Chapter 4

ADAPTATION OF BAS

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4.1 MEANING OF THE ADAPTATION

Certain investigators try to evolve a new test to measure certain abilities. They are called innovators. Certain type of investigators do not do totally new research or innovate new things, they adapt from the past researches made by certain other researchers. These are called adaptors and the act being done is called adaptation. In the case of adaptation, there was a curiosity to know the effect of the new test to be applied in a different situation.

In the present adaptation, the investigator has not to invent the items but she has to translate or modify the items to suit the different culture in such a way that they - either translated, modified or newly coined - ought to be congruous with the original ones. Burt, too, remarks that "to translate a set of instructions and problems first standardized upon foreign children is from its very nature a task fraught with difficulty".¹

So the adaptation would connote certain changes to be made in the test format, in the items, in the situations or in the manner of administration.
4.2 IMPORTANCE OF THE ADAPTATION

Different nations have their own unique cultures, customs, language usages, occupations, attitudes, etc. So in order to test a particular ability, every nation has specific items depending upon their nationality. That is why a foreign test can not be transplanted in another soil without any specific modifications or changes. So here adaptation is the pre-requisite to be fulfilled for using a foreign test in different country. It means a foreign test items should be nationalized to suit the purposes of measurement.

Certain foreign tests have different norms, as for example, age norms, grade norms, culture norms, etc. These norms of foreign calibration can not be used as such unless they are transformed to suit one's own national purposes. Some times items might be taken as such given in the original test but the calibration of norms can not be applied to other's national purpose because the ability of the children is supposed to be acquired and it has been proved that acquisition is a specific phenomenon differing in degree and intensity in accordance with national milieu.
4.3 RATIONALE OF THE ADAPTATION

The above discussion shows that adaptation is to be carried out to fulfil three objectives which are as under:

(1) To modify the test items from the original test to suit the abilities of the native children.

(2) To modify or to restructure the norms of the original test to suit the range of the abilities of the native children.

(3) To save the time, energy and money of the nation by not constructing a totally new test when a reliable and valid tool of the same kind is available that has proved its worth in the respective (educational, vocational, industrial, etc.) field.

So the adaptation can be taken as a process by which a test becomes adjusted to the new environment.

4.4 SPECIFIC REASONS FOR ADAPTATION FOR BAS

The present investigator has decided to work on the adaptation of the BAS.
The reasons for the adaptation, over and above the reasons given elsewhere, are as under:

(1) The BAS is the only standardized instrument for measuring the ability ranging from years 2.5 to 17.5. Such a range could not be found in any other single test.

(2) The instrument of testing of ability in India are lacking in unidimensionality. None of the present mental tests manifests unidimensionality. All the items of BAS are unidimensional. The test maker of BAS used only one test parameter of item difficulty. The other parameters of test standardization are not used thereby making the BAS unidimensional. So unidimensionality is the unique characteristic of the BAS. So this is a specific purpose in the mind of present investigator for adaptation of BAS to Indian culture.

(3) The BAS is fitted to Rasch model. This is a unique strategy to be used in this scale. None of the Gujarati instruments for measuring mental ability has ever used such technique. So in order to satisfy her curiosity as to how such type of scales would behave if BAS is adapted under Indian conditions.
(4) The ability scores of the pupils are anchored to the difficulty values of the item. So the predictive values could be known very well and that too with accuracy. So the probabilistic expectations can be drawn from ability scores to success or failure in solving items of known difficulty values.

(5) The items of preceding test is linked with the items of the subsequent test is a characteristic of the BAS. This characteristic is lacking in the make-up of the present test of mental measurement in India.

(6) If any item, after adaptation is changed or newly invented, the norms will not be affected by such modification or invention. This is the unique feature of the BAS.

