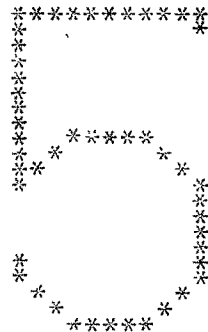


CHAPTER



PROBLEM, PURPOSE AND PLANNING

In the introductory chapter, it has been made clear that the main focus of this thesis is on evolving a 'test' for identification of creative talent. The review presented in the previous chapters indicates salient features of research developments in the field of creativity. This chapter delineates the problem, purpose and procedure.

5.1 STATEMENT OF THE PROBLEM

The problem of the present investigation can be stated thus: A Study on Creativity: Evolving a Test to Identify Children with Creative Ability at the School Leaving Age.

Why School Leaving Age?

Nothing suggestive of the age-range where identification is worthwhile has been said earlier. In the past research, age-range chosen has been much to the investigator's convenience and availability of the study groups. Even resolution by Government of India states that identification should be done at as early an age as possible. In choosing school leaving age (i.e. Secondary School leaving age which marks ~~as~~ the end of formal schooling) as the age-group for this study, the investigator has mainly stuck to immediate personnel procurement problems that the country is facing in different fields of growth and development.

That is secondary school leaving age marks the beginning of planned efforts, on the part of parents and society and also on the part of the student, to channelise one's future into preferred career.

There are a few studies (Torrance, 256; Trembly, 265-66) on the development aspects of creative ability, suggesting answer to the question. Torrance has found that growth of creative ability often would level at an age when children are in grade 10; this uniform status appeared to continue at the graduate school level. Studies quoted by Guilford (123) particularly that of Lehman (178) indicate that socially useful creative years were between 25 and 40.

Trembly's study indicated rapid rise in creativity test scores from the age of 15 to 30 when it reached the maximum.

When the above studies are inconclusive, they seem to fix some definite stages in the development of the creative ability. Upto fifteen years of age, a boy or a girl can be said to be developing - physiologically and psychologically - during which period socially useful creativity can hardly be expected, no doubt, a philosophy of education which is built upon the needs of the creative may serve useful. This aspect is still a matter for exploration (Taylor and Williams, 1966). It can further be said that after fifteen years of the age unfolding of creative ability might be dependent more upon environmental and motivational factors and reaches or maximum somewhere after twenty-five years of age. It can also be said that the 25-40 range is not a fixed one, some times first socially useful creative production from an individual occuring earlier, however, not earlier than the age of fifteen.

The age of fifteen is a crucial and decisive age, approximately marks the end of physical growth, and beginning of mental maturity and culminates in completion of formal education. The boy or a girl just crosses from adolescent mysteries to adult reality at this stage. Quoting Union College# researchers (Ligon, 130), Torrance (256) contends that "the fourteen to sixteen year period is the time for helping the individual to think about his/her abilities and how he/she can use to achieve success

in his/her career and vocations . It is a time to help him/her become aware of social needs and develop ideas for meeting them through action projects. He/She needs help in evaluating his/her abilities realistically. It is also a time for learning the skills of creative problem-solving and for practising the skill of finding "Third alternatives" which serve both conflicting purposes. He/She can be stimulated to list all of the things he/she can and cannot do in 'hopeless' situations". (p.99)

The points elaborated above tell that identification and needed channelisation of creative potential would be practical as well as possible at the age of 15-16 years of range. Testing materials too are well-developed for this age-range which can be broadly defined as secondary school leaving age or simply 'school leaving age'. Hence the present investigator has attempted to evolve a test to identify children with creative ability at this school-leaving age.

5.2 SOME NECESSARY CONSIDERATIONS

India is a country of many languages. A single test common to all languages has been difficult to evolve. This has been evident in the case of intelligence tests. Fifty years of work in the field of intelligence tests has not brought a single test which can be administered with ease any where in the country.

Comparatively, non-verbal (and performance) tests have been advantageous from the point of view of less verbal communication of test tasks or problems. Non-verbal tests have promise over verbal tests for being tests at the national level.

