

## CHAPTER V

### CONSTRUCTION OF THE INVENTORY

#### 5.1 INTRODUCTION

The personality tests differ from the ability or achievement tests in that they measure the more intangible aspects of behaviour. These intangible elements consist of complex patterns of thoughts, feelings and actions. They are not assessable by means of ability or achievement tests. Yet, they provide information which is of immense use to the teachers, counsellors, or employers. Because of their intangibility, the above aspects of behaviour have always defied measurement. In ability or achievement tests, areas of measurement can be defined clearly, and the pertinent samples of behaviour can be specified exactly. For example, achievement in mathematics at a particular level can be clearly

defined in terms of specific concepts, understandings, skills of computation, etc. Reasoning ability also can be defined in terms of certain types of problems to be solved in the different situations, viz., abstract, verbal, numerical, etc. But personality is a very broad and diffuse term. It includes ability and achievement factors also. In measurement, however, personality tests are those which measure the more intangible aspects mentioned above, and not those which measure the ability or achievement factors. Moreover, in personality, there are a number of areas or factors and one has to choose from them according to one's purpose. It is also necessary to define them to clarify their meaning, because, in the field of personality, there prevail, very often, controversies regarding the use of terms and concepts. Such definition and specification of the areas of measurement help one in construction and selection of items for his test.

In the present work, the areas to be measured are already discussed and defined in the first

chapter. They are: introversion-extraversion, neuroticism and psychoticism. The first two have been measured by inventories prepared in U.K. and U.S.A. But so far no attempt to measure psychoticism as a general factor has been successful. Here also, the primary intention was to construct an inventory for measuring the first two dimensions employing the forced-choice technique. The factor of psychoticism was to be measured if it was possible and if the items proved valid for the purpose.

The construction of the items was based on three sources, viz., the existing inventories, the descriptions of these areas in the psychological literature and discussions with persons who had studied these areas for some purpose, especially those who had specialized in the clinical psychology. The list of the inventories and the other literature which was referred in this connection, is given at the end of the chapter.

Items belonging to the areas of introversion-extraversion, neuroticism, emotional stability or

instability, various neurotic disorders, and various psychotic disorders were collected. Items were also constructed on the basis of clinical descriptions given in the text-books and psychological journals. They were combined with those collected from the inventories. These were suitably edited, and assembled into an inventory. A few persons working in the areas of clinical psychology were chosen for the discussion of the above items and for their suggestions regarding new items. Some of them were locally contacted and a few others were approached with a letter, a copy of which is given at the end of this chapter. In the light of these discussions and comments, the items were edited. The general principles mentioned in the next section, were also given due consideration in the preparation of the first draft of the inventory.

## 5.2 GENERAL PRINCIPLES OF WORDING ITEMS

The problem of exact and unambiguous communication is very important in standardized tests.

Words or statements which are equivocal in meaning defeat the very purpose of the test and render it invalid and unreliable. It is, therefore, necessary to use most simple form of expression and clear words. Wherever, unfamiliar terms are used, they should be defined exactly. In wording the questions also certain basic principles are worth considering. These are stated below briefly:

- (1) The language of the statements should be simple and easily understandable.
- (2) The meaning of each statement should be unambiguous and clear. It should have the same meaning for all the subjects.
- (3) Long and complex sentences should be avoided, if possible. Care should be taken to see that the item may not be partly applicable and partly inapplicable to the same person.
- (4) The wording of the statements should not be too suggestive.

- (5) The stereotyped words or catch-words should be avoided; e.g. introvert, neurotic, etc.
- (6) The sequence of questions should be carefully planned. The items in the beginning should be simple and such that the subject may not at once take up a defensive attitude.

