller skating"). After children understood the task, the experimenter read aloud each of the 24 items, waiting for children to record their ratings for each item before going on to the next item.

Two weeks later, sociometric measures were administered in each classroom by a female experimenter (the second author). Two different sociometric measures were used: (1) a positive-nomination measure in which children were asked to name their three best friends in the classroom; and (2) a rating-scale measure on which children rated each classmate on a 1-5 scale according to how much they liked to play with that person at school (Singleton & Asher, 1977). As in past research (e.g., Oden & Asher, 1977), sociometric scores were computed and analyzed on the basis of nominations and ratings received from same-sex classmates.1 For the

¹ Data reported here are based on sociometric ratings and nominations received from samesex peers since this scoring procedure is typical in the intervention literature addressed. However, data based on sociometric scores received from all classmates were also analyzed, and the results were highly similar to those reported here for same-sex sociometric scores.

nomination measure, a child's score first was computed as the number of nominations received from same-sex peers. Next, to permit comparison of nomination scores across classrooms that varied in size, a proportion score was also computed for each child, operationally defined as the number of samesex nominations received divided by the number of same-sex classmates. For the rating-scale measure, a child's score first was computed as the average rating received from same-sex peers, with a higher score indicative of greater peer acceptance. Then, to permit comparison of scores across classrooms, these average-rating scores were converted to standard scores ($Z = X_i - \overline{X}/SD$), using means and standard deviations for each sex group in each classroom in the computations.

Results

Descriptive findings.—Table 2 presents descriptive information concerning the distribution of children's responses to each of the 16 primary items. It can be seen that on nearly all items over 10% of the sample reported feelings of considerable social dissatisfaction. For example, on the item "I'm lonely," 5.8% of the children indicated "that's always true about me," and another 5.6% said "that's true about me most of the time." On the item "I feel left out of things," 8.5% said "that's always true about me," and 9.8% said "that's true about me most of the time." Thus, a sizable number of children reported feelings of loneliness and social dissatisfaction.

Factor analysis and internal reliability.—Children's responses to all 24 questionnaire items were subjected to factor analysis (quartimax rotation). The results indicated a primary factor that included all 16 of the loneliness and social dissatisfaction items. None of the hobby or interest items loaded significantly on this factor. Factor loadings for each scale item are given in Table 3 along with the item-to-total-score correlations.

The resulting 16-item scale was found to be internally consistent (Cronbach's $\alpha = .90$) and internally reliable (split-half correlation between forms = .83; Spearman-Brown reliability coefficient = .91; Guttman split-half reliability coefficient = .91).

Loneliness and sociometric status.—Next we examined the relationship between selfreported loneliness and sociometric status. On the basis of the factor analysis, all 16 loneliness items were used to compute a total loneliness score for each child. Responses to each of the loneliness items were scored from 1 to 5, with order reversed for particular items (see Table 1) such that a score of 5 was always indicative of greater loneliness or social dissatisfaction. Responses for each of the 16 items were then summed to create a total loneliness score for each child that could range from 16 (low loneliness) to 80 (high loneliness). In our sample, loneliness scores ranged from 16 to 79, with a mean score of 32.51 and a standard deviation of 11.82.

TABLE 2

Percentage Distribution of Children's Responses to Loneliness Items

_	Always True	True Most of the Time	Sometimes True	Hardly Ever True	Not True At All
It's easy for me to make new friends at					
school	29.2	29.8	29.0	6.2	5.8
I have nobody to talk to	5.6	6.2	14.1	18.5	55.6
I'm good at working with other children	29.2	34.2	25.3	5.8	5.4
It's hard for me to make friends	9.6	8.1	19.8	20.2	42.3
I have lots of friends	56.0	20.8	13.5	5.6	4.2
I feel alone	5.0	8.7	20.2	21.7	44.4
I can find a friend when I need one	39.1	23.6	23.4	6.4	7.5
It's hard to get other kids to like me	8.1	11.2	19.5	22.6	38.6
I don't have anyone to play with	5.4	5.4	17.7	19.4	52.1
I get along with other kids	37.5	37.3	20.2	2.1	2.9
I feel left out of things	8.5	9.8	22.5	27.1	32.1
There's nobody I can go to when I					
need help	6.7	5.4	11.7	18.3	57.9
I don't get along with other children	5.0	6.7	15.8	24.9	47.6
I'm lonely	5.8	5.6	15.6	20.4	52.6
I am well-liked by kids in my class	32.6	32.6	23.7	6.8	4.2
I don't have any friends	3.3	2.1	5.4	11.0	78.1

