Chapter V

Methodology
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Overview</td>
<td>101</td>
</tr>
<tr>
<td>5.2</td>
<td>Nature of the problem</td>
<td>101</td>
</tr>
<tr>
<td>5.3</td>
<td>Hypothesis</td>
<td>102</td>
</tr>
<tr>
<td>5.4</td>
<td>Sampling</td>
<td>105</td>
</tr>
<tr>
<td>5.5</td>
<td>Research Tool</td>
<td>112</td>
</tr>
<tr>
<td>5.6</td>
<td>Reliability and Validity of the Tools</td>
<td>118</td>
</tr>
<tr>
<td>5.7</td>
<td>Method of Analysis</td>
<td>118</td>
</tr>
<tr>
<td>5.8</td>
<td>Constraints</td>
<td>123</td>
</tr>
<tr>
<td>5.9</td>
<td>References</td>
<td>124</td>
</tr>
</tbody>
</table>
CHAPTER V

METHODOLOGY

5.1 Overview:

This chapter deals with the nature of the problem, hypotheses framed by the researcher, sampling, the tools and techniques used for data collection, the method of analysis and the constraints faced by the researcher.

5.2 Nature of the Problem:

Administration in every field plays an important role in bringing about development. An efficient administration depends upon the persons who are in charge of managing the various administrative activities. A weak leadership is a liability for any institution. The educational administration is entrusted with a noble responsibility. Since every sphere of the national life is affected by the educational policies of the government, the educational administration assumes greater importance. An efficient educational administration is a sine qua non for achieving the national objectives. As such, the leaders in educational institutions ought to play a significant role in bringing about the all round development of the country.
An analysis of the present day educational administration reveals that more and more women are taking up leadership positions in educational institutions. Their leadership orientation and leadership dimension go a long way in determining the effectiveness of leadership. There is an assumption that women by nature are rigid and strict in their official capacity and soft and considerate in their personal capacity. Based on this assumption, an attempt is made in this study to inquire into whether the women leaders at collegiate level are Task oriented or Person oriented as well as whether they have Initiating Structure dimension or Consideration dimension in their leadership behaviour.

5.3 Hypotheses

Based on the objectives framed and as stated in the introductory chapter (1.3), the following hypotheses were formulated.

(i) The college women administrators are task oriented leaders.

(ii) There is no significant difference between the percentage of respondents in the initiating structure leadership dimension and the percentage of respondents in the consideration leadership dimension.

(iii) There is no significant association between Task/person oriented college women administrators and their age.
(iv) There is no significant association between Task/person oriented college women administrators and their marital status.

(v) There is no significant association between Task/person oriented college woman administrators and the subject they have studied or teach.

(vi) There is no significant association between Task/person oriented college women administrators and their locality.

(vii) There is no significant association between Task/person oriented college women administrators of autonomous colleges or those of affiliated colleges and the affiliated status of the college.

(viii) There is no significant association between Task/person oriented college women administrators of government colleges and those of government aided colleges and the nature of college management.

(ix) There is no significant association between Task/person oriented college women administrators of government colleges or those of self finance colleges and the financial status of the college.

(x) There is no significant association between initiating structure/consideration dimension of college women administrators and their age.
(xi) There is no significant association between initiating structure/consideration dimension of college women administrators and their marital status.

(xii) There is no significant association between initiating structure/consideration dimension of college women administrators and their subject.

(xiii) There is no significant association between initiating structure/consideration dimension of college women administrators and their locality.

(xiv) There is no significant association between initiating structure/consideration dimension of college women administrators of autonomous colleges or those of affiliated colleges and the affiliated status of the college.

(xv) There is no significant association between initiating structure/consideration dimension of college women administrators of government colleges or those of government aided colleges and the type of college management.

(xvi) There is no significant association between initiating structure/consideration dimension of college women administrators of government colleges or those of self finance colleges and the financial status of the college.
5.4 Sampling

The population\(^1\) of the present study refers to the women heads of the Departments and the principals of the women's colleges affiliated to Manonmaniam Sundaranar University, Tirunelveli and Madurai Kamaraj University, Madurai.

The sample size is 206. Quota sampling was used for the selection of these 206. These 206 women leaders were chosen randomly\(^2\) from the colleges mentioned above. The following tables will indicate the details of the sample from whom the data have been collected.

