CHAPTER - III

METHODS AND PROCEDURE

This chapter describes the methods and procedures used in this study. It consists of the following six sections:

1. The Method of the Study.
2. The Population and the Sample.
3. The Variables and their Measurement.
4. Details of the Tools Used:

   b. Teachers' Family Relationship Questionnaire - Self made.
   c. Teachers' Anxiety Scale-Constructed by the Researcher.
   d. Organizational Climate Questionnaire Constructed and Standardized - M. Bhatnagar
   e. Teachers Sex, Experience, Qualifications and type of College/University Management need no Measurement device. They are taken for the study from the official records of the institutes.

5. Collection of Data and Data Organization.

1. THE METHOD:

   Since the main objective of the present study was to find out relationships between the organizational climate, teachers family relationship, teachers professional values and anxiety respectively.

The research strategies were reviewed by the researcher to identify the research method most appropriate to the present study. For this
<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M-302</td>
<td>F-98</td>
</tr>
<tr>
<td></td>
<td>CT-260</td>
<td>UT-042</td>
</tr>
<tr>
<td></td>
<td>MQ-160</td>
<td>LQ-100</td>
</tr>
<tr>
<td>ME</td>
<td>100</td>
<td>LE</td>
</tr>
</tbody>
</table>

M = Male  F = Female  
CT = College Teachers  
UT = University Teachers  
MQ = More Qualified  
LQ = Less Qualified  
ME = More Experienced  
LE = Less Experienced
purpose a number of related research studies conducted, so far, were reviewed by the investigator and it was found that in most of the research studies of this kind the researchers have used the descriptive method, particularly the relational type of descriptive method, particularly the relational type of designs. Thus on the basis of research studies conducted so far in this area, the investigator reached the conclusion that only the relational type of descriptive method now accepted as a fundamental instrument of sociological research, was best suited to the study undertaken by her.

2. **THE POPULATION AND THE SAMPLE**:

This section describes the population and the process of sample selection for the present study.

(A) **The Population**:

The population for the purpose of this study has been defined as the total number of teachers university and colleges of Bundelkhand University. Total number of teachers in this university was found to be 600. Therefore, the results of this study will be applicable to the teachers of Bundelkhand University.

**TABLE - 3.1**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>G. No.</th>
<th>Number</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Male</td>
<td>302</td>
<td>400</td>
<td>75.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>98</td>
<td>400</td>
<td>24.5</td>
</tr>
<tr>
<td>2.</td>
<td>High Experienced</td>
<td>260</td>
<td>400</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>Less Experienced</td>
<td>140</td>
<td>400</td>
<td>37.5</td>
</tr>
<tr>
<td>3.</td>
<td>More Qualified</td>
<td>231</td>
<td>400</td>
<td>66.25</td>
</tr>
<tr>
<td></td>
<td>Less Qualified</td>
<td>169</td>
<td>400</td>
<td>33.75</td>
</tr>
<tr>
<td>4.</td>
<td>University Teachers</td>
<td>60</td>
<td>400</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>College Teachers</td>
<td>340</td>
<td>400</td>
<td>55</td>
</tr>
</tbody>
</table>
(B) **The Sample**: (Table 3.1)

As per the definition of the population, the 'Unit of Sampling' was the 'teacher' working in the Bundelkhand University. The first task in drawing the sample was to get the list of the Colleges of Bundelkhand University, in the jurisdiction of Bundelkhand University. For this purpose a list of colleges was obtained from the office of the University official records. Total sample was 400. The details of samples were shown in Table 3.2

**VARIABLES AND THEIR MEASUREMENT**: 

The present study involved seven variables. The intent in this study was to see how these variables were linked with each other. These seven variables were:

1. Teacher's Profession Values
2. Teacher's Family Relationship.
3. Teachers' Anxiety.
4. Organizational Climate.
5. Teachers' Sex.
6. Teachers Experience.
7. Qualifications and
8. Type of management (Univeresity/College)

4. **DETAILS OF THE TOOLS USED**: 

a. A detailed discussion of each of these tools has been presented in the following pages:

A. **TEACHER'S PROFESSIONAL VALUES SCALE**: 

Teachers Professional Values refers to a set of beliefs, an abstract concept inculcated consciously or unconsciously by the members of teaching community governing the behaviour of the individual or group which helps in realization of their goal and fulfilment of their moral, social aesthetical, educational and psychological needs. Teachers Professional Values were measured by T.P.V.C. - P.C. Shukla & W.N. John.

