CHAPTER III
DEVELOPMENT OF THE TOOL

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INTRODUCTION:

The main purpose of the study is the analytical study of various adjustment problems of adolescents attending senior high school and college freshmen. For this study, several methods such as questionnaire, psychological tests and inventories, interview, observation etc. may be employed. Each method has its own advantages and disadvantages. The use of specific method depends upon several factors such as the type of subjects to be employed, place of study, magnitude of the problems under the study etc.

In view of this, the investigator has selected questionnaire as his main method of investigation. In this regard, he has planned to develop problem inventory. To substantiate the findings, he has also decided to use the interview method. The problem inventory will reveal the type and intensity of the problems and interview of some of the selected cases will attempt to indicate the likely dynamic aspects of the problem. So, the problem inventory suitable to the age group to be employed was developed and broad interview guidelines were prepared.

DEVELOPMENT OF THE TOOL:

As there was no suitable problem inventory or checklist available in Gujarati, the investigator has
developed the same on the basis of the problem inventory developed by Badami.\(^1\)

The problem inventory developed by Badami bears its origin to the developments in the guidance movement in Gujarat State, especially in the City of Ahmedabad. It was developed with regard to college and university students. The standardisation was done, one for sample drawn from colleges and the other from post-graduate centres located in Ahmedabad. The problem inventory and the interview guidelines were used as one of the sources for obtaining problems. To have a full coverage of the different types of problems differing in kind and intensity, the following sources were used. Further, the interview guidelines were prepared simultaneously. In this context, the investigator has developed the problem inventory through the procedure mentioned below:

A: **FREE WRITING:**

About twenty groups differing in size from 25 to 30 students were employed. Each member of the group was provided with a blank sheet of 8" x 10" size. They were asked, without suggestions, limitations or structuring, whatsoever, to write or to list all sorts of problems, worries, fears and anxieties that bothered them much. Initially, the purpose of writing their problems was explained to them and they were assured that their writings
will be treated as confidential. The importance of their cooperation in the project was explained. To protect the confidential character of the writing, they were asked not to write any of their identifying information. The investigator was present in the class-room when students were asked to write their problems, worries or anxieties of any kind and intensity.

Thus writings from 250 students of both sexes attending high school and under-graduate classes of various colleges were obtained. Some samples of the free writing are given in the appendix E.

B: INTERVIEWS:

(i) Interview with students:

To begin with, interviews of the students of both sexes from local high schools and colleges were conducted. These students were drawn from Standard X and XI of high schools and pre-university and F. Y. classes of colleges situated in various localities of Rajkot. They were asked individually to talk freely about their problems, difficulties and worries bothering them.

(ii) Student leaders:

Class representatives, monitors and office bearers of the students' unions were also personally contacted and were interviewed. In all, 20 leader students of high schools and colleges were interviewed. During
Interviews, they were asked to report the problems, worries and difficulties they might have observed during their interactions with classmates and authorities of those particular institutions.

(iii) Interviews of persons in charge of students' activities:

There is a usual practice found in most of the educational institutions to nominate their staff members for organising and conducting students' activities. During the organisation of such activities, these persons often come across various problems faced by students. In this context, the teachers were asked to list problems concerning the general behaviour of students during formal and informal set up. Their talks revealed many problems.

(iv) Head of the Institutions:

The administrative heads of institutions are likely to come across several problems faced by students. In this regard, the present investigator interviewed some of the heads of institutions. It provided good information regarding the various problems faced by students.

C: GROUP DISCUSSION:

With a view to obtaining details of various problems and worries of students, the investigator conducted a meeting of 20 students from various institutions in Rajkot. These students participated in discussions regarding their problems, worries and concerns. These discussions
disclosed the existence of a wide variety of problems of adolescence.

D: CHECKLISTS AND INVENTORIES:

As an important stage of development of the tool, the investigator has referred to the available checklists on the subject. The checklists referred to Badami's student problem inventory for college and post-graduate students in Gujarat, James Hemming's problem inventories of problems of adolescent girls, Mooney Problem checklist, Billet Star Youth Problem inventory and Bhopatkar's problem checklist.

