

**“CONSTRUCTION AND STANDARDIZATION OF A NON-VERBAL
GROUP INTELLIGENCE TEST FOR THE AGE GROUP
OF 13+ TO 17+ IN NAGALAND”**

**A
THESIS
SUBMITTED TO
NORTH-EASTERN HILL UNIVERSITY**

**FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY**

SUPERVISOR

Dr. S. K. Gupta
Reader
Department of Education

INVESTIGATOR

Imtisungba Ao
Lecturer,
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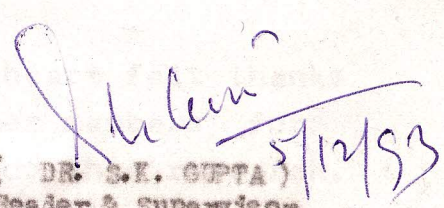
Dated December 5th / 1993.

C E R T I F I C A T E

This is to certify that Mr. Intisungba Ao has completed his thesis entitled " CONSTRUCTION AND STANDARDIZATION OF NON-VERBAL GROUP INTELLIGENCE TEST FOR THE AGE OF 13 + TO 17 + IN NAGALAND " under my supervision. To the best of my knowledge the data collected and facts reported in this research had been original work carried out and collected. The thesis is ready and fit for submission.

Place : Kohima

Dated : 5th Dec.1993.


(DR. S.K. GUPTA)
Reader & Supervisor
Department of Education

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Dated
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Imti sungba Ao
(Mr. Imti sungba Ao)
Investigator
NEHU. Nagaland Campus
Kohima, Nagaland.

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CHAPTER - I

1.1. IMPORTANCE OF THE STUDY

The word intelligence is a popularly used term in our daily life. People have defined its meaning, nature and process in different ways. People had been curious to know about it. It has been generally accepted that intelligence is an innate capacity in the individual. But at the same time it has been found that intelligence of an individual fluctuates with varying environment and with testing tools of intelligence.

People in ancient times were authoritative and commanding in nature and could use their own decisive power for the selection of manpower for various jobs. But in the modern democratic set up, it was found difficult to be authoritative and take unilateral decisions. Hence it was felt to devise some objective criteria for such selections for proper guidance and counselling to individuals. Thus intelligence tests play an important role to meet much requirements of human beings in democracy.

Intelligence tests also helps in making a judicious decision about the selection of proper courses of study to the aspirant individuals for various types of technical and commercial courses

of study in higher education. If proper educational and vocational guidance is not provided to students at an appropriate time, there is a possibility of misfits either in education or in vocations at later stage.

In Nagaland, it has been observed that most of the students choose a particular stream of course of study of their parents or attractive nature of the jobs, irrespective of their ability or capacity to do well in that area of study of job. The result is that there are more dropouts in their studies and more dissatisfied person in their jobs. In order to overcome such problems, the investigator felt the need of providing proper educational and vocational guidance in the light of their abilities and capacities to opt for proper courses of study and choose right type of jobs in their lines. For this the researcher was interested to make the people aware of intelligence and its use in their life and decided to construct a non-verbal intelligence test for Naga students population.

It was a common acceptance that both verbal group test and non-verbal group test have equal power to measure mental ability of the people. However in a diversified society with a number of sub-tribes with distinct dialects, sub-cultures of more or less similar value can be measured better by a non-verbal test than a verbal test. There are about 16 different tribes in Nagaland with distinct

dialects and therefore the researcher decided to construct a non-verbal test which could be used by all irrespective of their languages.

1.2. NEED AND JUSTIFICATION

Intelligence has very important role to play with various activities. Parents, school administrators, teachers, school counsellors and students require to know the role and importance of intelligence in managing education for the classification and categorisation of individuals for the selection of people for appropriate lines of life activities, intelligence test will give significant informations.

The people of Nagaland are not familiar with the concept of intelligence test. Intelligence test is a new terminology for the school teachers and students in this region. There is neither any centre for testing nor test instruments of this kind in the state.

In our country there are some test scale of intelligence which constructed and standardized in foreign countries with the norms of those people. Some Indian authors have developed some instruments on the basis of their local norms. As no particular test is reliable and valid for all the environments, the test constructed on other population may not be suitable or relevant for the Naga people.

In this state education is progressing rapidly with an increasing quantitative students enrolment at various levels; but these students and teachers are studying unaware of their mental levels and ability to do. It is not only a wastage but a source of socio-psychological and unemployment problems. As the people are still ignorant in darkness, those bright and excellence may lose a number of rights and opportunities.

