CHAPTER V

METHOD AND PROCEDURE

The present study started with the main aim of investigating relationship between conservatism-radicalism and certain personality traits. The first step was to construct a scale to measure conservatism-radicalism. The method and procedure of the scale construction has been reported in the previous chapter. As has already been mentioned, personality traits are innumerable; assessment therefore had to be selective. In the present study, the selection of traits was done on the basis of previous related studies and on a priori grounds, choosing those personality traits, the relationship of which with conservatism-radicalism appeared more probable. For instance, it would not seem fruitful to correlate such personality variables as visual acuity speed of tapping etc. with conservatism-radicalism. Thus traits which seemed to have relevance for social attitudes were selected. The names and description of the chosen personality traits is given further.

SAMPLE

The preliminary sample consisted of 1116 postgraduate students from the following three institutions:
Institution No. of subjects

<table>
<thead>
<tr>
<th>Institution</th>
<th>No. of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panjab University, Chandigarh.</td>
<td>793</td>
</tr>
<tr>
<td>College of Education, Chandigarh.</td>
<td>168</td>
</tr>
<tr>
<td>State College of Education, Patiala.</td>
<td>155</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>1116</strong></td>
</tr>
</tbody>
</table>

The number of boys was 523 and of girls 593. From the university, both arts and science students were included in the sample. The age range of the respondents was roughly between 19 to 24 years, mean age being 21.9.

Post-graduate students were preferred for the present study due to the following reasons:

1. All can understand English and thus, different tests could be used in their original form, without translation.

2. They have, relatively speaking, more established opinions and are mature as compared to the under-graduate students.

3. Better cooperation is expected from them, as being in post-graduate institutions they are able to appreciate and realize the value of research. Moreover, they are less resistant and fussy in expressing their attitudes.
4. They represent an important sector of the population, both through their family connections and through their prospective leadership in the community.

5. Additionally there were enough practical reasons to determine that the present study with its limited resources and objectives should start with post-graduate students.

**ADMINISTRATION OF THE C-R SCALE**

C-R Scales (printed booklets) were given to the students in groups of 15 to 20 in their classes. The filling in of the scale was preceded by verbal instructions (besides the instructions printed on the front page) given by the investigator to the respondents, which are as follows:

"I am trying to find out as to what the students feel and think about a number of social issues, which are important for the society. I am sure, you will find the enclosed scale interesting. You will find in it many questions you have thought about, read in newspapers and magazines or heard on Radio. This is not an intelligence test, nor an information test. There are no "right" or "wrong" responses. The best answer is your own personal opinion. You can be sure that whatever your opinion may be on a certain issue, there will be many people who will agree, many who will disagree with
it. And this is what I want to find out: how is public opinion really divided on each of these socially important topics? Rest of the instructions are given on the front page of the booklet. If any of the statements or meaning of words is not clear, please feel free to ask me. Please be sincere and accurate as far as possible in the limited time you have." These instructions helped in establishment of rapport leading to more of involvement.

Students took 40 to 50 minutes to complete the scale. Scoring was done to get the individual scores as discussed in Chapter IV. After the scoring was done, the 1116 filled forms were piled in descending order of the individual scores. Out of the preliminary sample of 1116 students, the upper and lower 10% students were included in the final sample for further analysis. The upper 10% of the sample (N = 112) was the conservative group whose scores ranged from 230 to 323. The lower 10% of the sample (N = 112) was radical, whose scores ranged from 44 to 124.

SELECTION OF INSTRUMENTS FOR THE FINAL STUDY

Having selected the final sample the next task was to choose suitable tools for measuring personality traits. The selection of tools for a particular study depends on various considerations, such as objectives of the study, the amount of time at investigator's
disposal, availability of suitable tests, personal competence of the investigator to administer, score, and interpret the test results and the like.

After carefully reviewing various personality tests and inventories, two personality tests and one intelligence test were chosen. Among the factors taken into consideration in the selection of the tests were:-(1) the efficiency of the test; (2) ease in administration and scoring; (3) the educational level for which the test was best suited; (4) the content of the test; (5) the suitability of the test to the objectives of the research.

SELECTION OF CPI, BPI, SPM : AND THEIR DESCRIPTION

CPI: One of the personality tests chosen was Gough's California Psychological Inventory (CPI).