(7) Most of the Indian tests of mental measurement are sample dependent i.e. in order to apply norms the profile of the sample should be maintained. This is the most difficult situation while applying such instrument for measuring such abilities. Many a time misuse of such test is a rule rather than exception while BAS is a local (sample) independent test. So any person can use this test to any sample accurately, validly and reliably.
(8) Last but not the least, the BAS have been developed by a team of 61 psychologists, statisticians, psychometricians, trained administrators and professional persons for fifteen years. Such type of persons, acuity, expenses and dedication never dreamt of in Indian condition. That is why the present investigator has decided to adapt BAS to our Gujarati children.

4.5 PROCESS OF ADAPTATION

Before effecting any adaptation of BAS to the children of Ahmedabad city with its socio-economic background and cultural differences in comparison with those prevailing in U.K., certain changes were made so as to suit the cultural aspect of the Gujarati children. For this, the present investigator has evolved certain steps of adaptation which are described below.

4.5.1 Modifications in the instructions of the administration of the test

It was the experience of the investigator that the instructions specified in original test can not be accepted in toto; hence it was decided to modify certain instructions to suit the administration of the original instructions.
written in a prosaic form. Looking to the age range and inadequate development of cognitive apparatus certain sentences of instructions have been changed to suit the needs of the children.

To be very specific, certain instructions were freely translated so as to make them more clear and meaningful to the children. As for example, instructions given in subscale Matrices the original instructions were somewhat modified and they were translated into Gujarati so that children could understand what is demanded of them.

4.5.2 Modifications in the Content

The content of the BAS is in English. While translating this content into Gujarati, the actual meaning has been kept in mind. So in the adaptation verbatim translation is not followed rigorously. The reason behind this is that if the children could not understand what is demanded of them, they would not be in a position to respond correctly. Hence it is thought that instead of translating word by word, the meaning should be conveyed in a language which would be comprehended by the children.

In many of the subscales the investigator had transformed many of the sentences into meaningful ones but they were not exact translation.
4.5.3 Modifications in certain words of the test

In the subscale 'Similarities', some of the words seem misleading or puzzling to the Gujarati children. These words were changed and modified to suit Gujarati children. Instead of original words Mosque, Chapel and Synagogue - the words used were: Temple, Mosque and Gurudwara.

In another item there are words like Cod, Shark and Pilchard which are simply foreign to Gujarati children. Therefore instead of the original words - Mango tree, Banyan tree and Pipal tree were used.

In the subscale of 'Social Reasoning', the following changes have been necessitated in order to have familiarity of names of persons, as for example,

Instead of John, Rajesh
Instead of Joe, Manu
Instead of Jane, Gita
Instead of Alan, Amit

Similar changes have been made in the items of other subscales. In many of the subscales, the investigator had transformed many of the sentences which may be suited to the Indian culture and social customs, so that they were
more meaningful to the Indian children. Such changes had been made in 'Social Reasoning' subscale, for example,

(1) In the subscale "Social Reasoning", there is an item in which a toy a teddy bear has been burnt by an elder children. To suit this item in an Indian culture, it was modified as follows.

"A toy of an elephant was broken down by the elder children."

(2) The other major change in the story narrated below had also been changed to suit Indian custom. In a story, "a girl promised to return home at 9 P.M. but she could not come until midnight." The present investigator modified the timing by "6 P.M." and "until 9 P.M." to suit the Indian culture. (Girls rarely remain outside home till midnight; there is no dating procedure followed here.)

4.5.4 Replacement of the Objects

There are certain subscales in the framework of BAS which require replacement of the object to suit the practical administration of the test. In Verbal Tactile Matching, the rubberball was of smaller dimension which could not be procured from the market, to solve the
practical difficulty, the rubber ball was replaced by a plastic ball. In the same subscale, the object of uneven surface was replaced by paper abrasive. Thus the practical solution were innovated by the investigator. The responses of the children were not altered by these replacements.

The above discussion pertained to the process of adaptation that was effected to BAS. The investigator had taken into account all the care necessary to evolve a test which would suit the interest and cultural background of the children. It is hoped that in the subsequent tryouts of the adaptation, much less further modification would be required, nevertheless, the investigator kept an open mind for the modifications, which would be absolutely necessary.
REFERENCES:
