DOCUMENT RESUME

ED 143 453 PS 009 481

AUTHOR Jackson, Nancy Ewald; And Others
TITLE Problems of Intellectually Advanced Children in the Public Schools: Clinical Confirmation of Parents' Perceptions.
SPONS AGENCY Ford Foundation, New York, N.Y.; Office of Education (DHEW), Washington, D.C.; Spencer Foundation, Chicago, Ill.
PUB DATE Jul 77
NOTE 22p.; Revised version of paper presented at the Biennial Meeting of the Society for Research in Child Development (New Orleans, Louisiana, March 17-20, 1977)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Academic Ability; Acceleration; Achievement Tests; *Advanced Placement; *Advanced Students; *Counseling Services; Early Childhood Education; *Educational Diagnosis; Exceptional Child Research; *Gifted; Intellectual Development; Intelligence Quotient; Longitudinal Studies; Parent Attitudes; *Parent School Relationship; Public Schools; Student Motivation; Teacher Attitudes

ABSTRACT

This paper reports on data collected during the 7-month pilot operation of a diagnostic and counseling service for intellectually advanced children and their families established in conjunction with a longitudinal study of such children. A summary of data on the first 24 cases handled by the service (involving children aged 3 to 11 years) indicated that parents of intellectually advanced children are legitimately concerned about the lack of appropriate educational options for their children. In most cases, intelligence and achievement test data confirmed parent perceptions of their children as intellectually advanced. Stanford-Binet IQ's showed a mean score of 138, with individual scores ranging from 108 to above the scale limits. Achievement test scores (Peabody Individual Achievement Test) showed a mean overall advance of 3.5 years beyond actual grade level. Parents of the preschool children anticipated problems of boredom and maladjustment, while the most common concern reported by parents of the older children was that the child was frustrated by lack of challenge in school work. Follow-up of these cases has indicated that the service's reports to parents had been useful in facilitating changes in the children's school programs. The provision of more readily available counseling services to parents of intellectually advanced children is recommended. (Author/BF)

Problems of Intellectually Advanced Children in the Public Schools: Clinical Confirmation of Parents' Perceptions

Nancy Ewald Jackson, Suzanne G. Krinsky and Halbert B. Robinson

in collaboration with

Wendy Conklin Roedell, Stephen McClelland and David Shorr

University of Washington

Child Development Research Group

Running head: Problems of Intellectually Advanced Children

Submitted for publication July 1977

Abstract

A counseling and diagnostic service for intellectually advanced children and their families has been established in conjunction with a longitudinal study of such children. A summary of the first 24 cases handled by the service indicates that parents of intellectually advanced children are legitimately concerned about the lack of appropriate educational options for their children. In most cases, intelligence and achievement test data confirmed the parents' perceptions of their children as intellectually advanced. Stanford-Binet IQ's of the group ranged from 108 to above the scale limits, with a mean of 138. Achievement test scores showed a mean overall advance of 3.5 years beyond actual grade level. Parents of children not yet in school anticipated problems of boredom and maladjustment. The most common concern reported by parents of older children was that their child was frustrated by the lack of challenge in the school work. Follow-up of these cases indicated that the reports given to parents had been useful in facilitating changes in the children's school programs. The provision of more readily available counseling service to parents of intellectually advanced children is recommended.

Problems of Intellectually Advanced Children in the Public Schools: Clinical Confirmation of Parents' Perceptions

One of the principal conclusions of Lewis Terman's longitudinal study of intellectually gifted children was the finding that bright children tend to be generally well-adjusted individuals who do well in school and in professional and personal life (Terman, et al., 1925; Terman & Oden, 1947; Sears & Barbee, Note 1). This conclusion may be relevant, however, only for the limited group of children represented in that study. Almost all of these children had already, at the time of their selection, demonstrated high achievement in school. Case studies of intellectually gifted children identified by other means have suggested that contentment and high achievement do not come easily to all bright children (Hauck & Freehill, 1972; Hollingworth, 1942).