To construct the Teachers Professional Values Scale (TPVS) a list of dimensions of values required for the profession of teaching was prepared with the help and consultation of the teachers and educationists. This list was sent to professions, educationists numbering 50 of different parts of India to ascertain the dimensions of Teachers Professional values. Seven dimensions were determined on the basis of the opinion of these experts; as (i) Moral Values: honesty, truthfulness, sincerity, integrity, kindness, compassion, tolerance, judiciousness, (ii) Social Values: Sociability, helpful, law abiding, cooperation, love for young, follow social norms. (iii) Educational Values: up-to-date knowledge, knowledge of the subject matter, effective teaching, punctual, honest in evaluation. (iv) Personal Values: Cleanliness, tidyness, health care, progressive, effective use of voice, hard working. (v) Economic Values: Contented, not greedy, non acceptance of bribe, increase in income through suitable means, economic adjustability. (vi) Democratic Values: Love for freedom, love for justice, love for equality, conscious of rights and duties, nationalista. (vii) Aesthetic Values: Environmental Cleanliness, appreciate, beauty, cultured, systematic, methodical.
Reliability:

The reliability of the test was calculated with the help of split-half method. The teachers professional values scale was administered to 100 teachers of the Colleges of Gorakhpur University. The split half reliability (correlating the odd and even items) of the scale, applying the spearman-Brown prophecy. Formula was found to be 0.86 which may be considered satisfactory for the purpose.

Validity:

The scale may be considered valid because of the manner in which it has been constructed. The Teachers Professional Values Scale was shown to several experts in the field of Education and Psychology. They were requested to examine the content of the items in the light of the definition provided to them, whether the content of the items of the TPVS measures what the scale is intended to measure? All the experts were 100% satisfied with the items as the measure of Teachers Professional Values. This indicated high face validity of the Teachers Professional Values Scale.

B. Teachers' Family Relationship:

Family plays an important role in the educational and vocational progress of the teachers. The relationship with in his/her family directly or indirectly influences his or her adjustment with the family. The success and efficiency of teachers also very much depends upon the degree of anxiety and adjustment with the family. There was no proper tool for measuring family relationship. Therefore the Researcher developed her own tool for this purpose and standardised it.
Use of the Inventory:
The questionnaire is intended for use with the college teachers in our country. It can be used for both sexes. It is especially helpful to the college administrators, principals and psychologists in identifying the majadjusted cases of teachers.

Development of Inventory:
In the beginning only 70 items were collected from different sources as well as from the personal experience of the researcher. But after test-retest only 52 items were selected in order to reach meaningful conclusions about the good or bad family relationship of teachers.

Time Limit:
There is no time limit for the questionnaire. Usually time taken by the subject is 15 to 20 minutes.

Scoring:
The questionnaire has been scored by hand. Scores were obtained by giving 1 mark for that answer which reflects good relations in the family and good adjustment with the family. The total scores vary from 0-52.

Reliability and Validity:
The reliability of the test was estimated by split-half method and test-retest method on a sample of 100 teachers of college to whom the questionnaire was administered twice with an interval of intervening period of 3 months. The reliability was found to be .62 and .57 respectively.
ADMINISTRATION AND SCORING:

This family relationship questionnaire is a self-made questionnaire. In the beginning only 70 items were collected from different sources as well as personal experience of the researcher. But after test-retest only 52 items were selected in order to reach meaningful conclusions about the good or bad family relationship of teachers. There is no time limit for the questionnaire. Usually time taken by the subject is 15 to 20 minutes. The questionnaire has been scored by hand. Scores were obtained by giving 1 marks for that answer which reflects good relations in the family and good adjustment with family. The total score varies from 0 to 52.

C. ANXIETY SCALE:

Ours is said to be the age of anxiety. Anxiety is a common symptom which is found in almost every individual of the world and specially in students of today. Anxiety can be defined as a state of arousal caused by threat to well being (Spielberger, 1960). 'State means a condition involving the entire organism. 'Arousal' means a condition of tension, unrest, or uneasiness, or a readiness to act the respond. Threat' means anticipation of pain or danger of serious interference with goal seeking activities. Operationally, anxiety can be defined as the automatic response pattern characteristic of a particular individual organism after the administration of a noxious stimulus (Wolpe, 1952).\(^1\)