According to Gough, "The CPI is a convenient and easy to use group test, meant to assess characteristics of personality, which have a wide and pervasive applicability to human behavior and which in addition are related to the favorable and positive aspects of personality rather than to the morbid and pathological aspects. A 12 paged re-usable booklet, self administering, containing 480 statements, answerable in True/False sheet, the inventory is intended primarily for use with normal subjects and provides a comprehensive survey of an individual from
social interaction point of view. Its scales are addressed principally to personality characteristics important for social living and social interaction. The scales are dominance, capacity for status, sociability, social presence, self-acceptance, sense of well being, responsibility, socialization, self-control, tolerance, good impression, communality, achievement via conformance, achievement via independence, intellectual efficiency, psychological mindedness, flexibility and femininity. Testing time usually is about 45 minutes and there are no rigid conditions set to achieve valid and useful test results. Hand scoring through a template yields, standard score for each scale. The test is standardized on 13000 cases of a stratified sample population. The reliability and validity of scales has been demonstrably proved to be pretty high and significant.\textsuperscript{1}

The test has diagnostic usefulness, which has been evaluated by Goodstein et al.\textsuperscript{2} The findings indicated consistent psychologically meaningful differences. Moreover, CPI has been successfully used in studies


somewhat similar to this one by Appley and Moeller\textsuperscript{3} and Plant et al.\textsuperscript{4}

Its test results are meaningful and easily interpretable. Mitchell and Jones say that "Eighteen scales of CPI are designed to yield a presumably meaningful set of scores, which can provide a profile representing the personality pattern of an individual."\textsuperscript{5} Shaffer remarks, "CPI appears to be a major achievement. Predictive value of the scale is very high."\textsuperscript{6}

About the social desirability involved in CPI Pumroy writes, "Correlations obtained between the Edwards SD scale and scales of Gough's CPI indicate, that while social desirability is involved in the CPI scale, it is not as important a factor, as with many other


personality tests.  

For the present study 10 out of 18 scales were selected. The rest of them were either overlapping with the other selected test i.e. BPI, or seemed irrelevant to the purpose or hypotheses of the study. With the help of the supervisor and another teacher of the university, some of the items were omitted as they did not seem to be culture-free.

In order to have clarity about the nature of traits being assessed, it would be worthwhile to give the definitions of traits measured by different subscales. Following are the names of the traits and their description as given by Gough.  

Capacity for Status (CS): To serve as an index of an individual's capacity for status (not his actual or achieved status), the scale attempts to measure the personal qualities and attributes which underlie and lead to status.

High Scorers tend to be seen as: Ambitious, active, forceful, insightful, resourceful and versatile, as being ascendant and self-seeking, effective in communication, and as having personal scope and breadth of interests.

---

8 Gough, pp. 10-11.
Low Scorers tend to be seen as: Apathetic, shy, conventional, dull, mild, simple and slow; as being stereotyped in thinking, restricted in outlook and interests and as being uneasy and awkward in new or unfamiliar social situations.

Social presence (SP): To assess factors such as poise, spontaneity, and self-confidence in personal and social interaction.

High scorers tend to be seen as: Clever, enthusiastic, imaginative, quick, informal, spontaneous, and talkative; as being active and vigorous; and as having an expression, ebullient nature.

Low scorers tend to be seen as: Deliberate, moderate, potent, self-restrained, and simple, as vacillating and uncertain in decision, and as being literal and unoriginal in thinking and judging.

Self acceptance (SA): To assess factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action.

High scorers tend to be seen as: Intelligent, outspoken, sharp-witted, demanding, aggressive and self-centred; as being persuasive and verbally fluent, and possessing self-confidence and self-assurance.

Low Scorers tend to be seen as: Methodical,
conservative, dependable, conventional, easy-going, and quiet; as self-abasing and given to feelings of guilt and self-blame, and as being passive in action and narrow in interests.

Responsibility (RE): To identify persons of conscientious, responsible, and dependable disposition and temperament.

High scorers tend to be seen as: Planful, responsible, thorough, progressive, capable, dignified and independent; as being conscientious and dependable; resourceful and efficient, and as being alert to ethical and moral issues.

Low scorers tend to be seen as: Immature, moody, lazy, awkward, changeable, and disbelieving, as being influenced by personal bias, spite and dogmatism, and as under-controlled and impulsive in behavior.

Tolerance (TO): To identify persons with permissive, accepting and non-judgmental social beliefs and attitude.

High scorers tend to be seen as: Enterprising, informal, quick, tolerant, clear-thinking and resourceful, as being intellectually able and verbally fluent; as having broad and varied interests.

Low scorers tend to be seen as: Suspicious,
narrow, aloof, wary and retiring as being passive and overly judgmental in attitude; and as disbelieving and distrustful in personal and social outlook.

Good impression (GI): To identify persons capable of creating a favorable impression, and who are concerned about how others react to them.

High scorers tend to be seen as: Cooperative, enterprising, outgoing, sociable, warm and helpful; as being concerned with making a good impression, and as being diligent and persistent.

Low scorers tend to be seen as: Inhibited, cautious, shrewd, wary, aloof and resentful; as being cool and distant in their relationships with others; and as being self centered and too little concerned with the needs and wants of others.

Achievement via conformance (AC): To identify factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.

High scorers tend to be seen as: Capable, cooperative, efficient, organized, responsible, stable, and sincere; as being persistent and industrious, and as valuing intellectual activity and achievement.

Low scorers tend to be seen as: Coarse, stubborn, aloof, awkward, insecure and opinionated; as
easily disorganized under stress or pressures to conform, and as pessimistic about their occupational futures.

Achievement via independence (AI): To identify those factors of interest and motivation which facilitate achievement in any setting where autonomy and independence are positive behaviors.

High scorers tend to be seen as: Mature, forceful, strong, dominant, demanding and foresighted; as being independent and self-reliant, and as having superior intellectual ability and judgment.

Low scorers tend to be seen as: Inhibited, anxious, cautious, dissatisfied, dull and weary, as being submissive and compliant before authority and as taking in self-insight and self-understanding.

Psychological mindedness (PY): To measure the degree to which the individual is interested in, and responsive to the inner needs, motives, and experience of others.

High scorers tend to be seen as: Observant, spontaneous, quick, perceptive, talkative, resourceful and changeable; as being verbally fluent and socially ascendant, and as being rebellious toward rules, restrictions, and constraints.

Low scorers tend to be seen as: Apathetic, peaceable, serious, cautious, and unassuming; as being
slow and deliberate in tempo and as being overly conforming and conventional.

Flexibility (FX): To indicate the degree of flexibility and adaptability of a person's thinking and social behavior.

High scorers tend to be seen as: Insightful, informal, adventurous, confident, humorous, rebellious, idealistic, assertive and egoistic; as being sarcastic and cynical and as highly concerned with personal pleasure and diversion.

Low scorers tend to be seen as: Deliberate, cautious, worrying, industrious, guarded, mannerly, methodical, and rigid; as being formal, pedantic in thought; and as being overly deferential to authority, custom and tradition.

EPI: Bernreuter Personality Inventory (BPI) is one of the most widely used inventories. "It represents a new departure in the measurement of personality in that it measures different aspects at one time. The immediate effect of this is a very considerable saving both in cost and in the time required for administration." The facts that the nature of the traits being measured is not

---

easily detectable, that the scales possess high reliability and validity, which permits their being used to compare one individual with another, are further distinct advantages.

High reliability and validity coefficients indicate that four of its six traits are identical with four traits which have been measured by four independent validated tests. These are:

1. Thurstone Neurotic Inventory.
2. The Bemreuter Self-sufficiency Test.
3. The Laird C-2 Introversion Test.
4. The Allport Ascendance-Submission Reaction Study.

Instead of using four separate inventories, it was considered convenient and economical to use one inventory, which serves the purpose of the above mentioned four tests. Super writes, "The correlations of BPI four keys with criterion tests range from .67 to .94, a substantial degree of validity if original inventories are adequate. Reliability of the inventory calculated ranges from .83 to .88."^10

The inventory consisting of 125 questions, measures six traits. Following are the names and description of the traits as given by Bemreuter: ^11

---


^11Bemreuter, p.1.
1. **B-1-N** A measure of neurotic tendency. Persons scoring high on this scale tend to be emotionally unstable.

2. **B-2-S** A measure of self-sufficiency. Persons scoring high on this scale prefer to be alone, rarely ask for sympathy or encouragement and tend to ignore the advice of others. Those scoring low dislike solitude and often seek advice and encouragement.

3. **B-3-I** A measure of Introversion-extraversion. Persons scoring high on this scale tend to be introverted, that is, they are imaginative and tend to live within themselves. Those scoring low are extraverted, that is they rarely worry, seldom suffer emotional upsets and rarely substitute day dreaming for action.

4. **B-4-D** A measure of dominance-submission. Persons scoring high on this scale tend to dominate others in face to face situations. Those scoring low, tend to be submissive.

5. **F-1-C** A measure of confidence in oneself. Persons scoring high on this scale tend to be hamperingly self-conscious and have feelings of inferiority. Those scoring low tend to be whole-somely self-confident and to be very well adjusted to their environment.

6. **F-2-S** A measure of sociability. Persons scoring high on this scale tend to be non-social, solitary, or independent. Those scoring low, tend to be sociable and gregarious.
It is a brief test, easy to administer. It is entirely culture-free and the questions are very simple. Various other researchers such as Symington, and Dexter etc. have used EPI in similar kinds of studies.

In differentiating social groups, EPI shows validity. Some of the scales indicate healthy or poor adjustment with the environment. It has shown to measure the group trends with reasonable degree of reliability.