Within the next few years, a more comprehensive picture of the educational fate of intellectually advanced[1] children should emerge from a longitudinal study now in progress at the University of Washington. Children in the longitudinal study are being followed from their preschool years through their academic careers and into adulthood. The focal group within the longitudinal study sample consists of children

---

[1] This is a revised version of a paper presented at the biennial meetings of the Society for Research in Child Development, New Orleans, March 17, 1977. Preparation of this paper was supported by grants from the Spencer Foundation, the Ford Foundation, and the U.S. Office of Education.

who have demonstrated extraordinary intellectual precocity before the age of five years; but children who have not yet demonstrated such precocity are also being followed in order to determine the efficiency of the early identification procedures.

The data to be reported here were collected during the seven months' pilot operation of a diagnostic and counseling service associated with this longitudinal study. The service was begun in response to repeated requests for help from parents of school-aged children who had heard of the longitudinal study. The members of the research group felt that by offering assessment and counseling services to these families, they could develop some hypotheses about potential difficulties soon to be faced by the young children in the longitudinal sample, as well as provide a needed service. As the service evolved, it quickly expanded to include a number of families of preschool-aged children who desired more comprehensive assessment and counseling than could be offered in the context of the longitudinal study.

A total of 24 children were seen during the period from December 1975 to August 1976. The children ranged in age from 3 to 11 years with most children aged 5 years and younger. The families resided in several different school districts in western Washington. They were predominately middle class, with a median education level of 15 years for both parents. All families were either Caucasian (n=20) or Asian (n=4) in ethnic background. Three of these Asian children were from bilingual backgrounds. Of the 24 cases, 14 were boys and 10 were girls. Fifteen of these children were reported to have had some

preschool experience, and all but two families reported both parents living together in the home. Sixteen of the children were either the only or the oldest child in the family.

In 22 of the 24 cases, the parents' primary concern was whether or not their child needed more academic challenge than was available in the regular public school program. For instance, the parents of one second-grader reported that their daughter had learned very little since attending school and there had been a decline in her self-confidence even though her grades were very good. Parents of preschool-aged children sought our help because they anticipated the problems of boredom and loss of intellectual zeal which had persuaded the parents of school-aged children to contact us. Some had even seen this decline of motivation in their older children and wanted to prevent this from happening in the younger sibling they were bringing to our service.

Parents' concerns reflected their own values and those of their community as well as the level of their child's ability. Some parents stressed only their fear that their child would not receive sufficient educational stimulation to challenge and maintain his or her intellectual interests. Other parents were also concerned with the potential social maladjustment which might result from the extreme discrepancy between their child's abilities and interests and those of his or her classmates. One family was so concerned about problems that might result from their preschooler's unusually advanced reading and interest in academic subjects that they had forbidden him to read his older

brother's textbooks. Most parents showed both pride in their child's accomplishments and concern about the difficulties involved in the rearing and educating of an atypical child.

Parents of children who had already had some school experience reported a variety of reactions from their child's teachers. Some teachers had quickly become aware of a child's advanced abilities and had provided whatever special activities they could arrange. One parent credited her child's kindergarten teacher with pointing out the outstanding nature of accomplishments which the family had taken for granted in their child. Teachers of other, equally remarkable children were reportedly unaware that they were unusually advanced or in need of any special opportunities.

The diagnostic and counseling service provided parents with information about educational options available for intellectually advanced children. It also provided parents with objective information about the level of their child's abilities. Many parents suspected that their child might simply be too far ahead of the class to fit readily into the existing school program, but they hesitated to make a special case of their child's needs without some outside confirmation of their own judgment.

In most cases, our testing did confirm the accuracy of parents' perceptions. By any measure, this group of children was strikingly advanced in intellectual ability. The distribution of IQ scores for the group is shown in Figure 1. The mean Stanford-Binet IQ (Terman & Merrill, 1973)

Insert Figure 1 about here

---

of the group was 138, and scores ranged from 108 to several cases beyond the scale limits. The highest scores were estimated at 164 and 175 by extrapolating from the published norms for the 1972 standardization.

The children's academic achievement test scores were fully as impressive as their intelligence test scores. All scores reported are from the Peabody Individual Achievement Test (Dunn & Markwardt, 1970), an individually administered test designed for children from kindergarten through twelfth grade. The test was standardized in 1969 on a sample of about 200 children at each grade level. Figure 2 gives the median performance of our group in terms of grade-equivalent scores on this test.