Schools and many other agents may require the informations about the intelligence levels of the school children for their clear decision making and justification for selective processes as well as to categorize them for improvement programmes. It is sad that sometimes, biased judgements and discriminations are possible on the part of the concerned persons. Very often this may be due to lack of the factual knowledge about the individuals with whom they are dealing.

Therefore seeing the necessity, the investigator decided to construct and standardized and instrument on the basis of local environment with local norms. The investigator prepared a non-verbal group test instrument as it is expecting to be a more appropriate and suitable for the people of Nagaland where a lot of geographical, linguistic and socio-cultural problems and diversifications are prevailing.

The present test construction and standardization was undertaken on the following grounds:

- (a) No test of this type has so far been developed in Nagaland.
- (b) A very few researchers had constructed test instruments of this type in north-eastern part of the country.
- (c) Only a limited number of intelligence test instruments have been designed in the form of non-verbal omnibus group tests in India as a whole.
- (d) Local people of this state are not familiar with the intelligence test scales.
- (e) The investigator felt the need of designing a test of intelligence and standardized on the local population with local norms.

1.3.

STATEMENT OF THE RESEARCH TOPIC

"Construction and standardization of a group intelligence test for high school students of class VII to X with-in the age group of 13+ to 17+ years in Nagaland".

1.4. DEFINITIONS OF THE TERMS

(i) Intelligence

"Intelligence is the ability and capacity of a person to learn and carry on abstract thinking to response appropriately to a new situation". ()

(ii) Intelligence test

"Intelligence test is a standardized test instrument which uses for measuring the mental ability and capacity of the individual person or persons to learn adequately and carry on abstract thinking to adopt and response appropriately to a new situation." (

(iii) Non-verbal group intelligent test

"Non-verbal group intelligence test is a standardized instrument which uses to administer in group for measuring the individuals mental ability and capacity levels to learn adequately and carry on abstract thinking to adopt and response appropriately to a new situation. "

1.5. OBJECTIVES OF THE TEST

The construction of a test is not an end in itself. It has a long process of integral objectives. Test results can be utilised by the decision makers

as the indicators to finalise various methods for behaviour modifications. The investigator had taken up this topic with a definite purpose and objectives. There were no intention to profound a theory of its own, so the investigator carefully followed a series of methods and procedures for completion of the test scale as by other test constructors. The investigator wanted to extend a unique contribution to the society by providing an instrument for fulfilment of since long felt need of the people in the field of education.

The following have been the objectives under the present research work :-

- (i) The main objective was to construct and standardize an omnibus type of non-verbal group intelligence test for the students of class VII to X in the age group of 13+ to 17+ years in Nagaland.
- (ii) To establish different types of reliability and validity for the test.
- (iii) To establish group test norms for the total population in the form of derived score scales.
- (iv) To study the emerging pattern of group intelligence of the Naga high school students through the non-verbal test.
- (v) ✓ To develop a workable test manual for use of the test.

- (vi) To measure the intelligence of students under different age-groups and grades.

1.6.

ASSUMPTION UNDERLYING THE RESEARCH PROBLEM

The present study was based on the following assumptions :-

- (i) That the intelligence of the Nagas will be similar with students at other places in their equivalent age groups and grade levels.
- (ii) That the test constructed will show high reliability and validity coefficient.
- (iii) That the non-verbal group test will give the significant measures of persons' intelligence at par with other types of verbal and non-verbal tests.
- (iv) That the IQ of the individuals tested will be normally distributed.
- (v) That the intelligence levels vary with different factors such as age, sex and grade levels.

1.7.

DELIMITATIONS OF THE TEST SCALE

The meaning of intelligence is so vast that it includes a vast activities to measure. There are different types of intelligence testing at different levels with different groups of people by various researchers. Therefore the present test instrument was delimited to the following :-

- (i) The test instrument was limited to an omnibus type of non-verbal group test with non-verbal test items.
- (ii) It was limited only to the high school students of Nagaland who were studying in different classes of VII, VIII, IX and X.
- (iii) The age group of the population approximately covered 13+ to 17+ years. (According to the actual study the age group were identified from 12+ to 19+ years).
- (iv) The sample of the population was restricted to regular students of boys and girls of Nagaland state.
- (v) The language used for oral instructions and directions was English.