CHAPTER V

PLAN AND PROCEDURE
OF THIS INVESTIGATION

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5.1 Introduction

The problem of the present investigation, as reported in the introductory chapter, is mainly concerned with establishing a relationship between two subjective phenomena namely, self-concept and occupational choice. Both the terms, namely, self-concept and occupational choice need some explanation. The various interpretations of the concept of self, its development, its determinants, its relation with the concept of role and the various methods of measuring it, have been discussed in a separate chapter. Similarly, the various processes involved in making a choice of an occupation have also been discussed in a separate chapter. In this chapter, these two terms are included merely to clarify the context in which they are used.

5.2 Occupational Choice

For the present investigation, the term occupational choice is defined in terms of two criteria, namely, (1) in terms of the selection of the college major field at the advanced level i.e. after graduation and (2) in terms of actual selection of an occupation. In the former, college students specializing in various
fields of study at the advanced level are used as subjects and in the latter, persons actually employed in occupations are used as subjects. In the case of the first criterion, it is assumed that the students who have specialized in various fields will enter the occupations, after the completion of their studies, which would be in line with their fields of specialization. However, legitimate this assumption may be, it is still subject to criticism. It can be argued, for example, that to what extent the choice of subjects and of college major fields is a function of self-concept, and to what extent it is a function of opportunities for students to be admitted to the various faculties. It is quite possible that people choose the occupation because of the availability of an opportunity rather than because of self-concept. A person may give up the major field which he has selected and take up another opportunity, even though the other opportunity may be less appropriate in terms of his self-concept. Moreover, social and economic pressures are more important in deciding the field of study. If students alone are used as subjects, it can also be argued that students are much more accessible than people actually employed in occupations. One advantage of choosing people in the occupation is that
more of a commitment is involved than in the case of students, although of course, people also enter the occupations for nonpsychological reasons quite frequently. It can also be said that a person gives up one occupation for another not because the new occupation is more in accordance with his self-concept, but perhaps, it is more remunerative.

In the case of the first criterion, namely, the selection of the college major field, the above mentioned criticisms are valid if the students are selected from graduate and under-graduate classes. The fact that a person comes upto the advanced level, indicates to some degree, that his choice of the major field is not much affected by the kind of factors discussed above. It generally happens that a person whose choice of subjects is inadequate, experiences a considerable amount of difficulty in coping up with the demands made upon him. Such a person will consequently make very poor grades. He may be able to go upto the graduate level but afterwards he is denied admission to the post-graduate classes as he fails to maintain the required standard. Moreover, Super1* himself has supplied a criterion in his statement: "In choosing
an occupation one is, in effect, choosing a means of implementing a self-concept."¹ Thus, it can be argued that the selection of the college major field is a realistic and valid act of the individual of implementing the self-concept. The second criterion can still be considered better than the first as more of a commitment is involved in it than in the case of students. Both these criteria have been used in this investigation to define occupational choice.

5.3 Self-Concept

The term self-concept, is defined differently by different theorists. The definition given by Rogers² is more comprehensive than any other definition. Self-concept as defined by Rogers "refers" to the organized, consistent conceptual gestalt composed of the perceptions of the characteristics of the 'I' or 'me' and the perceptions of the relationships of the 'I' or 'me' to others and to various aspects of life, together with the values attached to these perceptions." "It is

a process, but at any given moment it is a specific entity which is at least partially definable by means of a Q sort. Ideal self as defined by Rogers, "is the term used to denote the self-concept which the individual would most like to possess, upon which he places the highest value for himself". Rogers has mentioned that the self-concept is also a specific entity and that it can be defined in terms of Q sort. It can, therefore, be inferred that the self-concept can be studied in terms of the contents of the Q sort one uses. In the present investigation the aspect of the self-concept namely, personal characteristics is studied.

Both, the self-concept and the perception of the roles in the occupation are essentially subjective phenomena. The relation between them can be effectively studied by using the Q technique developed by Stephenson1. The Q sort procedure is briefly described here. In the Q methodology a subject is presented with a series of verbal descriptions. He is then asked to make forced choices, in order to group the material into a normal frequency distribution. In the forced choice

sorting, usually eight to ten piles, ranging from most descriptive to least descriptive, are used. The subject may be asked to give his perceptions of any given person, object or phenomenon under different instructions. The descriptions thus obtained for any two persons, objects or phenomena may be compared by deriving a statistical index to show the degree of congruency.

