

# Research

## Friendship Patterns in Highly Intelligent Children

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**A** study comparing the responses of very high IQ and moderately high IQ children and their parents to a detailed set of questions about friendships is reported in this article. Boys and girls each preferred friends of their own sex. More of the high IQ children reported their friends to be older than themselves, that they did not have enough friends, and that being smart made it harder for them to make friends.

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**A** clear consensus among professionals maintains that children of extraordinarily high IQ are compromised in cultivating friendships among their age peers. At least six recent texts, for example, list special social problems said to be characteristic of highly intelligent children (Barbe & Renzulli, 1975; Gallagher, 1975; Khatena, 1982; Laycock, 1979; Newland, 1976; Tannenbaum, 1983). Similar concerns were expressed in Roper Review's special section on highly gifted students (Powell & Haden, 1984; Roedell, 1984). Such is the state of the art. A list of these difficulties includes "different adjustment problems than the average child" (Barbe & Renzulli, 1975); "difficulty communicating effectively" and "sense of physical inferiority" (Gallagher, 1975; Roedell, 1984); "finding it difficult to relate to their agemates" (Tannenbaum, 1983); "confusing peers" (Powell & Haden, 1984); and "isolation and alienation" (Newland, 1976; Roedell, 1984).

In spite of this impressive consensus, most authors (Tannenbaum, 1983, is an exception) cite but one or two primary sources of evidence: Hollingworth's (1942) set of case studies of children having IQs greater than 180 and, occasionally, Terman and Oden's (1947) special section on children of IQs greater than 170. Those authors noted that the vocabulary and

interest patterns of high-IQ children are so different from those of agemates that mutually rewarding play is seldom a realistic possibility. Older children are not necessarily optimal playmates either, since they differ in coordination and skill, the degree to which they are willing to follow the leadership of younger children, however intelligent, and often in interests and language as well.

While these isolating and alienating situations may well exist, such conditions may not be typical. Janos's (1983) review of virtually all of the published empirical studies of the psychological and social adjustment of children of very high IQ argues that, rather than being buffeted by social inadequacies and failures, most highly intelligent children are quite satisfactorily adjusted and successful in relating to peers and adults. Janos (1984), who carefully paired Terman's 46 boys of IQ 170 and above with other male "Termites" of the same age but moderately high IQ, concluded that the social situations of the high-IQ boys were not markedly different from those of the comparison boys. The Terman records suggested that parents and others try hard to assure that social adjustment is not unduly compromised by intellectual development.

In spite of the fact that most high-IQ children show satisfactory social adjustment, Janos' (1983) review also found that a significant minority, about twice the proportion of average or moderately gifted children, do appear to experience social troubles. When troubles exist, the most frequent are loneliness, isolation, and finding appropriate playmates and friends. Among other reasons for greater vulnerability in high IQ children, parents who are charmed by early evidence of exceptional talent may begin to focus heavily on intellectual development at the expense of social skills (Bloom, 1982; Fowler, 1981). Second, children may experience a pervasive sense of difference from other children, and subsequent difficulties in peer relations (Freeman, 1979; Janos, Fung, & Robinson, 1984). As we have noted, other authors have been aware of these vulnerabilities, but more impressed with the problems of the minority than the successes of the majority.

**T**he rest of this paper describes an empirical study comparing the responses of very high IQ and moderately high IQ children and their parents to a detailed set of questions about friendships. The children had participated in a larger study, the focus of which was the general psychosocial adjustment of highly intelligent children (Janos, 1983). The present study focuses on several aspects of children's thinking

about friends, and on several characteristics of their friendship patterns.

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The study was conducted under the auspices of the Child Development Research Group (CDRG) at the University of Washington, which in 1974 instituted a longitudinal study of preschool children with distinctively advanced cognitive skills (Robinson, Jackson, and Roedell, 1977, 1978). The CDRG longitudinal study focused on the structure and development of early cognitive abilities, but data relevant to friendships were collected during 1981-82. The subjects of the CDRG longitudinal study on the early identification of intellectual precocity were drawn from the Puget Sound region, mostly from Seattle and its environs, during the years 1975 through 1979. The recruitment methods, which typically involved newspaper publicity and enlistment of self-selected volunteers, were efficient for locating a large number of very able preschool children, but it cannot be claimed that the sample constituted a representative group of gifted children.