E: ARTICLES:

The investigator has also consulted the proceedings of the seminar arranged at B.M. Institute of Psychology, Ahmedabad to discuss students problems. He also examined the papers by Mrs. Badami, Bhopatkar, Bhatt, Vora, Vyas K.B. etc. presented in the discussions to increase their insight into the nature and kind of problems faced by adolescents either at high school or college levels.

F: RELEVANT STUDIES:

An attempt has been made to have necessary information in this regard by referring to several writings by known authors on the subject of the problems of adolescence. (4, 5, 6, 7, 8, 9)
ITEM POOL:

On the basis of above mentioned method, a total of 584 problems were selected from the various sources discussed earlier. All the problems were written in statement form.

EDITING OF STATEMENT:

To make the inventory simple, straight and direct, the repetitions of ideas, ambiguous words or double barreled statements were eliminated. All the problems are worded, as far as possible, in simple language used by the students themselves.

These statements were given to 15 experts for evaluation in the light of structure, content, language and expression. They were also requested to examine the relevance of these statements to the purpose of study.

SELECTION OF ITEMS:

The inventory containing 584 problems passed through various stages including the suggestions from experts. The problems ticked by less than 10% and more than 90% of students were eliminated.

CLASSIFICATION OF STATEMENTS:

The items of problems of adolescence were classified into 10 areas. These areas were evolved on the basis of existing inventories and checklists, foreign as well as of home country are enumerated below:
(1) Physical health and appearance.
(2) Self and Self-image.
(3) Family and interpersonal relation.
(4) School and educational.
(5) Friendship, love and sex.
(6) Social.
(7) Behaviour.
(8) Emotional.
(9) Economic.
(10) Moral and religious.

ARRANGEMENTS OF THE STATEMENTS:

The sequence of the areas and the statements in each area have been arranged to ensure the continuity of thought in the individual on the basis of interrelatedness of each statement - that is to say that there could not be sudden breaks or transitions in the thinking of the individual taking it.

LAYOUT:

The layout was kept simple and easy to fill in. It aimed at collecting two types of information: identifying information and problems. It was printed on the three-fold paper of 12" x 22" size. On the first page, identifying information together with the necessary instructions for filling it, is given. For making, illustration was given and at the bottom of the page, the score-box was also given.
SCORING OF THE INVENTORY:

The inventory yields two kinds of scores. One is the count of the number of statements checked by individual student and the other, problem frequencies which are counts of the number of individuals in a particular group who have checked each problem.

Further, there are no right or wrong answers to the statements. The individual's score is the number of statements of problems he has marked.

VALIDITY:

The problem inventory is different from other psychological tools and is not a test. The problem inventory is used for a variety of purposes and is so constructed that the obtained data must be considered in the light of many other factors. In other words, the results must be studied in terms of particular students in specific situation. The validity can be established to a certain extent by inspecting the inventory in the light of methods used to obtain its content. As a preliminary study, a group of 40 students of high schools and colleges was approached and the students were asked to list their problems on a sheet of paper as mentioned earlier. All the items of all the students were then pulled together, sorted and resorted to eliminate overlappings. This has given a comprehensive survey of problems faced by students. The statements were carefully
edited in order to ensure freedom from ambiguity. From this, one can say that the inventory is a valid list of problems because it is derived from what students themselves report as being their problems. Validity in such cases is primarily a reflection of what students actually feel and say. Since the very procedure of the preparation of the inventory involves this, the question of validity does not arise.

**RELIABILITY:**

The inventory is mainly intended to reflect the problems of students of a particular time. So the traditional approach to reliability is out of question. It will be sufficient to say that the statements of the problems have been carefully edited to allow no ambiguity and the tool itself is made so exhaustive and comprehensive that it is almost sure not to omit any problem and also to provide an opportunity to reveal all serious problems.

**INTERVIEW SCHEDULE:**

The interview schedule consisted of ten areas evolved from the inventory. During interview, students were required to discuss freely, without restrictions, their problems in each area one by one.

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(1) BADAMI R.D.: Students Problem Inventory for under-graduate and post-graduate students. Journal of Gujarat University, Ahmedabad. 1965.


(4) COLE, LEULLA: Psychology of Adolescence. N.Y., Holt, Rinehart and Winston Inc. 197