Anxiety is one of the most important problems in Psychology. The investigations of 'Manifest Anxiety' begun at the Iowa University by Spence and Taylor (1951, 1953, 1956)\(^2\). This research starts with a set of items from MMPI (Minnesota Multiphasic Personality Inventory, first appeared in 1940 and the first manual in 1943) which
have been judged to be indicative of overt anxiety symptoms (Taylor, 1951). Taylor revised her inventory 'A Personality Scale of Manifest Anxiety' in 1953. These items together, with other buffer items, are used to constitute a scale which is administered to introductory psychology students. The top and bottom 10.20% are selected and designated as high and low MAS subjects. Taylor's manifest anxiety scale provides a quick and reliable measure of anxiety but it is doubtful that it measures the same anxiety as assessed by the Rorschach Test (Eichler, 1951). No doubt that these Iowa University investigations stimulated a large volume of research on anxiety and its correlates.

Sarason & Mandler have developed their anxiety questionnaire 'Test Anxiety Questionnaire', in 1952. In 1957 Cattell introduced his IPAT anxiety scale and in 1959 Martin developed a test on anxiety. Jenkins and Lykken (1957) have pointed out that in some cases high MAS subjects may show better performance than low MAS subjects on the first conditioning trial, i.e., before the CS and the US have paired. Standish & Champion (1960) confirmed that the higher MAS subjects did relatively better than low MAS subjects on the simple task but this relationship was reversed with the difficult material. It was shown in many studies (Sinha, 1958, 1961, 1966, 1966) in India that anxiety is related to academic attainment and performance. In one study academic ranks and the correlation of the anxiety score was found to be significant at .01 level (Sinha, 1961).

In India anxiety scale construction starts with the work of S.D. Kapoor of Delhi. His test was published as Hindi adaptation of Cattell's IPAT. 'Sinha W-A Self-Analysis Form' a anxiety test in Hindi by Prof. Sinha of Allahabad was published in 1966. A Hindi
adaptation of Taylor's anxiety scale was developed in 1967 by B.N. Singh and R.C. Thakur of Muzaffernagar. 'Sinha's Comprehensive Anxiety Test' by A.K.P. Sinha of Delhi and L.N.K. Sinha of Patna was published in 1973.

**DEVELOPMENT OF THE TEST**

The Anxiety Scale has been developed for use with college/University teachers of India. The Preliminary from the test has only 165 yes-No type of items on the following Areas:-(1) Psychological manifestations, (2) Ambition, (3) Future, (4) Family, (5) Relations, (6) Friendship, (7) Love, (8) Health, (9) Virtue & War (10) Shame, (11) Guilt. In the item construction help was taken from most of the tests mentioned in the introduction of this manual.

After giving proper instructions to the subjects of the sample the preliminary test was administered. Their age range was 23-58 years. After calculating the number of examines doing each items correctly as well as incorrectly, use of extreme groups as described by Anastasi (1968) was followed. Item Analysis was done with the help of the method described by Anastasi (1968). 120 items were of good discriminative value, 35-125 items were eliminated. In the final test there are 100 'Yes-No' type of items. It has been prepared both in Hindi and English. Ordinarily an examinee takes about 32 to 35 minutes time in answering the test.

**RELIABILITY**

The coefficient of reliability was determined by split-half method test-retest method. The test-retest reliability was determined by administrating the test after two weeks time. The following table shows the reliability coefficients determined by above two methods:
TABLE - 3.3
SHOWING RELIABILITY OF THE TEST

<table>
<thead>
<tr>
<th>Method</th>
<th>Sample</th>
<th>N</th>
<th>Reliability Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split - Half</td>
<td>Male</td>
<td>200</td>
<td>.893</td>
</tr>
<tr>
<td>Test - Retest</td>
<td>Male</td>
<td>82</td>
<td>.826</td>
</tr>
</tbody>
</table>

VALIDITY

The validation criterion used for this test was to correlate the scores of this present test with scores of other valid test on manifest anxiety in Hindi. For this following two tests were selected:

1. Sinha WA Self-Analysis from constructed and standardized by Prof D. Sinha Again on 100 male subjects correlation was found to be 76.

2. Sinha Comprehensive Anxiety Test constructed by A.K.P. Sinha and L.N. Sinha. On 100 male subjects correlation was found to be 71.

ADMINISTRATION OF THE TEST

1. It is a self-administering inventory. The examiner should read the instructions given on the cover page of the inventory before the examinees. The examinees should also read instructions silently alongwith the examiner.