Keeping in mind the above general principles, as many as possible symptoms characteristic of the three areas to be measured, were collected. Their sources were, as already mentioned, the discussions in the text-books, their use in the other inventories, and discussions with the clinical psychologists. For example, the description of introverts found in the text books as shy and hesitant, whose feelings are easily hurt, who are self-conscious, pessimistic, critical, thoughtful, reflective and imaginative, etc.... give one sufficient direction in framing items. Similar descriptions of the extraverts, the

normals, the neurotics, the psychotics are available from the text-books and other literature. Most of the items used in the prevalent inventories are based on these descriptions. The only difference is in the form of items. Some use question form, while some use a statement form in the first person. But the items are mostly common from one inventory to another if they measure identical areas. For the present inventory also items were freely borrowed from other inventories. The form of item adopted was the statement form in the first person and, therefore, all the symptoms collected were rendered in it. The reasons for choosing statement form is mentioned in the fourth section of this chapter. All the items were carefully worded into simple language. They were edited and scrutinized again and again with the help of a few colleagues, who were asked to go through the items to point out any ambiguity, lack of clarity, or possibility of misinterpretation which occurred to them. Items were revised in the light of such comments.

### 5.3 LANGUAGE OF THE INVENTORY

The language used for the inventory is English, because, the inventory was meant mainly for the educated population, either going to college or has gone through the college. The work was undertaken in the context of the present worker's own experience in the Student Counselling Centre of the M. S. University of Baroda, where he experienced the complete lack of any suitable evaluation tool in this area. The whole planning was done with this need in view. Besides the theoretical considerations already discussed in the first chapter, this was again the reason for choosing the areas of measurement. Looking to the multi-lingual nature of the student population of the above mentioned University in particular and most of the universities in general, English language had obvious advantage over the local regional language.

The students came to these universities from all parts of India. Their mother-tongues were



different and the common link language between them was the English. Moreover, a sizeable group of East-African students came to study in Gujarat and its universities. The attraction of students from far off distances was also due to the reason that the M.S.University offered rare courses such as fine arts, music, social work, architecture, home science, etc. besides all the common branches of studies. They spoke, wrote and understood primarily the English language. The medium of instruction in the M.S.University is also English. It required the students to have passed the S.S.C.examination with English language before admission to it. Therefore, all of its students could reasonably be expected to understand, at least, simple and carefully worded English prose.

Moreover, in the Students Counselling Centre, it was the investigator's observation and experience that those coming from far off distances in the other states, had greater adjustment difficulties than the local students; and their number used to

be proportionately larger. This might have been due to the feeling of homesickness, or alienness due to differences in the language, habits, culture, etc. Under such conditions it was likely that some of them found it difficult to make proper emotional, personal or social adjustments.

All the above considerations lead to the choice of the English language as the medium of the inventory.

#### 5.4 FORM AND CONTENTS OF THE INVENTORY

The items consisted of positive statements in the first person, such as:

I am an important person;

I am lacking in self-confidence;

People generally make such positive statements about themselves while thinking or while talking to others. By putting a question, a doubt is raised in the mind of the subject. He has to think and decide his answer. Whereas in the above manner, he has to recall whether he has thought or talked that way.

If the item has not been thought of before, it any way raises the question as to whether it is applicable or not. It is, because of this reason that positive statements were preferred to the items in the form of questions.

Suitable instructions were prepared to explain in the subject what he was supposed to do with the inventory. An appeal was prepared to elicit honest and frank replies. Instructions for marking the answers on the separate answer-sheet were given. Examples were included alongwith the directions, to illustrate how to mark answers. In summary, adequate care was taken to make the instructions clear and self-explanatory. Samples of the first form of the inventory is given in Appendix A.

The items were provisionally keyed in the light of their use in other inventories, on the basis of the definitions of the scales adopted in the present work, on the basis of the descriptions of these scales or identical scales in the text-

books and in the light of the comments by the experts consulted.

Out of the total of 195 items framed and already mimeographed for pilot administration, it was discovered that nine items either remained vague, or involved error in printing, or involved repetitions, or involved disagreement as regards keying to any particular scale. It was decided to omit these from the scheme of scoring.

Fifty-six items were keyed to introversion-extraversion scale, 83 to normal neuroticism scale, and 47 to normal psychoticism scale.

A separate answer-sheet was prepared for marking of the answers. Against each item number, two categories were provided for answering: Y (Yes) and N (No). No doubtful or question-mark category was provided, because, the very nature of questions was such that subject would safely resort to that category in a large number of cases. The identifying data regarding the individual was also included

in the answer-sheet.