Insert Figure 2 about here

For the test as a whole, median advancement was 3.5 years beyond the children's actual grade level. Advancement tended to be most extreme on the reading subtests and least extreme on the mathematics subtest. There were, however, striking individual exceptions to this pattern. Some children were equally advanced in all areas, while others showed

a particular strength in reading or mathematics. The children's generally advanced performance on the reading-related subtests of the PIAT was consistent with their parents' reports of an early interest and ability in reading. In 14 of the 24 cases, parents reported that their child began to read before entering school. Six of the children reportedly began reading by two years of age; another five were reading by age three, and another three were reading by age four. These data should, however, be interpreted with extreme caution. Parents were not all asked precisely the same questions, and their perceptions of what constitutes the onset of reading may have varied widely.

Figure 3 indicates a pattern of performance typical of the preschoolers who visited the diagnostic and counseling service. This child had just turned 5 and was not yet attending kindergarten. His advanced academic skills were acquired on his own, without formal instruction or parental pressure.

Insert Figure 3 about here

This child was only slightly advanced in his performance on the mathematics subtest, performing at the level of the average first grader. However, his performance on all other sections of the test was extremely advanced, ranging from the third to almost the fifth grade level for individual subtests.

Since achievement test scores are often discredited as unreliable, it is important to note that these scores are sufficiently extreme to indicate substantial precocity, even allowing for the unreliability inherent in the test. For example, this child's total raw score for the test was 146 points. The maximum raw score attained by any kindergartener in the standardized sample was a mere 96 points. Our preschooler's total score was 5.5 standard deviations above the mean for kindergarteners. Similarly, his raw score on the reading recognition subtest was more than twice as large as the maximum raw score in the standardization sample, and more than eight standard deviations above the mean. This preschooler's achievement test scores were consistent with his Stanford-Binet IQ of 157 and "mental age"[2] of 8 years, 6 months.

Figure 4 summarizes the test performance of a slightly older child. This girl was 7½ years old and in the second grade when she visited our office. She had, just prior to being seen by us, been given an intelligence test, the WISC-R (Wechsler, 1974) by a school psychologist. On this test, her full-scale IQ was 141, her performance IQ 145 and her verbal IQ 128. She earned the maximum possible standard score on three subtests (Arithmetic, Digits Span, Block Design and Object Assembly) often reported (Sattler, 1974) to be related to mathematical ability.

Insert Figure 4 about here

This child's performance on the Peabody Individual Achievement Test was excellent in all areas, but, as might be expected from her WISC-R profile, her greatest strength was in mathematics. Her score on this subtest, equivalent to the average performance of eighth graders, exceeded the performance of any of her second-grade peers in the standardization population.

These children are not the most extreme cases of intellectual precocity among the children we have tested. They are typical of the children we have seen both in the diagnostic and counseling service and in our larger longitudinal study sample. We have grown so accustomed to seeing children exceed the scale limits of standard tests that we are no longer amazed at such performance. We wonder why we find it so easy to collect samples of children with extraordinarily advanced abilities, and suspect that our advantage lies in our direct reliance on parents rather than schools to judge children's precocity. Several parents of school-aged children reported that their children seemed to hide their advanced skills during school hours. The typical kindergarten or first-grade classroom may provide much more incentive and opportunity for an intellectually advanced child to work at grade level than for the child to display precocious intellectual skills.

On their final visit to our office, parents were given a written report summarizing what we had learned about their child. The report listed educational options consistent with the parents' reports of their child's social and emotional development as well as the child's test performance. We suggested that the parents might use this report in their

discussions with school personnel. Our hope was that the schools, presented with evidence of a child's advanced abilities, might prove more flexible and creative in tailoring their programs to the child's needs than is usually the case when parents present a case unsupported by outside evidence.

Our hopes were at least partially realized. At the beginning of the next academic year, parents of 20 of the children were contacted by telephone and asked to comment on their child's current school situation. Parents were also asked to describe how they had used the information supplied by our diagnostic and counseling service. Follow-up reports on the two children whose test scores were summarized earlier illustrate patterns of experience common throughout the group.