2. There is no limit for the test. Ordinarily an examinee takes about 32 to 35 minutes time in completing the whole inventory.
3. The examinees should interpret the questions himself. The questions regarding the meaning or contents, if any, should by answered by the examiner.

4. The examiner should make every effort to secure the frank and sincere co-operation of the examinees. The examiner may assure the examinees that the results would always remain strictly confidential.

5. Questions from examineer concerning the purpose and use of the inventory should be answered frankly.

(d) **Organizational Climate Questionnaire (OCQ)**

by Dr. Meenakshi Bhatnagar :

The tool measures the climate of the teacher education institutions. A large number of tests and questionnaires have been prepared to measure organizational climates. The pioneer work in this direction has been done by Halpin and Crofts\(^1\) who developed OCDQ which has been adapted in India by Moti Lal Sharma\(^2\) several other persons in India have developed scales and questionnaires for measuring organizational environments and climates.

Bhatnagar not finding OCDQ suitable and realising the dearth of tools in the area developed her own questionnaire. She says: "The OCDQ continuum from open climate to closed climate has not been considered scientific and very valid."

Halpin himself commented on the use of the tool as follows :-

"Further more, I doubt whether the items which were devised in 1960 in the U.S., can be applied willy nilly within
the context of a different culture in 1975. I am not even certain that the items convey the same meaning as they originally did even within the U.S. Culture, now in 1975."

The same is concluded by Hayes in his study on Halpin's OCDQ. The author of this OCQ reviewed all the available tools and identified the dimensions. OCQ consists the nine dimensions having 10 items each. The dimensions ultimately retained in her study were:
1. **Disharmony** :
   Conflicts and relationships among teachers, students, principals.
2. **Hindrance** :
   Conditions which stand in the way of teaching learning.
3. **Support And Satisfaction** :
   This refers to the support that students get from the college environment and the satisfaction they have with teachers, students and other conditions of the college.
4. **Authoritarianism** :
   This refers to the authoritarian attitude of the principal/Head of the Department/Teachers, etc.
5. **Thrust** :
   This refers to the goal-achievement in the behaviours of the teachers, Principals/Head of Departments, etc. particularly emphasis and efforts on enabling the students to learn and grow in the right direction.
6. **Democracy & Freedom**

   This refers to the democratic way of functioning of the Principal/Head of Department and Teachers and freedom granted to the students.

7. **Academic Emphasis**

   This refers to the emphasis on academic activities and programmes by the Principal/Head of the Department and Teachers.

8. **Discipline & Control**

   This refers to the extent to which discipline and control over students and teachers are maintained.

9. **Lack of Facilities**

   This scale refers to the facilities that are needed but are not made available to the students and teachers.

   The organizational climate has been defined in terms of the above dimensions. A combination of these positive-negative characteristics defines the type of climate any institution may be said to have. The author gives the usual steps in the standardisation of her test. The dimensions were identified, statements written and subjected to expert scrutiny. Items were modified on the basis of the expert scrutiny and thus content and face validity was improved. Try-out of the OCQ was carried out and response sheets scored and data tabulated. The following indices were worked out on the basis of these scores.

1. **Scale Homogeniety**

   The OCQ consisted of 9 items. Each dimension contained 20 items. Only those 10 items were selected and which had higher correlations with the corresponding dimensions and were capable of making largest number of discriminations. This index of item-scale
correlation is a kind of internal validity of the item and is found in terms of discrimination value. Hence discrimination indices for all items dimensionwise were computed and those items were finally selected which had highest correlations with their corresponding scales. These correlations varied between 0.3 to 0.67. Thus, each scale of the questionnaire was made as homogenous as possible with respect to that dimension. The validity indices or discrimination indices yielding item-scale correlations were calculated by the formula:

\[ DI = \frac{T-B}{N/3} \]

Where \( T \) = Score on the item of the students in the top group on the total scale.

\( B \) = Score on the item of the students in the bottom group on the total scale.

\( N \) = Size of the item-analysis sample.

2. Average score on each item obtained by the total group. If, this score was less than 1.0 or more than 3.0 for any item that was rejected. The reason for this was that these items being either most favourable or least favourable would not make discriminations among various levels of students' opinion about climate characteristics.