Table 5.1

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>College</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Holy Cross College, Nagercoil</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>K.K. District</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Sri. Ayyappa College for Women</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Sungankadai, K.K. District</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Sri. Devi Kumari College,</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Kuzhithurai, K.K. District</td>
<td></td>
</tr>
<tr>
<td>Sl. No.</td>
<td>College</td>
<td>Number of Respondents</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>4.</td>
<td>Women's Christian College</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Nagercoil, Kanyakumari District</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Govt. Arts College for Women</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Pettai, Tirunelveli District</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Rose Mary College,</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Munneerpallam, Tirunelveli Dt.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Sarada College, Ariyakulam</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Tirunelveli Dt.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Sarah Tucker College,</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Palayamkottai, Tirunelveli Dt.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Sri. Parasakthi College,</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Courtallam, Tirunelveli Dt.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>A.P.C. Mahalakshmi College,</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Tuticorin</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Govindammal College,</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Tiruchendur, Tuticorin Dt.</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>St. Mary's College, Triticorin</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>131</strong></td>
</tr>
</tbody>
</table>
### Table 5.2
(Sample from Madurai Kamaraj University)

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>College</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A.C. Muthiah Govt. College, Dindigul Dt.</td>
<td>8</td>
</tr>
<tr>
<td>2.</td>
<td>A.M. Palani Andavar College, Palani, Dindigul Dt.</td>
<td>9</td>
</tr>
<tr>
<td>3.</td>
<td>C.S.I. Devasahayam College, K. Pudur, Madurai Dt.</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>Fatima College, Madurai Dt.</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>Lady Doak College, Madurai Dt.</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Sri. Meenakshi Govt. College, Madurai Dt</td>
<td>9</td>
</tr>
<tr>
<td>7.</td>
<td>Yadava College, Oomatchikulam, Madurai Dt.</td>
<td>8</td>
</tr>
<tr>
<td>8.</td>
<td>V.V.V. College, Virudhunagar</td>
<td>13</td>
</tr>
<tr>
<td>9.</td>
<td>S.F.R. College, Sivakasi, Virudhunagar Dt.</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
</tr>
</tbody>
</table>
DISTRIBUTION OF RESPONDENTS

UNIVERSITY WISE

- M.K.U.: 64%
- M.S.U.: 36%

Figure 5.01

DISTRICT WISE

- Kanyakumari: 19%
- Tirunelveli: 18%
- Tuticorin: 20%
- Dindigul: 10%
- Madurai: 8%
- Virudhunagar: 10%

Figure 5.02
**LOCALITY WISE**

- Rural: 47%
- Urban: 53%

Figure 5.03

**MARITAL STATUS WISE**

- Married: 85%
- Unmarried & Single: 15%

Figure 5.04
SUBJECT WISE

Figure 5.05

AGE WISE

Figure 5.06
WORKING IN GOVT / GOVT AIDED / SELF FINANCE COLLEGES

Figure 5.07

STATUS WISE - WORKING IN AUTONOMOUS / AFFILIATED COLLEGES

Figure 5.08
5.5 Research Tool

To find out whether the women leaders at collegiate level are task oriented or person oriented, Task/Person Leadership Questionnaire has been used. A copy of the Task Person Leadership questionnaire is given in the appendices for reference.

First part of the questionnaire deals with the biodata of the respondents, who are principals of women's colleges and women heads of departments chosen randomly from various institutions in the jurisdiction of Manonmaniam Sundaranar University and Madurai Kamaraj University. The biodata section was intended to collect data regarding the respondents' age, locality, marital status, and subject studied by them. Age determines the mental make up of the respondents and their outlook to deal with various situations, issues, conflicts, contradictions and deviations which they have to face everyday as women administrators in their respective institutions. Those who belong to lower age group would be more inclined to be rule bound, more rigid and prefer to be tradition oriented, moving along the beaten track, ie, the established system of administration. But as they advance in age, rigidity in outlook slowly changes to flexibility and in course of time the women administrators tend to be mellowed and softened in their attitude, perception and outlook.
Marital status is another important area where vital clues and informations can be obtained about the person oriented approach or task oriented approach of the college women administrators. Unmarried and single women generally would have more time, energy and opportunity to attend to their administrative responsibilities than their married counterparts who would have to look after their own families, spend much time with their family members and their personal needs. Under such circumstances, whether the college women administrators can adopt person oriented approach or task oriented approach can be well understood only by analysing the responses given to question sought in the biodata section of the questionnaire.

