To determine development patterns of the disadvantaged child at the age when he comes into contact with a school program, a comparison was made of the test performances of 25 primary school children on the Stanford-Binet and the Vineland Social Maturity Scale. Test batteries were given in fall and in spring. The Binet test was administered at school, the Vineland at home through social work interviews. Each child's performance was examined in terms of items succeeded and items failed on the Vineland. Early failures and late successes were categorized, identifying subareas of good and poor development. There was a substantial difference between the mean scores on the Binet and the Vineland Scale. Only four children had a Binet quotient equal to or superior to their Vineland quotient. Children excelled primarily in the self-care areas, being able to feed and dress themselves at an age level much beyond their skills in other areas. They were also able to use small tools to do routine household tasks. Failures tended to occur in the areas of communication, general self help, and locomotion. In regard to neighborhood exploration, children appear to be overprotected by their parents. Evaluation of the disadvantaged child's social skills should include many developmental dimensions. (NH)
Special Studies Project #2

The Social Maturity of Disadvantaged Children

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The evaluation of the resources of disadvantaged children has concentrated mainly on the intellectual dimension that is so closely tied to school achievement. It has been fairly well established that children from underprivileged circumstances are, in general, below average in intellectual performance but that they will respond to a program of intellectual stimulation by showing some improvement in IQ scores (see Bloom, Davis, and Hess, 1965).

Less is known about the social and emotional development of the disadvantaged child although there is substantial suspicion that they cannot be benign with the disastrous family background and social settings that they must overcome. It is well known that these children possess neither the readiness skills nor positive attitude towards school that can be noted in the middle class first grader (Taba and Elkins, 1966).

One crucial dimension that should contribute to an overview of the total development is the degree to which the child shows behavioral autonomy consistent with his chronological age. A useful tool in this regard has been the Vineland Social Maturity Scale in which the child's development in eight different dimensions is measured through interviewing a knowledgeable adult. A social quotient can be derived which gives an indication of the rate of development in the general area of social competence. As noted by Cruickshank (1953), such a tool provides an opportunity to differentiate between true mental defectives who are socially inadequate and persons who have merely subnormal intellectual
development and who are capable of managing their personal and social lives. It is also an index for the measurement of growth and change under various intervention conditions. As pointed out by Robinson and Robinson (1965), the Vineland has been one of the important tools used to measure adaptive behavior, one of the major dimensions of mental retardation as defined by the American Association on Mental Deficiency (Heber, 1959).

Practically all of the professionals (see Teagarden, 1953) have commented on the technical measurement problems involved in using adult interview materials for the evaluation of children, but the importance of this particular dimension in the diagnosis of problems and the measurement of treatment effects is so great that it has been a widely used clinical tool.

Purpose of Study

The purpose of the present study is to compare the performance of a group of primary age, disadvantaged students on the Stanford-Binet and the Vineland Social Maturity Scale to determine the patterns of development of the disadvantaged child at the age when he comes into contact with the educational program.

Subjects

The subjects in the present study were twenty-five children enrolled in kindergarten classes of the Education Improvement Program in Durham, North Carolina. The Education Improvement Program was established under a grant from the Ford Foundation to Duke University and was designed to improve the intellectual and social development of children growing up in
situations of economic and cultural impoverishment (Spaulding, 1966). Three low-income areas of Durham, North Carolina, city and county, were chosen as target areas for a variety of experimental educational programs and demonstrations. The present subjects represent the youngsters involved in two different schools in the primary school age range. All available subjects with both measures were used in the present study.

Procedure

The scores used in the present study were obtained by the research department of the Education Improvement Program. A battery of tests was administered to all of the youngsters involved in the project, both in the fall and in the spring. The Binet test scores used in this study were those taken closest to the time that the Vineland was administered. The Vineland Social Maturity Scales were collected through social work interviews with the mothers or guardians of the children.

In a further attempt to analyze patterns of development on the Vineland Scale, the performance of each youngster on the Scale was examined in terms of items succeeded and items failed. The three items that represented the highest level passes for the child were identified by subcategory, as were the three earliest failures on the Scale for each youngster. These early failures and late successes provided a pattern of successes and failures for each individual child. These were then categorized to identify general subareas of good and poor development.
Table 1

Intelligence and Social Maturity Scores of Kindergarten Age, Disadvantaged Children

<table>
<thead>
<tr>
<th>Life Age (months)</th>
<th>Stanford-Binet IQ</th>
<th>Vineland Social Maturity Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td><strong>Boys</strong> (N = 13)</td>
<td>71.54</td>
<td>3.60</td>
</tr>
<tr>
<td><strong>Girls</strong> (N = 12)</td>
<td>73.00</td>
<td>4.13</td>
</tr>
</tbody>
</table>