Thus, only 10 items were selected which met the foregoing criteria. The item thus, selected were rearranged and a separate answer-sheet was prepared for recording answers to the item. The questionnaire and answer-sheets were recyclostyled.
The answer-sheet was so prepared that the response to each item was recorded in the form of a numerical figure just below the number of that item. The items were so arranged that the items 1, 10, 19, 28, 37, 46, 55, 64, 73 and 82 would fall in one column, all constituting scale 1 (-D), item 2, 11, 20, 29, 38, 47, 56, 65, 74 and 83 scale 2 (-H) and so on (See answer-sheet Appendix B-2) A column was left blank under each item number for writing the response to it in such a way that the total of all responses in a column would indicate the score in that scale. For example, all the numbers written under items 1, 10, 19, 28, 37, 46, 55, 64, 73 and 82 are totalled and that yields a score on dimension one i.e. Disharmony which is a negative factor. These dimensions are indicated in abbreviative forms under each column. The subjects, themselves, are asked to do the summing up. An English version of the instruction on the questionnaire is given below:

"This is a questionnaire. Through this, an attempt has been made to know what kind of climate the college of which you are the teacher, has. The questionnaire consists of 90 item which indicate the characteristics of the climate of your college. After reading each of these statements, you have to write your responses on the answersheet given to you separately. Do not make any sign on he questionnaire nor write anything on it."

You have to write your answers on this answersheet (showing the answer-sheet). Read each of the statements carefully and think to what extent that is true about colleges. If you decide that it is wholly true, you write, on the blank square space under the serial number of that item. If you feel it is only partially true, you write that
space. If you feel it is not at all true, you write, O (zero) in that space. You have to write only one of the three numbered 0, 2, 4 in the space under each item. You have to write their number just under the corresponding serial number of the item.

Having finished all the items, you add all the numbers written by you on each vertical column and put this total just below that column. Thus you will have to write nine totals in all for nine columns.

Reliabilities:

The test-retest reliabilities of the test computed by the product moment method of the administration of the test to the same group after an interval of one week are as shown in the Table No. 3.4

**TABLE - 3.4**

Test- Retest Reliabilities of OCQ Dimensions

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Dimension</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Disharmony</td>
<td>.801</td>
</tr>
<tr>
<td>2.</td>
<td>Hinderance</td>
<td>.823</td>
</tr>
<tr>
<td>3.</td>
<td>Support &amp; Satisfaction</td>
<td>.861</td>
</tr>
<tr>
<td>4.</td>
<td>Authoritarianism</td>
<td>.796</td>
</tr>
<tr>
<td>5.</td>
<td>Thrust</td>
<td>.878</td>
</tr>
<tr>
<td>6.</td>
<td>Democracy &amp; Freedom</td>
<td>.796</td>
</tr>
<tr>
<td>7.</td>
<td>Academic Emphasis</td>
<td>.842</td>
</tr>
<tr>
<td>8.</td>
<td>Discipline &amp; Control</td>
<td>.799</td>
</tr>
<tr>
<td>9.</td>
<td>Lack of Facilities</td>
<td>.843</td>
</tr>
</tbody>
</table>

The reliabilities of the OCQ dimensions were calculated by the KR-21 formula also. A simplified version of Kuder-Richardson formula-21 taken from the educational testing service bulletin12 presented below was used for this purpose.
1-M (K-M)
R = -----------------------
    KS

Where:
M = Mean of the test scores.
K = Number of items, and
KS = SD of the test scores

KR reliabilities computed by applying the frequency formula are presented below. The following table shows these coefficients of correlations for each of the dimensions of the OCQ.

**TABLE - 3.5**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Dimensions</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-1</td>
<td>Disharmony</td>
<td>.842</td>
</tr>
<tr>
<td>D-2</td>
<td>Hinderance</td>
<td>.766</td>
</tr>
<tr>
<td>D-3</td>
<td>Support &amp; Satisfaction</td>
<td>.888</td>
</tr>
<tr>
<td>D-4</td>
<td>Authoritarianism</td>
<td>.797</td>
</tr>
<tr>
<td>D-5</td>
<td>Thrust</td>
<td>.897</td>
</tr>
<tr>
<td>D-6</td>
<td>Democracy &amp; Freedom</td>
<td>.875</td>
</tr>
<tr>
<td>D-7</td>
<td>Academic Emphasis</td>
<td>.819</td>
</tr>
<tr>
<td>D-8</td>
<td>Discipline &amp; Control</td>
<td>.819</td>
</tr>
<tr>
<td>D-9</td>
<td>Lack of Facilities</td>
<td>.842</td>
</tr>
</tbody>
</table>