The preschooler who was reading at the third-grade level was one of five children who skipped kindergarten and were accepted as early entrants to first grade. Like all of our early entrants, this child was at the top of his first-grade class. According to his mother, he and one other student were working far beyond their classmates; particularly in reading. The teacher had developed some opportunities for them to do special projects with the classroom's student intern. The child seemed to be happy in the class and is doing well by any standard, academic or social. His mother attributed his successful adjustment to an excellent teacher who seemed to be aware of this child's special needs. For the following year, the parents had enrolled him in their district's full-time program for able learners.

At the time of our initial follow-up, school was not going so well for the second child. She was in the third grade, despite her parents' request that she skip into a class of older children. An individualized program in mathematics, promised at the beginning of the school year, did not materialize. However, by March of that year, the child's mother had been able to transfer her to a combined third-fourth grade classroom at another public school. The mother reported that the principal of the new school had taken the diagnostic and counseling service report as evidence to support the transfer and to justify the child's placement in a multigrade open classroom where she could move ahead at her own pace. According to her teacher's report at the close of the first grading period after the transfer, the child was adjusting well and earning excellent grades.

In general, our service was more effective in facilitating dramatic changes for children just beginning school than for older children. None of the elementary-aged children skipped a grade, though this alternative had been suggested as an option in several cases. Some children have been given individualized work or permitted to join a more advanced class for a particular subject. Some seem to be happier in school this year simply because they now have a more congenial teacher. Two children have transferred from public to private schools and are enjoying opportunities for advanced work.

The data reported here are admittedly from a very small sample. As yet, we have no way of estimating how extensive the problems we have encountered actually are. In the long run, we hope that research and

service programs such as ours will help to document the existence of such a substantial number of children with dramatically advanced intellectual abilities that the schools and the community will recognize the need to develop school programs that will accommodate the unusually able student as well as the average one.

Adequate counseling may ultimately be the key to accommodating intellectually advanced children within the public school system. The service described in this paper could be provided by any school system, and is now available in some districts. When the school system provides parents of intellectually advanced children with ready access to counselors who are sensitive to the needs of such children, informed about the options available in the district, and committed to making the system work for the child, there should be no need for an independent counseling service. However, the growing demand for our service suggests that the public schools are not yet giving sufficient attention to provision of diagnostic and counseling services for intellectually advanced students.

Reference Note

1. Sears, P. & Barbee, A. M. Career and life satisfaction among Terman's gifted women. Paper presented at the Terman Memorial Symposium on Intellectual Talent, Hopkins University, November 6, 1975.

References

Dunn, L. M., & Markwardt, J. Manual for the Peabody Individual Achievement Test. Circle Pines, Minnesota: American Guidance Service, 1970.

Hauck, B. B., & Freehill, M. F. The gifted: Case studies. Dubuque, Iowa: William C. Brown, 1972.

Hollingworth, L. S. Children who tested above 180 IQ Stanford-Binet: Origin and development. Tarrytown, New York, World Book Company, 1942.

Sattler, J. Assessment of children's intelligence. Philadelphia: W. B. Saunders, 1974.

Shorr, D., McClelland, S., & Robinson, H. B. Corrected mental age scores. Measurement and Evaluation in Guidance, in press.

Terman, L. M., et al. Genetic studies of genius: I. Mental and physical traits of a thousand gifted children. Palo Alto: Stanford University Press, 1925.

Terman, L. M., & Merrill, M. A. Stanford-Binet Intelligence Scale: Manual for the Third Revision, Form L-M. Boston: Houghton-Mifflin Co., 1973.

Terman, L. M., & Oden, M. M. Genetic studies of genius: IV. The gifted child grows up. Palo Alto: Stanford University Press, 1947.

Wechsler, D. Manual for the Wechsler Intelligence Scale for Children, revised: New York: The Psychological Corp., 1974.

Footnotes

[1]The term "intellectually advanced" is preferred to the more common "intellectually gifted" because it more closely reflects the operations used to define the population described.

[2]The mental ages used to describe performance on the Stanford-Binet no longer reflect the actual age at which a given level of performance would be the norm. According to the 1972 norms for the Binet, this child's performance would be more precisely described as indicating a mental age of 8 years, 1 month (Shorr, McClelland & Robinson, in press).