A glossary of different words was given on the back of the answer-sheet for their reference. It was prepared on the basis of a pre-pilot try-out of the test. Ten preparatory (Pre-University) class students were given the test to mark out the difficult words, the meaning of which they did not understand. All the words marked by these students were included in the glossary.

The samples of the answer-sheet and glossary are appended at the end (Appendices - B & C).

#### 5.5. SUMMARY

There are inherent difficulties in the task of measuring personality by way of lack of clarity in the areas or attributes to be measured. Clear definitions of these are a first requisite before any attempt is made to measure them. While collecting items care should be taken to sample behaviour in a wide variety of situations. The possible sources of items are the discussions of the areas to be -

measured, in the text-books and other literature, discussions with the experts, and the items already used in other inventories while measuring the same or similar attributes. Utmost care is necessary in the wording of the questions to avoid any ambiguity or lack of clarity. English language was used in this particular instance to make the inventory suitable to the local as well as the alien population - students coming from other states and East-Africa who understood the English language better than the local regional language. The form of the item chosen was the statement form in the first person. Carefully edited and scrutinized items were assembled into the inventory. Instructions to the subject, separate answer-sheet, and glossary of difficult words were also prepared. In this manner, the first form of the Inventory was made ready for pilot administration.

List of tests referred to

1. Bernreuter Personality Inventory.
2. Cornell Index.

3. Edwards Personal Preference Schedule.
4. Gordon Personal Profile.
5. Maudsley Medical Questionnaire.
6. Minnesota Counselling Inventory.
7. Minnesota Multiphasic Personality Inventory.
8. Minnesota Personality Scale for Men.
9. Minnesota Personality Scale for Women.
10. Personal Data Sheet (Woodworth).
11. Personality Inventory (Eysenck).
12. Personality Research Inventory (ETS).
13. SRA Youth Inventory.

List of Books consulted

1. Eysenck, H.J. Dimensions of Personality.
2. Eysenck, H.J. The Scientific Study of Personality.
3. Eysenck, H.J. The Structure of Human Personality.
4. Eysenck, H.J. Dynamics of Anxiety and Hysteria.
5. Henderson, D.K. & R.D. Gillespie: A Textbook of Psychiatry.
6. Hunt, J. McV., Personality and the Behaviour Disorders, Vols. I & II.

7. Jung, C.G., Psychological Types.
8. Masserman, J.H., Principles of Dynamic Psychiatry.
9. Shaffer, G.W. and R.S.Lazarus, Fundamental Concepts in Clinical Psychology.

The copy of the letter addressed to experts for the preliminary classification of items:

Dated:

Dear Sir,

I am working on the construction of a Personality Inventory for my Ph.D. in Psychology. It is my intention to measure in the first place the three dimensions of personality as described by Dr. H. J. Eysenck. These three dimensions are Introversion-extraversion, Normal-neuroticism and Normal-psychoticism. According to him they are orthogonal factors, and he has tried to put forth this theory on the basis of a large body of research and empirical evidence. I am trying to measure these and see how far they apply in the perfectly normal population.



I, therefore, earnestly solicit your cooperation in establishing a preliminary classification of items into these three categories. These concepts depend on the social context for their meaning. So it will be a great help in the beginning if I can get the judgments of some experts in this matter. I am enclosing herewith a list of items with three indices against each item. They are IE, N, and P. IE denotes the Introversion-extraversion dimension, N denotes the Normal-neuroticism dimension and P denotes the Normal-psychoticism dimension. An item may measure one or more of these dimensions if answered in a certain way. You will be considering both the alternative ways of answering any item. The proposed alternative responses are Yes and No, meaning applicable and not applicable respectively. The subject will be saying whether a statement is true of him or not. You have to give your judgment as to which dimension or dimensions an item measures. You do this by striking off by cross marks (X) the areas against each item which

are not measured by that item. If an item does not measure any of the areas mentioned you can strike off all the three.

Besides these items if you can list more symptoms characteristic of any of these dimensions, your suggestions are most welcome.

Thanking you in anticipation,

Yours sincerely,

M.N. Palsane