5.4 Hypotheses

The following three hypotheses have been formulated from Super's self-concept theory:

(1) The congruency between the self-perceptions and the perceptions of the roles in a preferred occupation will be greater than the congruency index between the self-perceptions and the perceptions of the roles in the non-preferred occupation.

(2) The congruency index between the self-concept and the ideal self-concept will be greater in those persons who are satisfied with their preferred occupation.

(3) Self-ideal discrepancy will reveal greater
dissatisfaction with the occupational field selected.

Of these three hypotheses, the first one was tested by Englander\(^1\) in only one occupation namely, teaching. In the present investigation the same hypothesis is tested in a much broader context, i.e. the hypothesis is tested in four occupations with two criteria of occupational choice. The procedure followed in testing this hypothesis also differs slightly from that of Englander's. The congruency between the self-concept and the ideal-self-concept has been studied by many but to the knowledge of the investigator no such study has been extensively carried out with reference to occupational groups. The third hypothesis directly follows from the second. Here, an attempt is made to gather vocational developmental information from various cases showing a high degree of self-ideal discrepancy. This kind of information obtained from these cases will certainly throw light on the causes of maladjustment in the selected occupation.

5.5 Procedure for Developing an Instrument for Testing the First Hypothesis

As reported above, the first hypothesis deals with the relation between self-concept and the perceptions of the roles in the preferred and non-preferred fields of occupations. For this purpose, an instrument is needed which would provide a measure of self-concept and which would be comparable to a measure of occupational role perception in terms of self-concept. These requirements can be effectively met by employing 'Q' technique developed by Stephenson.¹

In the present investigation, the factor of personal characteristics in vocational selection is studied. Eight dimensions of personal characteristics were obtained by using self-referent statements in vocationally oriented exploratory interviews, conducted by Jersild², 1952; and Rogers and Dymonds³, 1954. These dimensions are reported by Englander⁴ in her study of

¹ Stephenson, W., Op. Cit.,
occupational choices. As a rough check to these dimensions, the investigator interviewed few cases in a similar exploratory interview. The cases were selected at random from different fields.

These eight dimensions are as follows:

(a) Emphathetic tendencies.
(b) Personal strength and weakness.
(c) Manifest behaviour.
(d) Temperament.
(e) Satisfaction.
(f) Effect upon others.
(g) Values.
(h) Traits.

The examination of these dimensions will make it clear that they are not mutually exclusive. Twenty five sentences were written to describe each of the eight dimensions. This gave a total of two hundred sentences. These two hundred sentences were then given to ten college teachers who acted as judges to classify the sentences into eight categories (dimensions). This procedure was necessary to ensure objectivity and relevance of sentences to pertinent dimensions. Each
judge was required to classify these two hundred sentences presented in a random order into eight categories (dimensions). On the basis of their sort-sentences, seven most frequently placed in each category were selected for each dimension. This resulted in a total of fifty-six sentences. These fifty-six sentences were then put in a balanced design, i.e., the sentences were grouped into groups of four sentences in each group so that each dimension was presented with every other dimension equal number of times in various combinations. Thus in all, fourteen groups of four sentences in each group were formed. Three such forms were prepared. The first form was used to measure self-concept. The second form was prepared to ascertain the perceptions of the personal characteristics of persons in the preferred field or occupation and the third form was prepared for obtaining the perception of the personal characteristics of persons in the non-preferred field or occupation. In each of the three forms the sentences were the same but the 'subject' of the sentences was changed. To illustrate this point the following example is selected:

**Occupational Group - Teaching**

**Forms**

1. I am sympathetic to the problems of others.
II Teachers are sympathetic to the problems of others.
III Lawyers are sympathetic to the problems of others.

