A PICTURE PERFORMANCE SCALE FOR THE HEARING IMPAIRED INDIVIDUALSt

LALITHA*

Introduction

Intelligence is defined by many people in different ways. Wechsler defines intelligence as the aggregate or global capacity of the individual to **act** purposefully, to think rationally and to deal effectively with his environment.

Intelligence can be measured by using verbal and/or performance scales. Performance scale is one in which language is used only in the instructions, or not at all when directions are given in pantomime. The main characteristics of the performance test is that a response to, or a solution of, the task does not require the use of language. These tests have proved most valuable when used with persons handicapped by language disabilities, such as the deaf, the foreign language speakers, the illiterate, and those who have speech or reading disabilities.

Performance scales usually are of two types: Power tests and speed tests.

A pure power test has time limit long enough to permit anyone to attempt all items. The difficulty of the items is steeply graded, and the test includes some items too difficult for any one to solve, so that no one can get a perfect score.

Wechsler has found that hearing impaired individuals obtain low I.Q's on speed tests. Hence, in the present study, it is intended to administer the picture construction test (from Bhatia's Battery). Picture arrangement and object assembly tests (from WISC), as power tests to hearing impaired individuals and find out the distribution of intelligence among them.

Methodology

1. *Subjects:* Thirty children who had either moderate or severe hearing impairment were selected from the School for the Deaf and Blind, Mysore, and from the A.I.I.S.H. therapy clinic. All were males. Children appearing to be mentally retarded were not included. The age range of the children was from 8-11 years to provide for some homogeneity. As this was only an exploratory study, no stringent methods of sampling, etc., were followed.

2. *Tests:* Three tests were chosen, namely, the picture construction test (from the Bhatia's battery), the picture arrangement test and the object assembly

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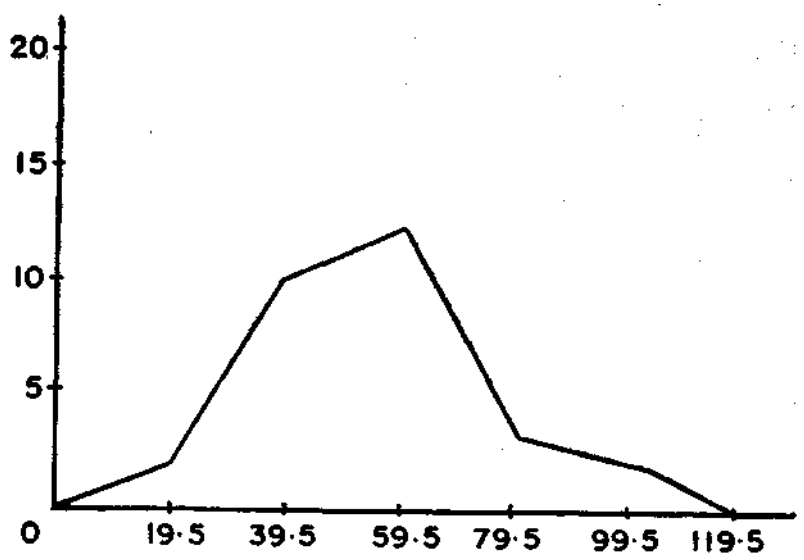
• Lalitha, M.Sc, Speech Therapist and Audiologist, Sankalp Hospital, Mysore.

test (from the Wechsler Intelligence Scale for Children). These tests requirs minimum or no verbal instructions and therefore very suitable for hard-of-hearing children. The method of administration was as described in the manuals by Bhatia and Wechsler. Speed of performance was not given any importance, except for the fact that the child had to complete the test within the maximum time limit permitted. A different scoring system for each of these tests was followed and a key has been prepared.

(3) *Procedure:* This group of children were individually administered these tests and scores were obtained. Finally, a composite score on all the three tests was obtained, as all these three tests require very similar performance ability. The mean scores and standard deviations were obtained for each of these three tests separately and even for the composite scores.