TABLE 3

FACTOR LOADING FOR EACH ITEM AND THE
CORRELATIONS OF EACH ITEM WITH
THE TOTAL SCORE

Item Number	Factor Loading	Item-to-Total-Score Correlation		
1	.54	.62		
3	.57	.58		
4	.43	.50		
6	.63	.66		
8	.58	.65		
9	.69	.70		
10	.51	.59		
12	.67	.70		
14	.66	.66		
16	.59	.65		
17	.64	.66		
18	.57	.56		
20	.60	.62		
21	.73	.72		
22	.55	.62		
24	.67	.67		

NOTE.—Items 3, 6, 9, 12, 14, 17, 18, 20, 21, and 24 had their response order reversed in scoring.

Correlational analyses were performed to examine the relationship between lone-liness and sociometric status. As noted earlier, to permit comparisons across class-rooms, the proportion of same-sex nominations received and standardized average rating scores from same-sex peers were used as sociometric indices in these analyses. The results are presented in Table 4 for the entire sample and separately for males and females and for children in each of the four grade levels. Three children within the sample had moved prior to administration of sociometric measures; thus the sample size for these analyses was reduced to 503. As can

be seen in Table 4, for both sexes and at each grade level, a significant negative relationship was found between loneliness and both friendship nominations and play ratings received from same-sex peers.

To examine loneliness further as a function of sociometric status, we considered whether children who might be targeted for intervention on the basis of sociometric measures reported greater loneliness and social dissatisfaction than their higher-status peers. A typical procedure in intervention studies has been to target as candidates for intervention the three lowest-rated children on a rating-scale sociometric measure. Accordingly, we selected the three children in each class who received the lowest ratings from same-sex peers (N = 59, 26 females and 33 males, with one targeted child omitted because of incomplete loneliness data). These least-accepted children were compared with the rest of their classmates (N = 444) in terms of loneliness in a three-way (sociometric status \times grade \times sex) analysis of variance. Results indicated a significant main effect for sociometric status, F(1,487) = 31.28, p < .001. Lowest-rated children reported significantly greater feelings of loneliness and social dissatisfaction (M = 40.61, SD = 12.46) than did their more accepted peers (M = 31.36,SD = 11.13). All other main effects and interactions were nonsignificant. Thus, the children typically selected for intervention on the basis of rating-scale sociometric data do report more loneliness than the rest of their classmates.

A second analysis was conducted to examine whether children with few or no best-friendship nominations within their class-room would experience greater loneliness. For this analysis, the number of best-friend

TABLE 4

Correlations of Loneliness with Sociometric Status

	SOCIOMETRIC MEASURES			
Group	Standardized Same-Sex Ratings	Proportion of Best Friend Nomination		
Males (N = 261)	37***	27***		
Females $(N = 242) \dots$	25***	23***		
Third-grade students $(N = 118) \dots$	28**	31***		
Fourth-grade students $(N = 128) \dots$	32***	21*		
Fifth-grade students ($N = 125$)	35***	32***		
Sixth-grade students ($N = 132$)	30***	19*		
All students $(N = 503) \dots$	31***	25***		

^{*} p < .05.

^{**} p < .01.

^{***} p < .001.

nominations received from same-sex peers was used to identify six groups of children: those who received no friendship nominations, and those who received one, two, three, four, or five or more friendship nominations. These groups were compared in terms of selfreported loneliness in a three-way (number of friends \times grade \times sex) analysis of variance. Results indicated a significant main effect for number of friends, F(5,455) = 7.30, p < .001, with all other main effects and interactions nonsignificant. Means and standard deviations of loneliness scores for each of the six levels of friendship are presented in Table 5; as can be seen, loneliness scores increased as the number of friends decreased. Post-hoc Scheffé comparisons of the means for these groups indicated that children receiving zero, one, or two best-friend nominations reported significantly more loneliness than children receiving five or more best-friend nominations.