The maximum reliability coefficient that can ever be obtained is 1.00. Compared to this, the obtained coefficients may be considered sufficiently high. Again in view of the fact that all the tests except intelligence tests have low reliabilities (As compared to intelligence tests whose reliability may be above 0.90), these coefficients for OCQ may be considered quite satisfactory.
Validity of the OCQ:

A standard and widely adopted classification system divides validity into 3 types: (1) Content Validity (2) Critarion related Validity, and (3) Construct Validity. Content validity tells how adequately the test samples the large universe of situations it represents. The key aspects in content validity is that of sampling. A test is always a sample of the many questions that could be asked. Content validity, then is a matter of determining whether the sample is representative of the large universe it is supposed to represent. Unfortunately, there is no statistical procedure for determining content validity. Only a careful logical analysis of the universe of items and the items selected may help in assessing content validity. Critarion related validity is of importance when prediction of future performance or estimation of performance on some other measure is called for. Construct validity points out to the degree to which test performance can be explained in terms of certain psychological traits or qualities.

In case of the present OCQ, content validity was considered of great importance. Hence, efforts were made to get this judged by a number of persons, experts as well as administrators. The OCQ was given to these persons to read and judge whether each item within the sub-scale measured the characteristics indicated by that or not. In the same way, there were asked to report the extent to which the dimensions of the OCQ were representative of the total hypothesised organizational climate area. The researcher was satisfied when these experts and administrators such as Principals and teachers expressed that the items were truly measuring the characteristics indicated by
the respective dimensions. Thus the face validity of the OCQ was very carefully acrutenised and made as dependable as possible.

Criterion related validity could not be worked out as no relevant and comparable criterion could be available. There are a number of organizational climate questionnaires available. But they all have identified quite different dimensions of the climate.

5. **Collection of Data**

After the colleges were sampled, questionnaires were distributed to all the teachers in these colleges/University. The total number of teachers in each college was ascertained from the seniority list of the university. Additional information such as the no. of students studying in the college, number of faculties whether degree or post-graduate etc. was obtained from the prospectus of each college. Getting the questionnaires filled up was the toughest part of the job. The investigator first adopted the method of the mailed questionnaire to individual respondents. She also mailed questionnaire to individual respondents. She also mailed questionnaires to some colleagues serving in other colleges requesting them to get these filled up and then return these to him. But the experience in this regard was very disappointing. Hence she had to modify his method of data collection. The method mostly used by her was through personal visits. She would go to a particular colleges, it was situated Bundelkhand Area or to a particular teacher in Bundelkhand University after fixing up the time of appointment with her. She would establish rapport with her and then explain her the purpose of the study. As the study concerned, the behaviour of the Principal, a large number of teachers were apprehensive of filling up the questionnaire. Some of them even flatly refused to fill it up. Teachers
in Government colleges and some of the girls' colleges simply won't fill it up. A teacher in a post-graduate college went to the extent or saying, "He (the Principal) is my God, I will not say word against him." If demanded a lot of patience and pursuasion on the part of investigator. In order to seek the complete cooperation of the respondents. She assured them at the personal level that the data would be employed exclusively for research purposes and that complete anonymity of the respondents would be maintained.

A second reason for the teachers' not filling up the questionnaire was that it took about 30 minutes in filling up both the questionnaires, when the investigator set before the respondents, read out the statements and the respondents marked out the answers. If the respondent read and then answered, it might have taken a little more time. Many teachers were reluctant to spare this much time.

However, the investigator also met many cheerful, enthusiastic and progressive teachers, who not only cooperated with but also discussed and enlightened her on many problems regarding college administration. In this way, a total of 400 sets OCQ questionnaires were got filled up.

6. Statistical Analysis:

After the questionnaires were filled up dimensionwise totals for each questionnaire were obtained. These were then entered on a master-sheet separately for each colleges. The OCQ dimensions were written nine sheets of paper. A frequency distribution of OCQ was obtained for the total sample as well as for each dimension. The dimensions means for the total sample as well as for the different dimensions were also obtained. After the means were found the number of cases above and below $M^+ - 1$ were found. This was done
first by rounding up the mean to its nearest whole number and then computing cases above M+1 and below M-1. After this was done, a 2x2 fold table was prepared and $X^2$ values calculated with the help of the following formula:

$$X^2 = \frac{N (AD-BC)^2}{(A+B) (C+D) (A+C) (B+D)}$$

A discussion on the analysis of the data and results is contained in the next chapter.