Figure Captions

Figure 1. Distribution of Stanford-Binet IQ scores for 22 cases.

Figure 2. Median scores on the Peabody Individual Achievement Test (16 cases, median actual grade placement at kindergarten level).

Figure 3. Peabody Individual Achievement Test scores of a typical preschool-aged client.

Figure 4. Peabody Individual Achievement Test scores of a typical school-aged client (aged 7 years, 9 months and enrolled in the second grade at time of testing).

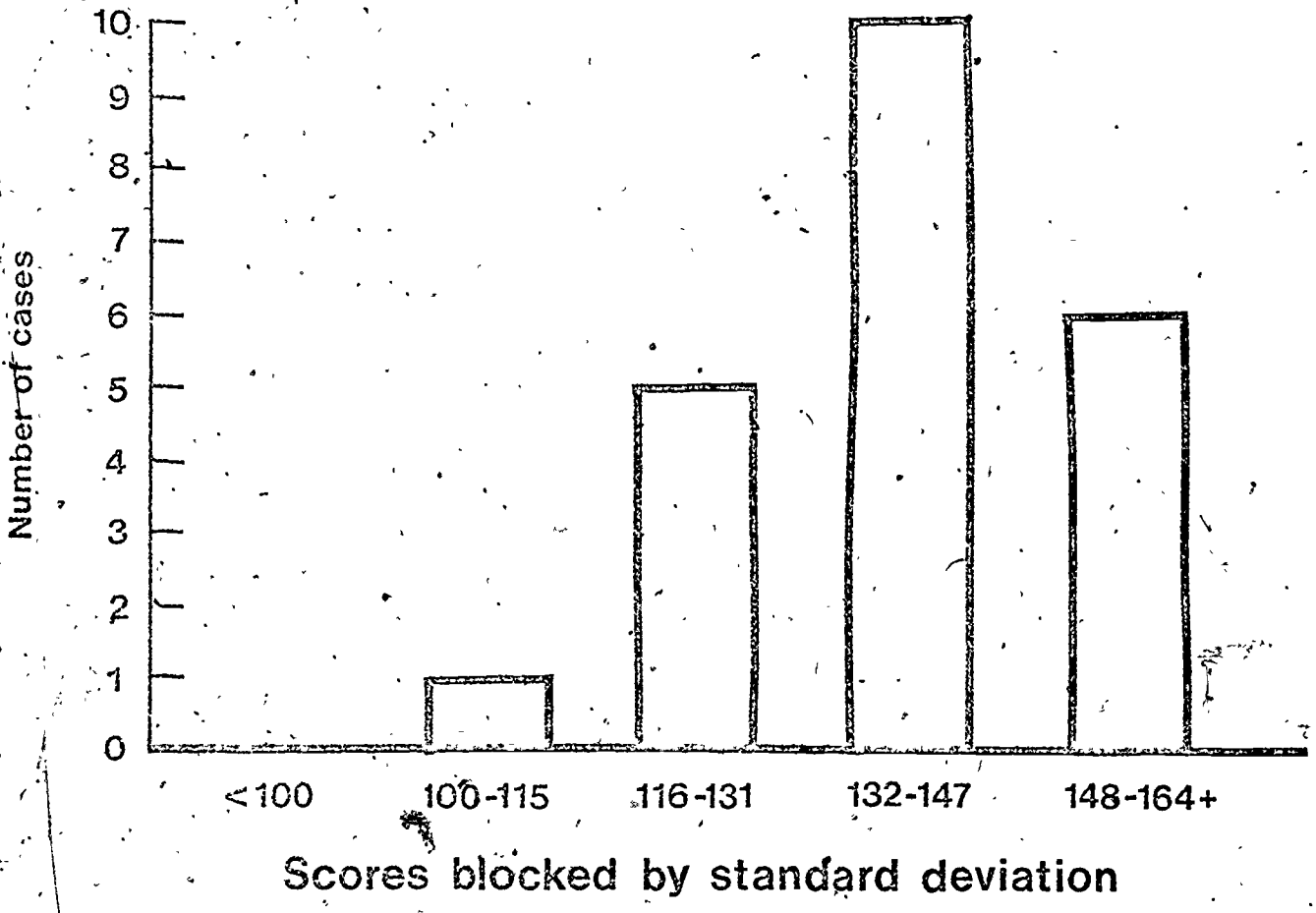

Figure 1. Distribution of Stanford-Binet IQ scores for 22 cases.