Non-verbal or performance tests which are to be individually administered present a most expensive situation as they consume more time. Group tests are easy to administer and consume less time. This probably suggests that non-verbal paper-pencil tests which can be administered to a group rather than to an individual are definitely advantageous to large-scale testing. Also, intensity of usual draw-backs such as that of copying and cheating seems to be less in the case of non-verbal tests.

Experience of an ordinary school teacher with psychological tests has been very nauseating from the point of view of length of tests (hence time) as well as preliminaries to be followed. A long paper-pencil test involves high expense of testing and hence keeps many schools with meagre resources away from adopting psychological testing. However, in our country, schools are not to be blamed. No national philosophy for adopting psychological testing as one of the 'musts' in the school education yet stands due in our country. But keeping the tests short, at the same time without losing efficiency would look to such needs of individual teachers and schools as mentioned above.

An important point which a brief and quick preliminary survey to tests brought out was low accountability of verbal side of abilities by non-verbal tests. Coincident with this is the language problem. For, the examiner or the teacher who administers the test is faced with the communication problem. If the test is such that the responses are verbal the individuals who attend the test are at advantage for they can express better and faster. Thus, the problem can be solved to a reasonable extent by keeping non-verbal items with verbal response type of tasks. According to Torrance (256), his tests can be classified into three categories:

- (i) Verbal stimulus-verbal response tests
- (ii) Non-verbal stimulus - non-verbal response tests
- (iii) Non-verbal stimulus - verbal response tests.

Even verbal stimulus non-verbal response category is also possible.

Keeping in view of the simplicity with which a test can be adopted for a nation wide testing which would keep efficiency at relatively high level, it is the third category tests that seem to be advantageous.

5.3 OBJECTIVES OF THE PRESENT INVESTIGATION

1. To evolve a test (or a battery of tests) which differentiates those children supposed to be creatives from non-creatives. A study of related literature and tests is imperative.

2. To study factor analytically the nature of λ factors contributing to the phenomenon creativity described by the test.
3. To establish as a peripheral outcome, the norms to which reference can be made. These should be taken as tentative and not final.

5.4 ESSENTIAL FEATURES

The proposed test should be fashioned such that it involves the following features:

1. To a possible extent that test should be free from the difficulties of communication of the tasks involved. This has been visualised as a future requirement at the national level.
2. The test should be compact, short and effective instrument available for use in Indian schools many of which are with meagre resources.
3. The test should be useful to identify the creative who may not even have formal schooling; thus it takes the pictorial and symbolic (numbers) forms essentially in presentation. (No doubt, the written responses in case of school-going population are in verbal form, as in the present case; however, these can be oral in case of the illiterate subjects to be interviewed by the tester. This can be a future possibility.)

5.5 LIMITATION

The present study would be limited to selected areas in Mysore State. As Mysore is author's native state, instruction to be framed by him would be in Kannada(State language) and so would be the responses and such other information to be gathered from children of the said State.

5.6 PROCEDURE

Test Development

Rationale on which different creativity tests are based will be surveyed and synthesised. Test battery will be accordingly evolved.

Pilot Study

The test battery so evolved will be subjected to pilot study and items will be analysed. Final battery will thus contain a small number of items having high discriminative capacity.

Finalisation of Scoring Procedures

Scoring for different factors of creativity will be based on the constructs based on previous studies and a composite index of creativity giving maximum correlation with criterion measures will be evolved. This will be based on final test and criterion data collected from a sample of above 200 children of Std. X.

Reliability and Validity

Reliability and validity of the test battery will be decided on the data collected above. A study of the hypothetical constructs used for scoring will be done factor analytically.

Norms

Norms will be established on a sample of 400 subjects. The age range under study is one year.

In this chapter, we have discussed the points regarding problems, some necessary considerations, objectives of the present study, essential features, limitation and procedure of the study under consideration.

In the chapter that follows, discussion is made on the development of the test battery.