SPM: In the words of Raven who constructed this test, "It is a test of a person's capacity at the time of the test to apprehend meaningless figures presenting for his observation, to see the relations between them, conceive the nature of the figure completing each system of relations presented and by so doing, develop a systematic method of reasoning." This test designed as a measure of Spearman's 'g' factor, requires primarily the education of relations within abstract material. It consists of 60 matrices or abstract designs from each of which a part...

---


has been removed. The subject chooses the missing insert from 6 or 8 given alternatives.

Out of all the tests this was chosen as:

i. It is relatively culture free (Anastasi).\(^\text{15}\)

ii. It is a group test.

iii. It is very easy to administer.

iv. This test successfully discriminates within relatively homogeneous groups of high intelligence as found by Yates.\(^\text{16}\)

v. It measures principally a common general factor of intellectual functioning as reported by Bingham et al.\(^\text{17}\)

Cronbach says, "The matrix item is the single most popular technique for measuring mental ability. The matrix principle is highly flexible. The possible range of difficulty is enormous. The test may be administered individually or in group and may be speeded or given liberal time allowance. The directions are very simple, so that verbal understanding plays little part."\(^\text{18}\)

---


Ahastasi remarks "Despite the flexibility and simplicity of its response indicator, this test covers a wide range of difficulty and provides a fairly high test ceiling.... High correlations have been reported between Progressive Matrices and Verbal Intelligence tests. On the whole RPM appears to have considerable promise for a number of testing purposes."\(^{19}\)

Taking into consideration all the points, RPM was chosen for the study.

**ADMINISTRATION OF THE PERSONALITY INVENTORIES**

The three above mentioned tests (CPI, BPI and Raven's Standard Progressive Matrices) were given to the chosen sample of 224 students, belonging to different departments and institutions. Students were contacted at their respective departments. The main objective of the tests was concealed from the students.

Appointments were made with the students according to their convenience. Some students were contacted for doing the tests in their departments after their classes, some came to the investigator's department, and some of the female students were contacted in their hostels.

All the three tests were administered at different times, i.e. one subject completed not more than

\(^{19}\)Ahastasi, pp. 270-271.
one test at a time, as all the three tests are fairly lengthy. It was not feasible for a subject to complete more than one test at a time. Tests were administered in groups of three to four subjects, as all the three chosen ones are group tests.\textsuperscript{20,21,22}

In order to avoid fake responses or non-seriousness on the part of the subjects, administration of the test was postponed, if the subject showed even slight unwillingness. Ten of the subjects from the extreme sample were excluded because of their point-blank refusal or extreme unwillingness.

The success of the study and reliability of the results mainly depends on the cooperation of the subjects. To build rapport with the subjects and to extract maximum cooperation, the following measures were adopted:

1. Their ego was boosted up by telling that out of the whole lot, 20\% have been chosen who gave the most consistent and sincere responses to the previous test.

2. The results would be kept strictly confidential.

3. The investigator promised to tell them

\textsuperscript{20}Gough, p. 6.

\textsuperscript{21}Bemreuter(1935).

\textsuperscript{22}Raven, p. 8.
their results after all the subjects finished with the final test.

4. The investigator looked to the subjects' convenience regarding time, date and place where the tests were to be administered.

5. The investigator tried to satisfy the subjects as much as she could by answering their various questions about psychology and listened patiently to their personal problems.

Administration of CPI

Subjects were provided with cyclostyled inventory consisting of 246 statements and an answer sheet on which they were to cross the true or false boxes for each statement. Instructions were given on the booklet. Subjects were asked to clarify the meanings of difficult words (if any) with the investigator. The usual time taken by the subjects to fill the inventory was 40-50 minutes.

Administration of BPI

BPI was given to the students. They were given both verbal and written instructions and were requested to give their honest and frank responses. Responses were to be given in terms of Yes, No and ?. The students took about 20 to 30 minutes to complete the test.
Administration of Raven's Standard Progressive Matrices

A booklet of Progressive Matrices and an answer sheet were given to each subject with the following instructions, "On every page there is a pattern with part left out. All you have to do is to point each time to the bit which is right one to complete the pattern. They are simple at the beginning and get harder as you go on. If you pay attention to the way easy ones go, you will find the latter ones less difficult. Just point to the place which completes the pattern. Now carry on at your pace. You can have as much time as you like. There is no need to hurry, be careful. Remember, each time only one bit is quite right." To demonstrate the procedure and to be sure that instructions were clear, subjects were asked to solve the problem No. 1 in set A. No time limit was set, as has been found by Schnell and Dwarshivs\textsuperscript{23} that there is negligible correlation between Progressive Matrices and the time taken to complete. Strict supervision was done in order to see that the subjects do not discuss or take each other's help while doing the test.

Scoring of the tests was the next step. Separate scoring keys for all the three tests were obtained and hand scoring was done.