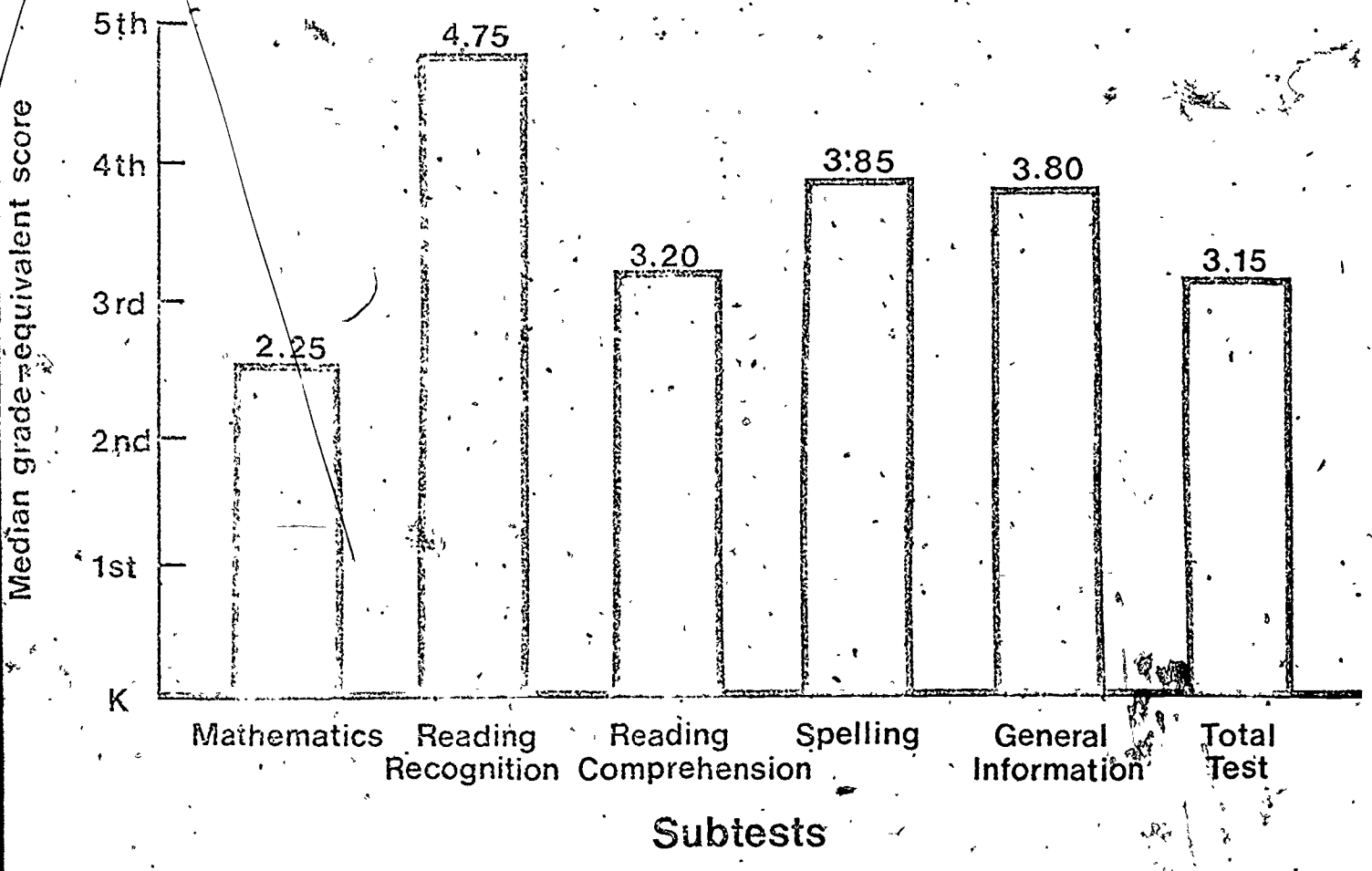

Figure 2. Median scores on the Peabody Individual Achievement Test (16 cases, median actual grade placement at kindergarten level)