The subjects in this illustration are those who have specialized in teaching or who are already employed as teachers. They are asked to describe their self-concept as they perceive it, then they are asked to describe teachers and finally they are asked to describe lawyers by means of the same sentences. It was reported above that the first hypothesis was studied in four occupational groups with two criteria of occupational choice. These four occupations are Teaching, Law, Social Work, and Medicine. The two criteria to define the occupational choice are: (1) selection of the college major field at the advanced level, and (2) the selection of the actual field or occupation. Each group was administered three forms at the interval of fifteen days between the two administrations. The distribution and general characteristics of the subjects will be discussed little later. The following table is prepared to show the manner in which the three forms were administered to each group:
Each form was administered individually as well as in a group. The necessary instructions were given on the front page of the form. Accordingly, they were asked to read each group of four sentences very carefully and to select two sentences— one most applicable and one least applicable— from each of the fourteen groups. They were asked to write 'M' for most applicable and 'L' for least applicable. All the sentences were positive and no negative sentences were kept. This was done to take into account the effect of social desirability. When the subjects felt that there was no statement which could be marked 'L', they were asked to mark 'L' against that statement which was less favourable in a group. It is now clear that fifty six statements were distributed in three categories— fourteen statements in the most applicable category, fourteen

<table>
<thead>
<tr>
<th>Form</th>
<th>Social Work</th>
<th>Medicine</th>
<th>Law</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I am ......</td>
<td>I am .....</td>
<td>I am .....</td>
<td>I am .....</td>
</tr>
<tr>
<td>II</td>
<td>Social</td>
<td>Doctors</td>
<td>Lawyers</td>
<td>Teachers</td>
</tr>
<tr>
<td></td>
<td>Workers are</td>
<td>are</td>
<td>are</td>
<td>are</td>
</tr>
<tr>
<td></td>
<td>...........</td>
<td>...........</td>
<td>...........</td>
<td>...........</td>
</tr>
<tr>
<td>III</td>
<td>Doctors</td>
<td>Social</td>
<td>Teachers</td>
<td>Lawyers</td>
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</tr>
</tbody>
</table>
statements in the least applicable category and the remaining in the neutral category. In the usual application of the 'Q' technique there are about eight to eleven piles for distributing the statements. In the procedure followed in this investigation all these statements were sorted in only three categories as mentioned above.

The scoring procedure also differs slightly from the usual procedure. When the same statement is marked 'M' for most applicable or 'L' for least applicable on the two forms, it is taken as one congruency score. In each group of statements, two such scores are possible. For fourteen such groups the total possible score is twenty eight. Such congruency scores are summed up to form the total congruency score for each subject. Two such congruency scores were obtained for each subject in each group. One congruency score was calculated by considering the perceptions of the self and the perceptions of the roles in the preferred occupation. The second congruency score was calculated by considering the self-perceptions and the perceptions of the roles in the non-preferred occupation.

To illustrate this point, reference should be made to the above-mentioned table in which the manner of
giving the forms to the various groups was shown. It is seen that in the case of teaching, for example, one congruency index can be calculated between self and teachers and the second congruency index can be calculated between self and lawyers. The first hypothesis can now be studied by comparing these two indices within each group. This kind of comparison is regarded as internal comparison as the same subjects have filled up the three forms and the comparison between the two indices derived from them represent the comparison within the group.

Secondly, the congruency index between the self-perceptions and the perceptions of the social workers in the social work occupation, for example, can be compared with the congruency index between the self-perceptions and the perceptions of social workers by the doctors. This can be done for all the groups. The congruency between self and teachers in the teaching group can be compared with that between self and teachers in the law group. This kind of comparison is regarded as external comparison because the congruency index derived from one group is compared with similar congruency index obtained in the other group. It is now clear that the first hypothesis is studied in four
occupations with two controls, namely, internal and external.

Subjects

The table on the following page shows the distribution of subjects in four occupations together with their age, mean age, and standard deviation.

In all, 400 students and 280 employed persons served as subjects. The number of female subjects is much less compared to the number of male subjects. It was decided not to use female subjects, but it was difficult to get sufficient number of cases at least in some occupations. Hence, some female subjects were kept. All the 400 subjects were Indian college students. Hundred subjects from each of the four college major fields at the advanced level were selected. Employed persons were difficult to get as they are not found at one place. They were, therefore, selected from different places. The age range, mean age, and standard deviation for each group are shown in the table. The groups of students had a minimum of one year and a maximum of one year and four months of college education at the advanced level. All the students came
<table>
<thead>
<tr>
<th></th>
<th>Teaching</th>
<th>Law</th>
<th>Medicine</th>
<th>Social Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>N</td>
<td>75</td>
<td>25</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Age range</td>
<td>24-30</td>
<td>22-32</td>
<td>20-31</td>
<td>19-30</td>
</tr>
<tr>
<td>M</td>
<td>26.2</td>
<td>25.16</td>
<td>24.21</td>
<td>24.1</td>
</tr>
<tr>
<td>SD</td>
<td>1.65</td>
<td>2.32</td>
<td>2.60</td>
<td>2.13</td>
</tr>
<tr>
<td>N</td>
<td>80</td>
<td>20</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>Age range</td>
<td>25.35</td>
<td>26-33</td>
<td>25-36</td>
<td>22-34</td>
</tr>
<tr>
<td>M</td>
<td>30.12</td>
<td>31.20</td>
<td>32.64</td>
<td>29.15</td>
</tr>
<tr>
<td>SD</td>
<td>2.34</td>
<td>3.10</td>
<td>2.71</td>
<td>1.31</td>
</tr>
</tbody>
</table>
from a differing background, and hence they were not comparable with respect to their social status, although they did not differ much from one another. It is seen from the table that employed persons are more heterogeneous than college students with respect to age. This is so because it was not possible to select subjects of more or less the same age. Their social status was also not comparable as they came from differing social background.

At this point, it will be quite useful to mention something about the various college major fields from which the subjects were selected. The student subjects in the teaching group have to undergo a training of approximately one year leading to a degree of bachelor of education. Most of them had at least two years of teaching experience and very few fresh graduates. They were administered the three forms discussed earlier in this chapter, at the end of the training period. After the completion of training all of them generally seek employment in secondary schools as teachers.

The student social workers have to undergo a training for two years after graduation leading to the degree of Master of Social Work. The graduate with any subject is eligible to get admission. Admissions are
given on the basis of interview and test results. After the completion of training some get employment in industries or in medical field, while others get employment in some other fields involving social work.

The medical students have to receive training for four years leading to a degree of M.B.B.S. After the completion of training, all of them have to undergo one year's practical training in various hospitals and then they either take up job in the field or start their independent practice. These medical students were administered the three forms in their final year of training.

In the case of law, the students have to study law for two years. Any graduate is eligible for admission. In this case, it should be noted that many students were employed at various places. Most of the students join law courses without the intention to practise law after the completion of training. Some students join this course with the intention that it will be useful to them in whatever field they are. Others take up law because they are uncertain about their employment or they fail to get suitable employment. Still some others join it because time is available to
study it. Very few join with the intention to practise law.

5.6 Procedure for Studying the Second Hypothesis

The second hypothesis deals with the relationship between self-ideal congruency scores and the scores on the satisfaction questionnaire. This hypothesis requires that first, the congruency between the self and the ideal self should be measured and then its relation with satisfaction in the job should be studied. For this purpose, a large number of statements were collected from various sources. Some of the statements were written by the investigator with the help of some psychologists, while many others were taken from personality inventories. While selecting the items the following areas were considered:

(a) Family relations
(b) Self-determination
(c) Morality
(d) Intellectual ability
(e) Social Relations
(f) Friendship
(g) Ability to stand criticism.
These areas were used by Fuster\(^1\) in his research on "acceptance of self and acceptance of others".

Seven sentences were selected to describe each area. These seven sentences for each area were made to vary in the degree of self-acceptance they expressed. These forty-nine items were then given twice to student groups and employed groups at the interval of fifteen days to measure self-concept and ideal self-concept. For measuring self-concept the following instructions were given: "At this stage you very well know the type of person you are. You can also describe yourself in the form of some sentences that are applicable to you. You will find with you a list of 49 statements. You are requested to describe your actual self, i.e. what you are at present and not as you would like to be. This you can do by following the steps as under:-

(1) Read all the 49 statements and select 17 statements that describe yourself, i.e. what you actually are at present. Indicate your choices by putting a tick mark (✓) against these statements.

(2) From these 17 statements select 8 statements that describe yourself more than the remaining statements. Indicate your choices by encircling the tick marks of these eight statements. (✔)

(3) From these 8 statements select 2 statements that describe yourself more than any of the remaining statements. Indicate your choices by putting a cross upon the encircled tick marks of these two statements. (✗)

(4) From the remaining items select 17 that are less descriptive of yourself. Indicate your choices by putting a cross (X) against these 17 statements.

