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ABSTRACT

A total of 948 minority children of 2-5 years of age from inner-city areas of Newark, New Jersey participated in a study that aimed to identify gifted preschool children. The study was designed to develop and validate a screening instrument and establish an enrichment program that would nurture the unique abilities of the gifted children. The screening device consisted of six age-specific forms, each with 12-18 items that required the child to perform certain cognitive tasks. The screening took approximately 15 minutes to administer. In order to evaluate the effectiveness and validity of the screening tool, 355 of the children also received a full assessment battery. These children were grouped in a way that allowed for a comparison of groups selected by the screening tool, teacher nomination, and chance. Five percent of the children were identified as gifted, compared to the 0.4 percent who, at that time, were identified as gifted by the Newark school system upon their entrance to first grade. The results indicated several points, including the following: (1) there are gifted children in economically deprived areas; (2) gifted children in inner-city populations are seriously under-identified; (3) early identification and intervention are crucial to guarantee that gifted preschoolers do not get lost in the system. The Inner-City Gifted Behavioral Form is appended. (LB)

Identification of Minority Inner City Gifted Preschool Children

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Identification of Minority Inner City Gifted Preschool Children

Children from poverty-stricken inner city environments are, by definition, children at risk. To identify and develop the potential of a group of young gifted inner city children would proclaim that giftedness is to be found among the minority population of this high risk environment and counteract the stereotype of the "ghetto" child as dysfunctional and incompetent.

The belief that gifted children will do well regardless of home or educational environments is not supported (Feldman, 1982; McGuffog, Feiring, & Lewis, 1987; McKenzie, 1986). Currently, 0.4% of children entering first grade in the public school system of Newark, New Jersey are identified as gifted. Statistically, 2% of inner city children should meet gifted criteria. This suggests that this talent, while not being identified and nurtured in the preschool years, is being lost.

The purpose of this study was to identify minority gifted preschool children living in the inner city. To this end, we developed a screening instrument and tested its validity. Following identification of a group of gifted children, our goal was to establish an enrichment program in order to nurture their unique abilities.

Method

Subjects

948 children between the ages of 2 and 5 years from 27 day care centers in the inner city of Newark, New Jersey served as

participants. Of these children, 355 received the full assessment battery.

Screening

The screening device consists of six age appropriate forms for two through five year olds (e.g., form 1 - 2 years 0 months to 2 years 5 months; form 2 - 2 years 6 months to 2 years 11 months, etc.). Each form consists of 12 - 18 items which require the child to perform certain cognitive tasks. The screening takes approximately 15 minutes to administer.

In order to evaluate the effectiveness of the screening tool and to validate the identification of children screened as gifted, we have assessed 355 children of the 948 screened. These children include those nominated by our screening tool as well as three comparison groups necessary to examine the effectiveness of our newly developed screening instrument. The comparison groups allow us to test the hit rate of our screening tool compared to teacher nomination, a method often used in the past to identify gifted children, and chance selection (the statistical comparison group). Consequently, children were divided into four groups for the purpose of assessment. The four groups are as follows:

1) Screening nominated - **SN**. This group consists of children who reach criterion score, indicating potential giftedness, for their age group on the screening measure. 2) Teacher nominated - **TN**. This group consists of children chosen by their teacher as being potentially gifted. 3) Teacher and screening nominated - **TN/SN**. This group consists of children who are both teacher and

Table 2. Assessment battery - skills assessment by age group.

Age (in months)	Overall I Q			Verbal Skills		Spatial Skills	
	Stanford Binet	WPPSI Full Scale	McCarthy GCI	WPPSI Verbal Scale	McCarthy Verbal Scale	WPPSI Performance Scale	McCarthy Perceptual Scale
2.0-2.5	X		X		X		X
2.6-2.11	X		X		X		X
3.0-3.5	X		X		X		X
3.6-3.11	X		X		X		X
4.0-4.5		X	X	X	X	X	X
4.6-4.11		X	X	X	X	X	X

Age (in months)	Quantitative Skills		Memory Skills	Pre-Reading	Spontaneous Language
	McCarthy Quantitative	PIAT Mathematics	McCarthy Memory Scale	PIAT Reading	Language Sample
2.0-2.5	X	X	X	X	X
2.6-2.11	X	X	X	X	X
3.0-3.5	X	X	X	X	X
3.6-3.11	X	X	X	X	X
4.0-4.5	X	X	X	X	X
4.6-4.11	X	X	X	X	X

screening nominated. 4) No nomination - **NO/NO.** This group consists of children who are neither screening nor teacher nominated. The majority of children are likely to fall into this group.