Residential background is another feature which can decide the person oriented approach or task oriented approach or initiating structure dimensional style of leadership or consideration dimensional type of leadership of college women administrators. A woman administrator with rural background would generally prefer to be tradition bound and go along the established norms of the administrative system. Hence she may be tilted towards the task oriented approach or may follow the initiating structure dimension of leadership. On the other hand an urbanite woman administrator would be expected to be more flexible, person and concern oriented towards various administrative situations because of wider exposure and higher opportunities thrown open to them. Hence this information 'Residential Background' is sought in the biodata section.
The questionnaire part had two sections. The first section carried the Task-Person Leadership questions and the second section carried the Leadership Behaviour Description questions. The first section had 18 questions. The respondents were asked to indicate their response encircling any of the responses: Always (A), Frequently (F), Occasionally (O), Seldom (S), or Never (N) against each of the 18 items.

Some of the items which describe the leadership behaviour like, acting as the spokesman of the group, keeping the work moving at a rapid pace, reluctant to allow the member any freedom of action, deciding what shall be done and how it shall be done for the group, pushing for increased production, refusing to explain the leaders' actions to the group, persuading others that the leaders ideas are to the group's advantage were task oriented questions.

Other items like allowing the members complete freedom in their work, permitting the members to use their own judgement in solving problems, letting the members to do their work the way they think best, turning the members loose on a job and then letting them go to it, willing to make changes, permitting the group to set its own pace, were person oriented questions.

Scoring is done in the following way by the researcher.
If the respondents have encircled S or N against the serial number 1, 3, 9, 10, 11, 15, 16, 17 then the researcher has to cross the rectangular window as shown below:

If the respondents have encircled A or F against the serial numbers 2, 4, 5, 6, 7, 8, 12, 13, 14, 18 then the researcher has to cross the rectangular window as shown below:

If the respondents have crossed the rectangular window for 2, 4, 5, 6, 8, 10, 14, 16, 18 then the researcher has to put a cross in the bracket.

( X )

The number of crosses in the bracket is the score for P, person oriented leadership.

If the value of P is subtracted from the number of crosses in the rectangles, score for T, Task oriented leadership is obtained.

A high value of P & T is desirable for an effective leader.
The second section of the Questionnaire carried the Leadership Behaviour Description Questionnaire (LBDQ). It contained 30 items of leadership behaviour. This was intended to study leadership dimension such as initiating structure and consideration. The respondents were asked to indicate their responses encircling any one of the responses: always, often, occasionally, seldom and never shown against each item.

The normal grading of the five choices given for each of the 30 items is in the order, always-5, often-4, occasionally-3, seldom-2 and never-1. The first 15 items deal with the initiating structure dimension of leadership and the last 15 items deal with the consideration dimension of leadership.

Maximum score attainable is 150. For initiating structure dimension $15 \times 5 = 75$ and for consideration dimension of leadership $15 \times 5 = 75$. Items numbering 3, 7, 20, 22, 23 and 24 were scored in the reverse order.

Some of the items which describe the leadership behaviour like a leader making his attitudes clear to the staff, trying out his new ideas with the staff, criticizing poor work, speaking in a manner not to be questioned, assigning staff members to particular tasks, maintaining definite standards of performance, emphasizing the meeting of deadlines, encouraging the use of uniform procedures, making sure that his part in the organization is understood by all members, asking that staff members follow standard rules and regulations,
allowing staff members to know what is expected of them, seeing that staff members are working up to capacity and seeing that the work of staff members is coordinated are the observations for initiating structure dimension of leadership.

Other items like a leader, doing personal favours for staff members, doing little things to make it pleasant to be a member of the staff, easy to understand, finding time to listen to staff members, looking out for the personal welfare of individual staff members, treating all staff members as his equals, willing to make changes, be friendly and approachable, making staff members feel at ease when talking with them, putting suggestions made by the staff into operation and getting staff approval on important matters before going ahead are the observations for consideration dimension of leadership. The obtained scores for each of the dimension were taken up for considering a respondent to be having that dimension dominant in her leadership behaviour. The number of respondents having a particular dimension dominant in their leadership behaviour was calculated for each dimension, viz initiating structure and consideration and the necessary $\chi^2$ value computed for finding out the significance of difference.
5.6 Reliability and validity of the Tools:

Although the Task/Person Questionnaire and the Leadership Behaviour Description Questionnaire are standardised tools, the researcher tried them on a small sample of 50 before administering them to a larger sample selected for the study. It was found that the respondent had no difficulty in understanding the items and the experts to whom the responses were referred were convinced of the correctness of the tool. Therefore, the tools were used with a high degree of reliability and validity.