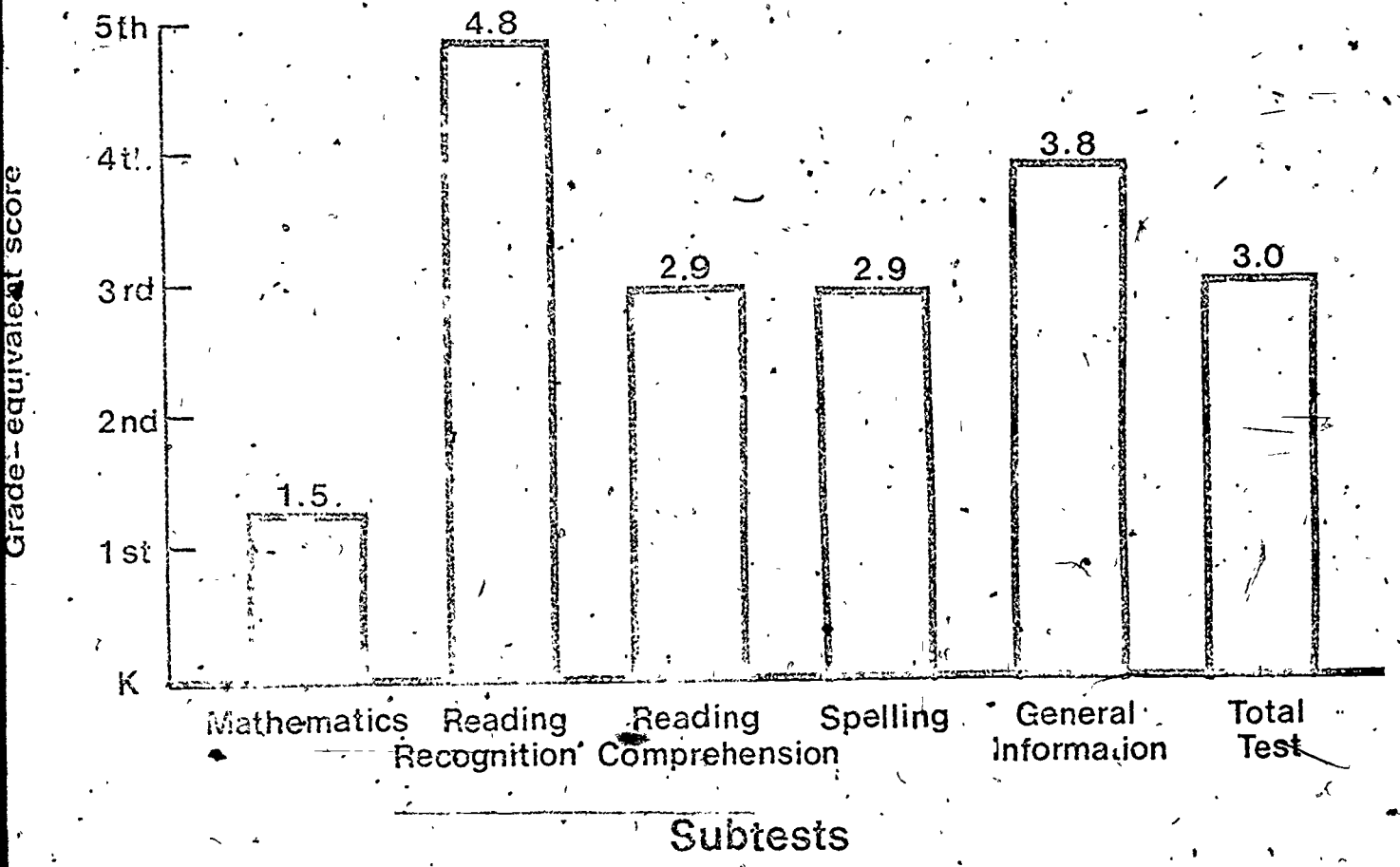

Figure 3. Peabody Individual Achievement test scores of a typical preschool-aged client.