Table 1. Number and percent of children belonging to the screening nominated group (SN) and the other comparison groups (TN, TN/SN, NO/NO).

SN	TN	TN/SN	NO/NO	Total
139 (15%)	82 (9%)	37 (4%)	690 (73%)	948 (100%)

Table 1 presents the number and percent of children screening and/or teacher nominated. The results show that for the total sample, 15% were nominated by the screening device alone, 9% by the teacher alone, and 4% were nominated by both.

Assessment

Table 2 About Here

Each child chosen for evaluation was seen on two separate occasions for approximately three hours of assessment. Children were assessed in five specific skill areas including verbal, spatial, quantitative, memory, and pre-reading skills, as well as overall cognitive ability and spontaneous language. Table 2 presents the skills assessment measures used for each age group. A short behavioral checklist was completed for each child immediately following the first session (see Appendix A).

All SN, TN, and TN/SN children received the full test assessment battery. A random sample of the NO/NO group also was selected to receive the full assessment battery, as a test of the effectiveness of our screening device against no form of screening (rate of false negatives). A total of 258 children were nominated by screening test, teacher, or both screening test and teacher. In addition, 132 children from the NO/NO group were chosen for evaluation. Termination of 35 nominated children resulted in a total evaluation sample of 355 children[1]. Table 3 presents the number of children evaluated in each of the four nomination groups.

Table 3. Number of children evaluated in each of the four nomination groups.

SN	TN	TN/SN	NO/NO	Total
105	82	36	132	355

Results

Table 4 About Here

Of the 355 children who received the full assessment battery, 16 or 5% have been found to score in the gifted range.[2] Table 4 presents the distribution of these gifted children by nomination group and age. It also presents the number of children scoring at

Table 4. Number of children determined to be gifted by assessment in at least one skill area by the 98th, 95th and 90th percentile criterion - by nomination and age group.

	SN			TN			TN/SN			NO/NO			TOTAL		
Percentile:	98th	95th	90th	98th	95th	90th	98th	95th	90th	98th	95th	90th	98th	95th	90th
Total	7	26	43	0	8	22	5	13	21	4	10	22	16	57	108
2.0-3.5	1	1	1	0	2	6	0	1	1	3	6	11	4	10	19
3.6-5.0	6	25	42	0	6	16	5	12	20	1	4	11	12	47	89

Table 5. Percent of children scoring in the 98th, 95th, and 90th percentiles by nomination group.

	SN			TN			TN/SN			NO/NO			TOTAL		
Percentile:	98th	95th	90th	98th	95th	90th	98th	95th	90th	98th	95th	90th	98th	95th	90th
%	7%	25%	41%	0	10%	27%	14%	36%	58%	3%	8%	17%	5%	16%	30%
N	7	26	43	0	8	22	5	13	21	4	10	22	16	57	108
Total Number Evaluated	105			82			36			132			355		

the 98th, 95th, and 90th percentiles. Because standardized tests are known to give biased estimates of minority population performance, we felt it was important to consider broader criterion ranges for giftedness. Table 4 shows that when we move to the 95th and 90th percentile criteria, the number of gifted children increases markedly. A total of 57 (16%) children scored in the 95th percentile and 108 (30%) in the 90th percentile. This represents a relatively large proportion of children in this population scoring well above the standardized mean in any one skill area.