The subjects included in the investigation reported below were a subset of those participating in the longitudinal study. All of the children had been tested at least twice between the ages of two and six years. The 22 girls and 16 boys who had ever obtained a Stanford-Binet short form IQ score (Terman & Merrill, 1973) greater than 163, and their parents, were invited to participate. Thirty-two (82%) did so. Their mean IQ, measured close to age six, was 167.9 (*s.d.*=18.76); their mean age when the friendship data were collected was 8.0 years (*s.d.*=1.33 years). The high-IQ children were compared to children whose scores on the Stanford Binet were all between 120 and 140 and whose last measured IQ was between 125 and 140. The children comprising the high-IQ group were all non-black, therefore the moderately high IQ group was also constituted of non-black children. All such children in the longitudinal study (30 girls and 29 boys) were invited to participate. Forty-seven (80%) did so. Their mean age-six IQ was 131.2 (*s.d.*=6.14); their mean age when the questionnaires were completed was 8.3 years (*s.d.*=1.09). The difference between the groups in mean age was not statistically significant.

Parents and children were asked to complete an extensive battery of questionnaire measures, which included, for parents, the Vineland Adaptive Behavior Scales (Sparrow, Balla, & Cicchetti, 1981), and the Child Behavior Checklist (Achenbach, 1979). Children were asked to complete the Piers-Harris Children's Self-Concept Scale (Piers & Harris, 1969), and the Children's Friendships Questionnaire (CFQ), which was devised specifically to tap children's views of their friends. The CFQ asks 15 straightforward questions about friendships, such as the age and sex of friends, whether one feels that he or she has the "right" number of friends, and

whether being "gifted" makes it harder or easier to make friends. Seven CFQ items asked the child to choose companions (adult, same-age, younger or older child) for various activities; these items were subject to varying interpretations, and were omitted from this study. Since the focus of the investigation reported here was on friendships, only a subset of the data from the various instruments was utilized. Only those items from the Piers-Harris, the Vineland, and the Achenbach that provided direct information regarding friendships were analyzed.

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## Results

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Since all of the data consisted of discrete categorical responses, the chi-square test, with Yates correction for all 2x2 tables, was employed for all analyses. Of the 23 questions to be analyzed, none showed a significant sex difference, except that boys and girls each preferred friends of their own sex. Therefore, the responses of boys and girls were combined for all other analyses.

For most of the items on both parents' and children's instruments, there were no differences between the high IQ and moderately high IQ groups. Ten of the 14 items answered by the children on the Children's Friendship Questionnaire and Piers-Harris showed the groups as similar. In both, the children responded that they like other children and have special friends. They also prefer playing with other children to playing with adults or alone, and do so with about the same frequency. On the Piers-Harris, neither of the items relating to friends elicited any differences between the groups. Very few high IQ or moderately high IQ children reported that it was hard for them to make friends. All the children in both groups described themselves as about as friendly or more friendly than other children. Moreover, on several questions asked of parents, there were also no differences between the groups. In general, parents reported that almost all children had consistent preferences for certain other children, and that their child had a best friend of the same sex.

Although the majority (13/20) of questions did not differentiate between the groups, several did. Those reflecting the children's responses are tabulated in Table 1. More of the high-IQ children reported their friends to be mostly older than themselves, that they did not have enough friends, and that being smart made it harder for them to make friends. High IQ children did not as often indicate that they liked other children "a lot." Differences between high IQ and the comparison children were also apparent on half of the six items responded to by parents. They are tabulated in Table 2. Parents of the high IQ children more often reported that their children had no close friends, that their child played with his or her close friend less than once a week, and that their children significantly less often played with a regular group of friends.