**Results**

Table 1 shows the performance of the groups, divided by sex, on the Stanford-Binet and the Vineland Social Maturity Scale. As can be seen, there is substantial difference between the mean scores on the Binet and the Vineland Scale. Taking into account the known variation of both scales at this age level (Wolfensberger, 1962; Roberts and Melbone, 1952), this would mean that the sample was about -.5 to -1.0 standard deviations below average on the Binet but +.5 to 1.0 standard deviations above average on the Vineland. Of the twenty-five youngsters, only four had a Binet quotient equal to or superior to their Vineland quotient.

This difference in favor of the Vineland would tend to agree with previous literature obtained in the area of educable mental retardation (Kirk, 1962) which suggests that the students obtain better social maturity indices than Binet scores. Thus, while these disadvantaged
youngsters, on the average, obtained intelligence indicators of dull normal or low normal intellectual performance, they have achieved above average scores on 'social maturity.' However, care should be taken in clearly stating what this difference means.

Another picture of their performance is revealed by the patterns of early failures and late successes as shown in Table 2. Here one can see that the patterns of successes and failures are not at all randomly distributed in the eight subcategories of the Vineland. Instead, they are extremely selective in nature. Probability figures are given on the basis of Sign tests in Table 2, but most of the trends are clearly observable by inspection.

The areas in which these children seem to excel, or have late successes, seemed to be primarily in the self-care area. They are able to handle eating utensils and able to dress themselves at an age level much beyond their skills in other areas. The other dimensions in which they have outstanding successes were in using small tools and utensils or in doing routine household tasks.

In contrast, the failures which occur fairly early in the developmental schedule of the youngsters fall under the areas of communication, general self help and locomotion. Problems in communication follow the general problems in language or inability to communicate by telling stories or being able to use a pencil for writing or to print their own names.

Somewhat of a surprise is the tendency for the parents to not allow the children to go around the neighborhood unattended and their belief that their youngsters cannot avoid simple hazards. While there are some environmental realities in causing the parents to be cautious about the mobility of their children in these neighborhoods, this does raise the picture of a cautious and protective parent in regard to things outside the home.
Table 2

Early Failures and Late Successes by Vineland Categories

<table>
<thead>
<tr>
<th>Vineland Category</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Self Help General</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Self Help Eating</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Self Help Dressing</td>
<td>6</td>
<td>2</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Socialization</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Communication</td>
<td>3</td>
<td>12</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Locomotion</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Occupation</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Self Direction</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Discussion

Our search for the nature of the disadvantaged child has more often than not resembled the six blind men researching the elephant. The psychologist gives his report from a limited perspective; the social worker does likewise; while the pediatrician and school teacher and others also provide a one-dimensional portrait of the child and his problems. A total evaluation of the child must cut across many developmental dimensions for it to be useful in planning a more comprehensive program leading to 'equality of opportunity.' The lack of correspondence of the Vineland and the Binet scores in this study is just one indication of the need for a more total evaluation.
The wide variation in social development as indicated in the sub-sections of the Vineland Social Maturity Scale makes it relatively useless, and certainly misleading, to talk about the 'social age' as if these children were developing smoothly and evenly in all aspects. While the total Social Quotients of the present sample would give the impression that the children are progressing quite well, indeed above average, a detailed analysis of successes and failures showed quite a different situation.

In those areas where language and communication are important, they were below average as might be expected. There is some indication that these children are being overprotected in terms of their freedom to explore the neighborhood or their immediate environment.

The question that needs to be checked through further investigation is whether such restrictions represent a reality situation, whether such actions indicate punitive control, or whether this result reveals another trend of such mothers to try and isolate themselves and be overprotective of their young children. The other evidence of the children's social and self-care skills on tasks around the home would suggest that they are quite ready for development and experience outside the home, unless such environment is overtly hostile and dangerous.

It would appear also that the field has outgrown the ingenious but now badly out-dated Vineland Scale. More comprehensive measurements of the various threads of development that comprise social skills and self-care dimensions are badly needed. The single Social Quotient (as the single Intelligence Quotient) does not provide the needed information to plan an effective program based on individual needs.
The total planning or 'total push' that is required to benefit these children requires the services of an interdisciplinary team that could reveal the total fabric of development for each youngster and to propose a program reaching into many dimensions that would maximize his forward movement.

REFERENCES