Table 5 About Here

Table 5 presents the percent of children scoring in the 98th, 95th, and 90th percentiles within each nomination group. Notice that identification by screening results in a higher percentage of gifted children than the other methods (recall that both the SN and TN/SN groups are screening nominated). Results reveal that while 9% of the screening nominated children (SN + TN/SN) scored in the gifted range (98th percentile), teacher nomination (TN + TN/SN) was successful in identifying only 4% at this level. Assessment of the NO/NO group resulted in a 3% identification rate. Thus, our screening device, compared to other methods (TN and NO/NO), was over twice as effective (9% vs. 4%).[3]

Conclusion

These results illustrate several important points about giftedness in inner city populations:

1) Gifted children do exist in economically deprived areas. This is evidenced by the fact that we have identified at least the expected percentage of children scoring in the 98th percentile in the Newark preschool population. This is despite the fact that the assessment measures we use have not been standardized on an inner city population.

2) Gifted children in inner city populations at present are seriously underidentified. According to the Newark Board of Education, only 0.4% of children entering first grade currently are being identified as gifted. This is in contrast to the 5% that we have found in our sample.

3) Early identification and intervention are crucial in order to ensure that these gifted preschool children do not get lost in the system. The fact that only 0.4% of children are being identified upon entrance to first grade suggests either that identification methods at the elementary school level are not effective or gifted performance already has been impaired by this time due to insufficient nurturance. Our preschool gifted education program, established to serve the children we have identified, provides one means of helping these inner city children reach their full potential.

Footnotes

1. The Newark daycare system has a fairly high rate of population turnover due to children changing centers or parents moving out of the area. This resulted in the loss of 35 children (14%) who were to be evaluated on the basis of screening or teacher nomination.

2. For the purposes of this report, a gifted child is defined as any child who scores in the 98th percentile or above on either an overall test of intelligence (IQ) or in a specific skill area. The PIAT subtests are not included in these criteria as they are not normed on this aged population. One difficulty with using a specific skills criterion is that we do not know the expected percentage for the population at large. There are four separate skills being assessed. If there are 2% who score within the 98th percentile, then the maximum percentage would be 8%, if we assume no overlap in children's scores on each of the skills. The latter case is unlikely since performance across skill areas is correlated; however, what the percentage is remains unclear. If, due to the biased estimates of minority population performance known to be intrinsic to standardized tests, we broaden our criteria to the 95th or 90th percentile, the same line of reasoning can be applied. That is, if 5% of children are expected to score within the 95th percentile (10% within the 90th percentile), then the maximum percentage would be 20% (40% - 90th percentile) when four independent skills are being assessed. As total independence

of skills is unlikely, the actual percentage at each level is uncertain.

3. We currently are in the process of evaluating the effectiveness of our screening instrument by age. Preliminary inspection of the data suggests that our screening is more effective in the older than younger age groups. This issue will be addressed by future revision of the screening device.

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Appendix A

Behavioral Checklist

INNER CITY GIFTED

BEHAVIORAL FROM

Name:

Date of Birth:

Chronological Age: Years Months

Date of Testing:

Behavioral Observations: During testing (name) **(Always, Usually, Somewhat, Rarely, Never)** was absorbed by the test. In general, he/she showed **(Excellent, Good, Fair, Poor)** attention span and/but **(Never, Rarely, Sometimes, Usually, Always)** was distracted. (name) activity level was **(Slow, Moderate, High)**. His/her response to test items usually was **(Quick, Impulsive, Thoughtful, Slow, Decisive, Unsure)**.

In regard to the examiner, (name) was **(Very, Moderately, Not Very)** socially confident. Initially, he/she was **(Comfortable, Shy, Reticent, Relaxed, Reserved)** and/but **(Later warmed up and relaxed, Continued to be uncomfortable, Continued to be at ease)** with the examiner. (name) appeared basically **(Comfortable, Ill at ease, Reticent)** with unfamiliar adult company. (name) self-confidence in his/her ability was **(Realistic, Unrealistic)** and he/she usually was **(Anxious, Assured, Unconcerned)** about his/her successes and performed to please him/herself as well as the examiner. (name) was **(Persistent, Easily frustrated)** in problem solving. His/her reaction to failure usually was **(Realistic Acceptance, Anxiety/Upset, Hostility, Frustration, Anger, Denial, Curiosity concerning correct response)**. When (name) could not solve a task he/she was **(Eager to continue other tasks, Wanted to stop temporarily, Ready to give up too easily)**. (name) seems to enjoy and prefer doing tasks that (Present the most challenge, Are moderately difficult for him/her, Are easy for him/her).