**Table 1**  
**Children's Responses to Friendship Items\***

Item	High IQ %	Moderate IQ %	Chi Square	df	p
Most of my friends are:					
Younger	3.3	4.7	13.11	2	.001
Same Age	46.7	83.7			
Older	50.0	11.6			
The number of my friends is:					
Too Few	19.4	2.2	7.20	2	.03
Just the Right Number	71.0	77.8			
Too Many	9.7	20.0			
Being smart makes making friends:					
Easier	22.6	46.7	7.73	2	.02
About the Same	61.3	51.1			
Harder	16.1	2.2			
I like other children:					
A Lot	60.0	81.8	4.30	1	.04
Somewhat	40.0	18.2			

\*Ten other items did not demonstrate group differences.

**Table 2**  
**Parents' Responses to Friendship Items\***

Item	High IQ %	Moderate IQ %	Chi Square	df	p
How many close friends does your child have:					
0	20.0	6.7	8.46	2	.01
1	56.7	37.8			
2 or more	23.3	55.6			
How often does he/she do things with them:					
Less than once a week	36.7	8.9	8.92	2	.01
Once or twice a week	23.3	40.0			
More than twice a week	40.0	51.1			
My child has a fairly regular group of friends:					
Yes, usually	75.9	95.2	6.05	2	.05
Sometimes	17.2	2.4			
Never	6.9	2.4			

\*Three other items did not demonstrate group differences.

**T**o determine whether the differences between groups were associated with age, the children at each IQ level were split at the median for age (8.0 years). Among the high IQ children, there were no differences between older and younger children on any of the dependent variables. Among the children of moderately high IQ, however, older children were considered by their parents to have fewer close friends (chi square (2)=6.4; p=.04); only 25% of the younger children were reported by parents to have fewer than two close friends, but at the older age, 60% of the children were so described. High IQ children at both ages were characterized by having no more than one close friend, at least a third having none at all.

**S**even significant differences between high IQ and moderately high IQ children have been reported above, of which six are indicative of potential difficulties (age of friends does not, in itself, constitute a problem). To discover whether perhaps a few maladjusted children might be determining the group differences, we looked at the distributing of the six items for individual members of the groups. As can be seen in Table 3, significantly more of the high IQ children (28%) than moderately high IQ children (2%) reported at least two difficulties, though few showed as many as three. In short, it appeared that the differences reported above were not due to distortion introduced by a few aberrant high IQ children.

**Table 3**  
Total Number of "Difficulties" with Friends

Total # of Difficulties With Friends:	High IQ %	Moderate IQ %	Chi Square	df	p
0	53.1	78.0			
1	18.8	20.0			
2	18.8	0.0	13.33	3	.004
3 or more	9.4	2.0			

In addition to the differences on friendship variables that have already been discussed, the high IQ children differed from the moderately high IQ children in one other respect that might have contributed to the overall positive picture. That is, they tended more often to be grouped with other children of high ability. Thirteen of the high IQ children (43%) versus seven of the moderately high IQ children (15%) had been placed in special programs for gifted children [chi square=6.02; df=(1); p<.01].

#### Dissension

As we have seen, a review of the empirical literature suggests that the social adjustment of most high-IQ children is relatively positive, but that a minority experience significant difficulties, a minority somewhat larger than is found in studies of children with average to moderately high IQs. Most of the previous studies of highly precocious children are, however, over 50 years old and many are (possibly selective) case studies. The present data, gathered from a relatively substantial number of children and parents, tend to confirm a relatively positive picture of the friendships of high IQ and moderately high IQ children with, however, a significant minority (28%) of the high-IQ children having fewer friends than they would like and feeling that being smart made it harder to make friends. These difficulties would in themselves not call for clinical attention, but simply indicate that intelligence does not necessarily play a helpful role in relating to other children.

Our evidence provides little basis for concluding that many of the children have serious difficulties with their agemates. The difficulties that are present may, however, trouble the children who have them and provoke worry among their parents. For this reason, educators and psychologists should be prepared to provide guidance. Most of the difficulties might be alleviated by helping children — whether or not highly intelligent — to conceptualize individual differences realistically and accept them with good grace. Contact with other bright children, in programs which cultivate intellectual talent, may also be helpful. Attentive and sensitive listening by adults can help bright children for whom there are no compatible playmates, to-

gether with the reassurances that, as the children grow older, they will move into environments better suited to finding "true peers."

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