It appears, then, that lower-status children do experience and report considerably more loneliness and social dissatisfaction than their more accepted peers, regardless of the type of sociometric measure used to identify such children. Still, the magnitude of the relationship (see Table 4) suggests that there must be considerable variability within particular levels of status. To examine this issue further, we used both rating-scale and nomination measures to identify three groups of children: unpopular, average, and popular. Unpopular children (N = 69) were defined as those who received average play-rating scores that were 1 SD below the mean for their same-sex classroom peers and who were nominated as a best friend by only one or no same-sex classmates. Popular children (N =60) were defined as those who received average play rating scores that were 1 SD or more above the mean for their same-sex classroom peers and who were nominated as

TABLE 5

Number of Best Friends and Average
Loneliness Scores

	Loneliness Scores		
GROUPS	M	SD	
No friends $(N = 70)$	36.27	12.89	
One friend $(N = 102) \dots$	35.66	12.79	
Two friends $(N = 91) \dots$	33.85	10.91	
Three friends $(N = 89)$	30.37	10.56	
Four friends $(N = 58) \dots \dots$	30.64	9.78	
Five or more friends $(N = 93) \dots$	27.79	10.18	

a best friend by four or more same-sex classmates. The remaining children (N=374) were considered to be average in popularity. Of the 69 children classified as unpopular, 29% had loneliness scores that were at least 1 SD above the mean for the entire sample. However, 6% actually had loneliness scores that were 1 SD below the mean, and the remaining 65% were average in self-reported loneliness (i.e., within 1 SD of the mean). Loneliness scores varied among popular children as follows: 33% reported low loneliness, 62% reported average loneliness, and, interestingly, 5% reported high loneliness.

Variability is also evident when children's responses to individual items are examined (see Table 6). Many of the items did show considerable differences between popular and unpopular children. For example, on the item "I feel left out of things," 23% of the unpopular children indicated the statement to be "always true" of them as compared with none of the popular children and 6% of the average children. Still, it is also clear from the individual items that a few popular children experience difficulty in their relations with peers and that many unpopular children do not experience, or at least do not report, serious dissatisfaction. For example, 8% of the popular children indicated that they felt left out of things most of the time, and 41% of unpopular children said it was not at all true that they felt lonely.

Achievement, sociometric status, and loneliness.—There are several studies indicating a relationship between children's sociometric status and their school achievement (e.g., Glick, 1972; Green, Forehand, Beck, & Vosk, 1980). For most of the children in the present study, achievement test data were available from the schools, and we were interested in assessing the reliability of the relationship of status to achievement, as well as in examining the relationship of achievement to loneliness.

Two different achievement tests, the Comprehensive Test of Basic Skills (CTBS) and the Stanford Diagnostic Reading Test (SDRT), had been administered by the schools approximately 1–2 months prior to our study. CTBS scores were available for 364 of the 506 children in our sample; SDRT scores were available for 293 of the 506 children. To compare students across the various grade levels, percentile rank scores were obtained on these measures and used in the correlational analyses described below. These analyses examined the relationship among achievement, sociometric status, and lone-

liness for a large subsample of the children included in the study. As in past research, modest but significant correlations were obtained between achievement scores and sociometric status: r(362) = .27, p < .001, between CTBS scores and standardized play ratings; r(291) = .19, p < .001, between SDRT scores and standardized play ratings; r(362) = .20, p < .001, between CTBS scores and the proportion of friendship nominations received; and r(291) = .14, p < .05, between SDRT scores and the proportion of friendship nominations received. Loneliness was unrelated to SDRT achievement scores, r(287) = .02, and only slightly related to CTBS achievement scores, r(348) = .10, p <

Discussion

Results of this study indicated that children's feelings of loneliness and social dissatisfaction can be reliably measured and that children's feelings about their social relationships do relate to their sociometric status in the classroom. Indeed, the children whose status was lowest reported more loneliness and social dissatisfaction. This suggests that the children who have been selected in previous intervention research were likely to have been more lonely than their classroom peers.