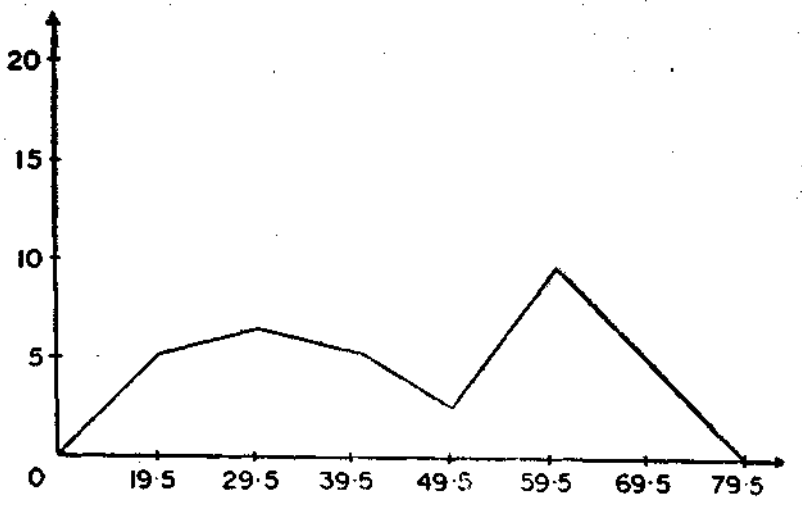


GRAPH NO. 1

Results

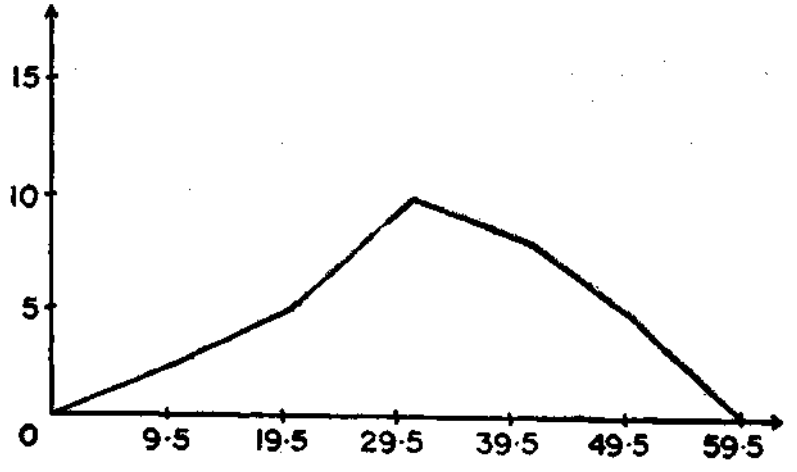
Graph-1 shows the distribution of scores on the picture construction test. It very much resembles the normal distribution. This gives an indication that the test can be usefully tried with hard-of-hearing children.

Graph-2 shows the distribution of scores on the object assembly test. The distribution seems to be bimodal. This result is not as per expectation. This is possibly because, there are four different sub-tests under the object assembly and that there is no continuity of increasing difficulty in the test. This might have resulted in the bimodal distribution. Also the group being not a random



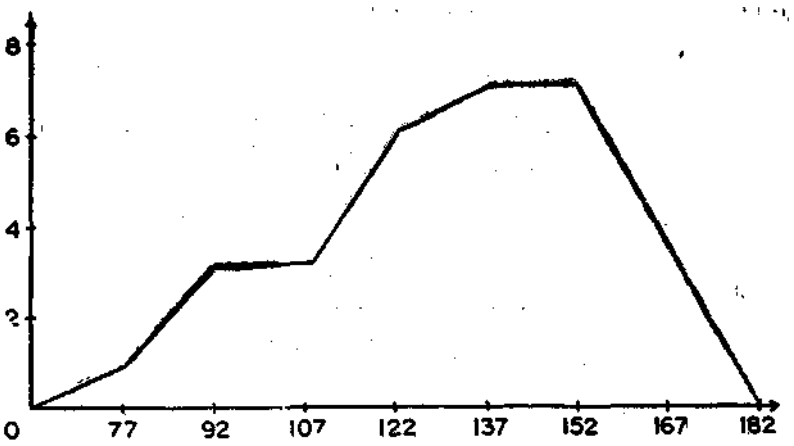
GRAPH NO. 2

sample and being very small might have resulted in this distribution. This gives an indication that this test may not be useful for testing hard-of-hearing children.



GRAPH NO. 3

Graph-3 shows the distribution of scores on the picture arrangement test. This seems to be very near normal distribution and therefore this is possibly useful with hard-of-hearing children.



GRAPH NO. 4

Graph-4 shows the composite score distribution which seems near normal distribution and the dip at score 107 needs to be explained. This is possibly because of the scores of the object assembly test included in this group.

If only a composite score had been derived only from picture construction and picture arrangement tests, it would have resulted essentially in a normal distribution.

However, certain precautions are necessary. These tests have to be tried with larger groups of children, with proper selection procedures, etc., which would give confirmatory evidence. Also these tests have to be tried with large groups of normal children.

The findings of this study point out the possibility of using picture construction and picture arrangement tests with hard-of-hearing children on a power scale and with suitable modifications may also be used for measuring mental development.

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