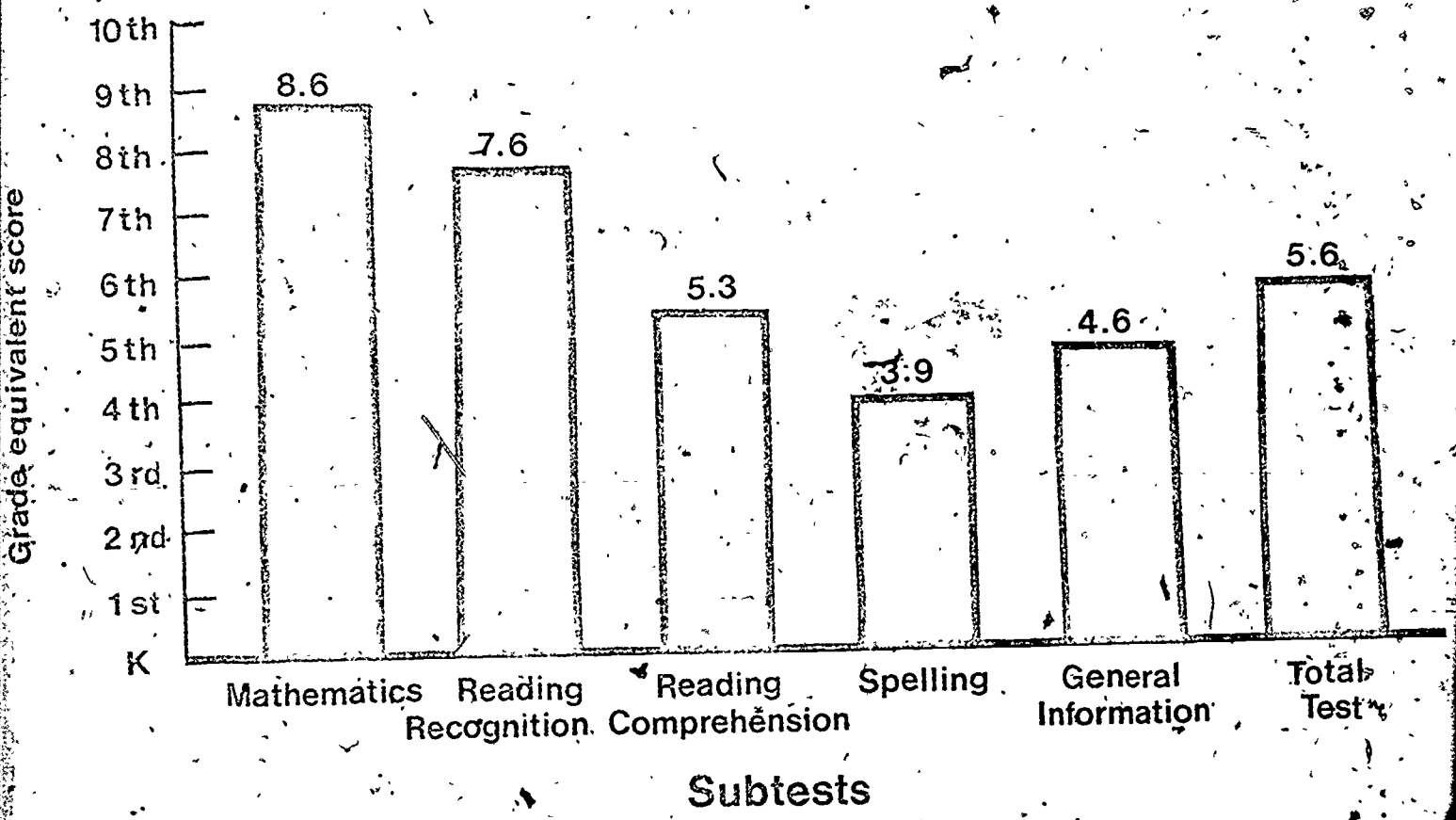

Figure 4. Peabody Individual Achievement Test scores of a typical school-aged client (aged 7 years, 9 months and enrolled in the second grade at time of testing.)