Still, the overall relation between loneliness and sociometric status was modest. Several explanations can be suggested. As in other areas that rely on self-report measures with children (e.g., Sarason, Davidson, Lighthau, Waite, & Ruebush, 1960), there is the possibility of social desirability or defensiveness on the part of respondents. Many low-status children may have been uneasy about admitting feelings of loneliness or social inadequacy and, instead, responded in a socially desirable fashion. Recent research by Kagan, Hans, Markowitz, Lopez, and Sigal (1982) provide data relevant to this issue. These investigators examined the validity of third graders' self-reports in a number of domains, including popularity among classmates. Kagan et al. found that when children acknowledge negative or undesirable personal attributes these tend to be confirmed by external assessments from peers and teachers. However, using peer and teacher ratings as standards, positive self-evaluations were suspect for about one-third of the sample. These results suggest that, when children do admit to undesirable personal characteristics such as loneliness, the reports are probably valid. However, there may be children who report positive feelings who are in fact experiencing dissatisfaction.

A moderate relation between status and loneliness also may result from sociometric assessment being done only in the child's classroom. Some children identified as unpopular may have friends in other classes or schools (e.g., neighborhood friends), and thus are not particularly lonely or discontent. Similarly, children's parents and siblings may serve as emotional buffers, and satisfactory home relationships may help when school peer relationships are not going as well as they might. We have some anecdotal evidence to support these speculations. In a later sample, individual responses to the loneliness items were discussed with the children in an attempt to understand how children interpreted the statements and how they decided on their responses. It was clear in several cases that children responded to particular items with consideration of their neighborhood and/or family social relations. For example, some children indicated that they did not feel alone because they had brothers or sisters at home or had neighborhood friends with whom they could play. Further research on the relative contributions of parents, siblings, and classroom versus neighborhood peers would be welcome. Also it may be useful to assess children's feelings of loneliness in various relationship and situational contexts (for a recent example of research with adults, see Schmidt & Sermat, 1983). Only two items (1 and 22) in our questionnaire explicitly referred to a school context; others referred to peers but without context, and still others make no mention of peers at all.

It would also be advisable in future research to subclassify unpopular children into those who are rejected and those who are neglected. This long-recognized distinction (e..g, Gronlund & Anderson, 1959) has been difficult to implement because of hesitancy about administering negative nomination measures (e.g., "name three children you don't especially like"). However, recent research by Coie, Dodge, and their colleagues indicates that the distinction is essential. Rejected children are more likely to remain rejected when placed in a new group or new class, whereas neglected children are more likely to become average or even popular (Coie & Dodge, 1983; Coie & Kupersmidt, 1983). Furthermore, the two groups exhibit quite different behavioral styles (e.g., Coie, Dodge, & Coppotelli, 1982; Dodge, 1983; Dodge, Coie, & Brakke, 1982). Overall,

TABLE 6

PERCENTAGE DISTRIBUTION OF POPULAR VERSUS UNPOPULAR CHILDREN'S RESPONSES TO LONELINESS ITEMS

	RESPONSE					
SCALE ITEM AND GROUP	Always True	True Most of the Time	Sometimes True	Hardly Ever True	Not True At All	
1. It's easy for me to make new						
friends:						
Unpopular $(N = 86) \dots$	23	24	29	14	9	
Average $(N = 341) \dots$	30	30	30	5	5	
Popular $(N = 76) \dots$	37	33	25	3	2	
3. I have nobody to talk to:						
Unpopular	8	10	19	16	47	
Average	5	6	15	17	57	
Popular	4	i	8	29	58	
4. I'm good at working with other	-	-	•		-	
children:						
Unpopular	27	22	33	8	10	
	30	38	24	4	4	
Average	27	34	24	12	3	
Popular	21	34	24	12	3	
6. It's hard for me to make						
friends:	• •		22	10	20	
Unpopular	19	17	22	16	26	
Average	8	6	20	21	45	
Popular	5	5	16	22	51	
8. I have lots of friends:						
Unpopular	48	21	17	6	8	
Average	56	22	13	6	3	
Popular	70	15	13	1	1	
9. I feel alone:						
Unpopular	14	10	22	19	35	
Average	3	9	20	24	44	
Popular	3	7	13	22	55	
10. I can find a friend when I						
need one:						
Unpopular	38	23	24	11	4	
Average	39	23	23	6	9	
Popular	40	26	25	5	4	
12. It's hard to get other kids to	40	20	20	J	-1	
like me:						
Unpopular	14	16	24	20	26	
	7	11	20	20 22	39	
Average	4	4	20 14	28		
Popular	4	4	14	20	50	
14. I don't have anyone to play						
with:	0	~	20	15	40	
Unpopular	9	5	28	15	43	
Average	5	6	16	. 19	54	
Popular	3	3	13	26	55	
16. I get along with other kids:				_		
Unpopular	30	24	34	7	5	
Average	37	41	18	1	3	
Popular	46	41	12	1	0	
17. I feel left out of things:						
Unpopular	23	8	29	17	22	
Average	6	11	22	29	32	
Popular	0	8	18	29	45	
18. I have nobody to go to when I						
need help:						
Unpopular	6	8	23	13	50	
Average	7	5	9	20	58	
Popular	5	3	7	17	68	
	•	•	•		00	

TABLE 6 (Continued)

Scale Item and Group	RESPONSE					
	Always True	True Most of the Time	Sometimes True	Hardly Ever True	Not True At All	
20. I don't get along with other children:						
	10	17	10	20	0.4	
Unpopular	10		19	20	34	
Average	4	6	16	25	49	
Popular	1	0	12	30	57	
21. I'm lonely:						
Unpopular	14	8	17	20	41	
Average	5	6	16	20	53	
Popular	1	1	9	25	63	
22. I am well-liked by the kids in	_	=	v		00	
my class:						
Unpopular	19	27	32	14	8	
Average	35	32	23	6		
				-	4	
Popular	42	38	20	0	0	
24. I don't have any friends:						
Unpopular	6	3	10	19	62	
Average	3	2	5	9	81	
Popular	0	0	3	14	83	

NOTE.—Figures do not always total 100% because of rounding.

it appears that rejected children may be the group particularly at risk for later adjustment problems. Given the findings emerging from this research, it would not be surprising if rejected children report stronger feelings of loneliness than neglected children. This pattern, too, would explain why the overall correlation between status and loneliness, although significant, was not higher.

Finally, it seems important to consider the influence of certain social-cognitive processes that may mediate the relationship between actual peer status and loneliness. Children's awareness of their acceptance by peers may be one important mediating variable. Some unpopular children simply may be unaware of their poor acceptance by peers and, therefore, may not report social dissatisfaction. Another potentially important factor is children's perceptions of the reasons or causes of their difficulties with peers. Research on children's attributions for social success and failure (e.g., Ames, Ames, & Garrison, 1977; Sobol, Scott, & Earn, Note 1) suggests considerable variation in children's causal attributions. Children who attribute social rejection or failure to external causes rather than more internal, personal causes may be less dissatisfied with their personal relationships.

In our discussion of the moderate relationship of sociometric status to loneliness, it should be kept in mind that loneliness is in fact a subjective experience (Peplau, Russell, & Heim, 1979) and cannot be equated with the objective condition of number of friends. From this perspective, the correlation between loneliness and sociometric status will always be far from perfect. Although unpopular children would be expected to feel more dissatisfaction than popular children. all children may feel the need for more social support and intimacy. It is also important not to lose sight of the fact that many children in our study reported being very lonely. Indeed, the number of children reporting extremes of loneliness and social dissatisfaction typically exceeded 10% on each item. This percentage is similar to that obtained with a single question in a recent national survey of 7-11-year-olds in the United States (Zill & Peterson, in press). Our hope is that the present research will serve to stimulate further inquiry into the causes and ramifications of loneliness during childhood.

Reference Note

 Sobol, M., Scott, C., & Earn, B. Children's sociometric status and explanations of social experience. Paper presented at the annual meeting of the American Psychological Association, Los Angeles, August 1981.

References

Ames, R., Ames, C., & Garrison, W. Children's causal ascriptions for positive and negative interpersonal outcomes. *Psychological Reports*, 1977, 41, 595-602.

- Asher, S. R., & Hymel, S. Children's social competence in peer relations: Sociometric and behavioral assessment. In J. D. Wine & M. D. Smye (Eds.), Social competence. New York: Guilford, 1981.
- Asher, S. R., & Renshaw, P. D. Children without friends: Social knowledge and social skill training. In S. R. Asher & J. M. Gottman (Eds.), The development of children's friendships. New York: Cambridge University Press, 1981.
- Ausubel, D., Schiff, H. M., & Gasser, E. B. A preliminary study of developmental trends in sociempathy: Accuracy of perception of own and others' sociometric status. *Child Develop*ment, 1952, 23, 111-128.
- Coie, J. D., & Dodge, K. A. Continuities and changes in children's social status: A five-year longitudinal study. Merrill-Palmer Quarterly, 1983, 29, 261–282.
- Coie, J. D., Dodge, K. A., & Coppotelli, H. Dimensions and types of status: A cross-age perspective. *Developmental Psychology*, 1982, 18, 557-570.
- Coie, J. D., & Kupersmidt, J. B. A behavioral analysis of emerging social status in boys' groups. Child Development, 1983, 54, 1400-1416.
- Dodge, K. A. Behavioral antecedents of peer social status. *Child Development*, 1983, **54**, 1386–1399.
- Dodge, K. A., Coie, J. D., & Brakke, N. P. Behavioral patterns of socially rejected and neglected preadolescents: The roles of social approach and aggression. *Journal of Abnormal Child Psychology*, 1982, 10, 389-410.
- Glick, O. Some social-emotional consequences of early inadequate acquisition of reading skills. Journal of Educational Psychology, 1972, 63, 253-257.
- Gottman, J. M., Gonso, J., & Schuler, P. Teaching social skills to isolated children. *Journal of Abnormal Child Psychology*, 1976, 4, 179–197.
- Green, K. D., Forehand, R., Beck, S. J., & Vosk, B. An assessment of the relationship among measures of children's social competence and children's academic achievement. *Child Development*, 1980, 51, 1149-1156.
- Gresham, F. M., & Nagle, R. J. Social skills training with children: Responsiveness to modeling and coaching as a function of peer orientation. Journal of Consulting and Clinical Psychology, 1980, 18, 718-729.
- Gronlund, N. E., & Anderson, L. Personality characteristics of socially accepted, socially ne-

- glected, and socially rejected junior high school pupils. Educational Administration and Supervision, 1959, 43, 329–338.
- Hartup, W. The peer system. In E. M. Hetherington (Ed.), P. H. Mussen (Series Ed.), Handbook of child psychology. (Vol. 4): Socialization, personality, and social development. New York: Wiley, 1983.
- Kagan, J., Hans, S., Markowitz, A., Lopez, D., & Sigal, H. Validity of children's self-reports of psychological qualities. In B. Maher (Ed.), Progress in experimental personality research (Vol. 2). New York: Academic Press, 1982.
- Ladd, G. W. Effectiveness of a social learning method for enhancing children's social interaction and peer acceptance. Child Development, 1981, 52, 171-178.
- LaGreca, A. M., & Santogrossi, D. A. Social skills training with elementary school students: A behavioral group approach. *Journal of Con*sulting and Clinical Psychology, 1980, 48, 220-227.
- Oden, S., & Asher, S. R. Coaching children in social skills for friendship making. *Child Development*, 1977, **48**, 495-506.
- Peplau, L. A., & Perlman, D. Loneliness: A sourcebook of current theory, research and therapy. New York: Wiley, 1982.
- Peplau, L. A., Russell, D., & Heim, M. The experience of loneliness. In I. H. Frieze, D. Bar-Tal, & J. S. Carroll (Eds.), New approaches to social problems: Applications of attribution theory. San Francisco: Jossey-Bass, 1979.
- Putallaz, M., & Gottman, J. M. Conceptualizing social competence in children. In P. Karoly & J. J. Steffen (Eds.), Improving children's competence: Advances in child behavioral analysis and therapy. Lexington, Mass.: Heath, 1982.
- Sarason, S. B., Davidson, K. S., Lighthau, F. F., Waite, R. R., & Ruebush, B. K. Anxiety in elementary school children. New York: Wiley, 1960.
- Schmidt, N., & Sermat, V. Measuring loneliness in different relationships. *Journal of Personality* and Social Psychology, 1983, 44, 1038-1047.
- Singleton, L. C., & Asher, S. R. Peer preferences and social interaction among third-grade children in an integrated school district. *Journal* of Educational Psychology, 1977, 69, 330-336.
- Zill, N. Happy, healthy, and insecure: A portrait of middle childhood in the United States. New York: Doubleday/Anchor, in press.