(5) From these 17 statements select 8 that are less descriptive of yourself than the remaining items. Indicate your choices by encircling the crosses of these 8 statements. (✘)

(6) From the 8 items, select 2 items that are least descriptive of yourself. Indicate your choices by putting a square mark
For measuring the ideal self-concept, the same procedure was followed but this time the subjects were asked to sort the same 49 statements to describe their ideal self, i.e. the kind of person they would like to be. Thus, the subjects were forced to sort the 49 statements into seven categories under two sets of instructions with an interval of 15 days between the two sortings. The following example will illustrate the point:

<table>
<thead>
<tr>
<th>Scores</th>
<th>Most applicable</th>
<th>Least applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of statements</td>
<td>1 2 3 4 5 6 7</td>
<td>2 6 9 15 9 6 2</td>
</tr>
</tbody>
</table>

As shown above, the 49 statements were distributed in seven categories ranging from most applicable to least applicable, under two sets of instructions — one for self and the other for ideal self. In this procedure every statement will receive two scores — one for each sorting. These two sets of scores for all the statements are correlated to obtain a relationship between them. The high positive correlation indicates a high degree of congruency between self and ideal self.
The congruency score expressed in the form of a correlation coefficient was thus obtained for each subject in each group. In order to use these correlations as scores, they were converted into Fisher's 'Z' scores.

**Subjects**

The same 400 students and 280 employed persons who were used for the first hypothesis were also used as subjects for the second hypothesis. Their distribution and general characteristics were discussed in connection with the first hypothesis.

### 5.7 Job Satisfaction Questionnaire

The job satisfaction questionnaire consists of forty two items. While preparing the questionnaire the following aspects of satisfaction were considered. These aspects were proposed by Hoppock¹:

1. **Individual's reactions to unpleasant situations.**
2. **Adjustment with other persons.**

(3) Relative social and economic status of the group with which the individual identifies.

(4) The nature of the work in relation to the abilities, interests, and preparation of the worker.

(5) Security.

(6) Loyalty.

Several methods, like clinical interviews, observation and sociometry, are also used to measure job satisfaction. The questionnaire method is very widely used for this purpose. The respondents are asked to answer yes or no to several questions regarding their liking for the job. The responses, thus obtained, are used to classify individuals as satisfied, dissatisfied or indifferent. Sometimes the items are weighted in order to obtain a quantitative score of job satisfaction. In the present investigation, the answers to the various questions in the questionnaire were restricted to the form yes or no. This questionnaire was administered to 400 students and 280 employed persons. The score of a
subject was simply the sum of the favourable yes or no answers. These satisfaction scores of subjects were then correlated with the self-ideal congruence scores. This was done for each occupational group.

5.8 Procedure for Studying the Third Hypothesis

The third hypothesis states that the self-ideal discrepancy will reveal greater dissatisfaction with the field or occupation selected. In the second hypothesis the self-ideal congruency scores were simply correlated with satisfaction scores. This procedure, however, does not tell us the causes of dissatisfaction. It was, therefore, thought to go deeper into the personal history of the individual. This was done in a vocationally oriented exploratory interview. The vocational data thus obtained were examined in relation to the present adjustment to and satisfaction with the field or occupation selected. The cases were interviewed individually and their responses regarding their early and subsequent vocational history were obtained. Some of the cases showed a high degree of discrepancy between their self and ideal self.
5.9 Summary

In order to study the relation between vocational choice and self-concept, the two terms namely, vocational choice and self-concept should be properly defined. The problem mentioned above is studied by formulating three different hypotheses derived from the self-concept theory of vocational choice. The first hypothesis deals with the perceptions of the self and of the roles in the preferred occupation. It is studied by using two controls namely internal and external. The internal control involves the comparison between the two sets of congruency scores within the group. The external control involves the comparison between the two sets of scores in two independent groups. The hypothesis is studied by using both students and employed persons as subjects. The instrument used to study the hypothesis consisted of 56 items which were grouped into 14 groups of 4 sentences in each group. This was administered to 400 students selected from each of the four college major fields namely, teaching, law, social work and medicine, and 280 employed persons selected from the same occupations as in the case of students.

The second hypothesis deals with self-ideal
congruence in relation to satisfaction. The instrument used to measure the self-ideal congruence consisted of 49 items which were selected by considering certain areas of personality. The subjects were asked to sort the same 49 items into a forced normal distribution twice under two specific instructions. The correlation between the pairs of 49 observations was calculated for each individual. These self-ideal congruency scores were then correlated with the scores of job satisfaction.

The third hypothesis which deals with self-ideal congruence and adjustment was studied by making case studies of some of the selected cases.