5.7 Method of analysis:

The Task/Person questionnaire and Leadership Behaviour Description questionnaire along with the personal data were administered to heads of departments and principals of women's colleges either in person by the researcher or through some reliable representatives. Nearly 270 booklets of research took containing the two questionnaires and personal data were administered to college women administrators. However, only 206 booklets were responded properly and they were scored and the data were tabulated for further analysis.

Data collected for the study of Task or person oriented leadership, initiating structure dimension and the consideration dimension of leadership of college women administrators are analysed under three major heads, viz,
Leadership Type study, Leadership Associational study and Leadership Behavioural study.

Under "leadership type study", two types of analysis, whether the college women administrators are task oriented or person oriented in their leadership or adopting initiating structure dimension leadership or consideration type leadership are made. Both are global studies and all the respondents irrespective of their age, discipline, locality and other factors are taken up for analysis.

Under "leadership associational study" an attempt is made to find out whether there is any significant association between task/person oriented or initiating structure dimension/consideration dimension oriented college women administrators and factors like their age, marital status, subject of study, locality and type of college.

Under 'Behavioural study', the different aspects of leadership behaviour as indicated in the Task/Person leadership questionnaire and the Leadership Behaviour Description questionnaire used by the researcher are probed into to find out the dominant leadership behaviour of the women leaders at collegiate level.

While analysing Task/Person leadership behavioural aspects, the percentage for responses given by the respondents for each aspect of the person oriented leadership behaviour is calculated and analysed.
The categories always and frequently are combined to mean the dominating aspect of a particular aspect and similarly the categories seldom and never are combined to mean the dormant aspect.

While analysing initiating structure / consideration aspects of leadership behaviour, the percentage of responses given by the respondents for each aspect of initiating structure and consideration dimension of leadership behaviour is calculated and analysed. The categories always and often are combined to analyse the initiating structure dimension for items 1, 2, 4, 5, 6 and 8 to 15 and the categories seldom and never for the items 3 and 7.

Similarly, the always and often categories are combined to analyse the consideration dimension for the items 16 to 19, 21, 25 to 30 and the categories seldom and never for the items 20, 22 to 24.

The statistics techniques employed in the analysis are

i) $\chi^2$ - test

ii) Critical Ratio test (CR)

(i) $\chi^2$ - Test

Chi-square is the statistic which measures the divergence of fact from hypothesis in the sample at hand. It is used to test two variables or attributes which are independent or related.
In this study, to carry out the Chi-square test, the following null hypothesis has been proposed.

\[ H_0 \] - The two attributes of College woman administrators are independent of each other.

According to Richard A. Joslyn, a null hypothesis is simply a hypothesis that states that there is no relationship between two variables or attributes.\(^5\)

The alternative hypothesis is

\[ H_1 \] - The two attributes of college woman administrators are related to each other.

The test criterion is

\[
\chi^2 = \sum \frac{(O - E)^2}{E} \rightarrow (r - 1)(c - 1)k^2
\]

where

- \( O \) means the observed frequency
- \( E \) means the expected frequency
- \( r \) refers to number of rows
- \( c \) refers to number of columns
The value of $\chi^2$ is thus calculated $\chi^2(c)$ is compared with the Table value $\chi^2(T)$.

The rule of decision is now applied

If $\chi^2(c) > \chi^2(T)$, reject $H_0$

$\chi^2(c) < \chi^2(T)$, reject $H_1$

(ii) **Critical Ratio Test (CR)**

For finding the critical ratio value,

$$P = \frac{P_1N_1 + P_2N_2}{N_1 + N_2}$$

$$Q = 1 - P$$

$$\text{S.E. } P_1 - P_2 = \sqrt{PQ \left( \frac{1}{N_1} + \frac{1}{N_2} \right)}$$

$$CR = \frac{P_1 - P_2}{\sigma_{P_1-P_2}}$$
where \( P \) - % occurrence of the observed frequency

\( Q \) - % of non occurrence of the observed frequency

\( N_1, N_2 \) - Population samples

S.E. \( P_1 - P_2 \) - Standard error of difference between the two percentages

CR - Critical Ratio value

If \( CR_{(Cal)} < CR_{(Table)} \) at 0.05 level of significance, then Null hypothesis \( H_0 \) is retained.

5.8 Constraints

Out of the 270 booklets containing tools distributed to respondents, only 206 were responded. Inspite of repeated reminders, the missing booklets could not be obtained.

To meet women Heads of Depts. in women's colleges for research purpose is not that easy and the formal permission of the woman principal is necessary every time. The respondents were to be met only in their work place, the institutions.

The duration of collection of data was prolonged to about one year.
5.9 References:


