Discrimination faced by female administrators in institutions of higher education in India and the United States of America

Rajni Bhatnagar

Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/rtd

Part of the Higher Education Administration Commons, and the Women's Studies Commons

Recommended Citation

Bhatnagar, Rajni, "Discrimination faced by female administrators in institutions of higher education in India and the United States of America " (1990). Retrospective Theses and Dissertations. 9391.
https://lib.dr.iastate.edu/rtd/9391

This Dissertation is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
INFORMATION TO USERS

The most advanced technology has been used to photograph and reproduce this manuscript from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
Discrimination faced by female administrators in institutions of higher education in India and the United States of America

Bhatnagar, Rajni, Ph.D.
Iowa State University, 1990
Discrimination faced by female administrators in institutions of higher education in India and the United States of America

by

Rajni Bhatnagar

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY

Department: Professional Studies in Education
Major: Education (Higher Education)

Approved:
Signature was redacted for privacy.
In Charge of Major Work
Signature was redacted for privacy.
For the Major Department
Signature was redacted for privacy.
For the Graduate College

Iowa State University
Ames, Iowa
1990
# TABLE OF CONTENTS

**DEDICATION** .................................................. ix
**ACKNOWLEDGEMENTS** .......................................... x
**CHAPTER 1. INTRODUCTION** ................................. 1
  - Statement of the Problem .................................. 8
  - Basic Assumptions ......................................... 8
  - Limitations ................................................ 9
  - Need for the Study ....................................... 10
  - Null Hypotheses ........................................... 12
    - Null Hypothesis 1 ..................................... 13
    - Null Hypothesis 2 ..................................... 13
    - Null Hypothesis 3 ..................................... 14
    - Null Hypothesis 4 ..................................... 14
    - Null Hypothesis 5 ..................................... 15
    - Null Hypothesis 6 ..................................... 16
    - Null Hypothesis 7 ..................................... 17
    - Null Hypothesis 8 ..................................... 17
  - General Procedure and Organization of the Study ...... 18
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of Terms</td>
<td>21</td>
</tr>
<tr>
<td>Organization of the Study</td>
<td>22</td>
</tr>
<tr>
<td>CHAPTER 2. REVIEW OF LITERATURE</td>
<td>24</td>
</tr>
<tr>
<td>Status and Education of Women in India</td>
<td>25</td>
</tr>
<tr>
<td>Post independence era</td>
<td>27</td>
</tr>
<tr>
<td>Indian Women in Administration</td>
<td>33</td>
</tr>
<tr>
<td>Location of female administrators in higher education</td>
<td>38</td>
</tr>
<tr>
<td>Discrimination and Biases Faced by Women in India</td>
<td>43</td>
</tr>
<tr>
<td>Government Policy and Actions Supporting the Status of Indian Women</td>
<td>50</td>
</tr>
<tr>
<td>Salaries and Fringe Benefits</td>
<td>59</td>
</tr>
<tr>
<td>Location of Female Administrators in the United States of America</td>
<td>61</td>
</tr>
<tr>
<td>Salary in the United States of America</td>
<td>64</td>
</tr>
<tr>
<td>Nature of Sex Discrimination</td>
<td>66</td>
</tr>
<tr>
<td>Subtle discrimination</td>
<td>71</td>
</tr>
<tr>
<td>Reason Why Women Occupy Limited Top Level Administrative Positions</td>
<td>76</td>
</tr>
<tr>
<td>&quot;The female role&quot; or &quot;women's place&quot;</td>
<td>77</td>
</tr>
<tr>
<td>The effects of education</td>
<td>87</td>
</tr>
<tr>
<td>The structure of organizations</td>
<td>89</td>
</tr>
<tr>
<td>Reasons for Expanding the Role of Women in University Administration</td>
<td>92</td>
</tr>
<tr>
<td>Efforts of Organizations to Dismantle Discrimination</td>
<td>94</td>
</tr>
<tr>
<td>Summary</td>
<td>97</td>
</tr>
<tr>
<td>CHAPTER 3. METHODOLOGY</td>
<td>100</td>
</tr>
<tr>
<td>Resources Utilized to Locate Literature Related to this Study</td>
<td>100</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Identification of the Target Population</td>
<td>101</td>
</tr>
<tr>
<td>Instrument Development</td>
<td>103</td>
</tr>
<tr>
<td>Data Collection</td>
<td>105</td>
</tr>
<tr>
<td>Independent and Dependent Variables</td>
<td>109</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>110</td>
</tr>
<tr>
<td>Independent variables</td>
<td>110</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>111</td>
</tr>
<tr>
<td><strong>CHAPTER 4. STATISTICAL ANALYSIS</strong></td>
<td>119</td>
</tr>
<tr>
<td>Analysis of Categorical Data</td>
<td>119</td>
</tr>
<tr>
<td>Null Hypothesis 1</td>
<td>119</td>
</tr>
<tr>
<td>Null Hypothesis 2</td>
<td>128</td>
</tr>
<tr>
<td>Null Hypothesis 3</td>
<td>133</td>
</tr>
<tr>
<td>Null Hypothesis 4</td>
<td>137</td>
</tr>
<tr>
<td>Null Hypothesis 5</td>
<td>141</td>
</tr>
<tr>
<td>Null Hypothesis 6</td>
<td>144</td>
</tr>
<tr>
<td>Null Hypothesis 7</td>
<td>146</td>
</tr>
<tr>
<td>Null Hypothesis 8</td>
<td>149</td>
</tr>
<tr>
<td><strong>CHAPTER 5. SUMMARY AND CONCLUSIONS</strong></td>
<td>153</td>
</tr>
<tr>
<td>Restatement of the Problem</td>
<td>153</td>
</tr>
<tr>
<td>Summary of the Findings of the Study</td>
<td>153</td>
</tr>
<tr>
<td>Findings of Relationships Between Various Categories</td>
<td>155</td>
</tr>
<tr>
<td>Restatement of Null Hypothesis 1</td>
<td>155</td>
</tr>
<tr>
<td>Restatement of Hypothesis 2</td>
<td>159</td>
</tr>
</tbody>
</table>
Restatement of Null Hypothesis 3 .......... 161
Restatement of Null Hypothesis 4 .......... 162
Restatement of Null Hypothesis 5 .......... 163
Restatement of Null Hypothesis 6 .......... 164
Restatement of Null Hypothesis 7 .......... 165
Restatement of Null Hypothesis 8 .......... 166

Conclusion ........................................ 167
Recommendations ................................. 168

BIBLIOGRAPHY .................................... 170

APPENDIX A. COVER LETTER .................. 183

APPENDIX B. INSTRUMENT USED FOR THE STUDY .... 185

A Note to Respondents ............................ 185
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table 2.1:</th>
<th>Education by stages – classes, 1979-80</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.2:</td>
<td>Females employed in government administrative services</td>
<td>36</td>
</tr>
<tr>
<td>Table 3.1:</td>
<td>No. and location of statements related to each area of discrimination</td>
<td>104</td>
</tr>
<tr>
<td>Table 3.2:</td>
<td>Numerical details of data collection</td>
<td>107</td>
</tr>
<tr>
<td>Table 3.3:</td>
<td>Internal consistency reliability</td>
<td>111</td>
</tr>
<tr>
<td>Table 3.4:</td>
<td>Frequency distribution of position in India and U.S.A.</td>
<td>112</td>
</tr>
<tr>
<td>Table 3.5:</td>
<td>Frequency distribution of marital status</td>
<td>112</td>
</tr>
<tr>
<td>Table 3.6:</td>
<td>Frequency distribution showing degrees earned</td>
<td>113</td>
</tr>
<tr>
<td>Table 3.7:</td>
<td>Frequency distribution showing age of female administrators</td>
<td>113</td>
</tr>
<tr>
<td>Table 3.8:</td>
<td>Frequency distribution showing total years in the profession</td>
<td>114</td>
</tr>
<tr>
<td>Table 3.9:</td>
<td>Frequency distribution showing number of years spent in present position</td>
<td>114</td>
</tr>
<tr>
<td>Table 3.10:</td>
<td>Frequency distribution showing type of institutions female administrators belong to</td>
<td>115</td>
</tr>
<tr>
<td>Table 3.11:</td>
<td>Frequency distribution showing salaries received by female administrators in U.S.A.</td>
<td>115</td>
</tr>
</tbody>
</table>
Table 3.12: Frequency distribution showing salaries received by female administrators in India 116
Table 3.13: Frequency distribution of major departments female administrators belong to 118
Table 4.1: Statistical analysis of categorical data 120
Table 4.2: Cells that were largest contributors to the significant relationships between categories listed in table 4.1 124
Table 4.3: Cells that were second largest contributors to the significant relationship between various categories presented in Table 4.1 127
Table 4.4: Analysis of areas of discrimination across countries 129
Table 4.5: Analysis of areas of discrimination in the United States 134
Table 4.6: Analysis of areas of discrimination in India 138
Table 4.7: Areas of discrimination by position in United States of America 143
Table 4.8: Areas of discrimination by position (chairs, heads, directors of departments vs deans within India) 145
Table 4.9: Areas of discrimination by position (chairs, heads and directors of departments) in India and U.S.A. 148
Table 4.10: Areas of discrimination by position (deans) India vs United States 151
Table 5.1: Largest frequencies and their % for India and the United States 154
Table 5.2: Characteristics of female administrators 155
Table 5.3: Characteristics of female administrators 158
Table 5.4: Discrimination perceived by female administrators as the findings of hypotheses two to eight indicate (represented by areas of discrimination) 160
DEDICATION

This dissertation is dedicated to
my mother
with deep respect and love
ACKNOWLEDGEMENTS

I would like to thank God for giving me this opportunity to come to this great country and experience the joy of pursuing knowledge and rewarding my hard work with success.

There are so many individuals to thank - each one contributing in his/her own unique way - supporting and encouraging me during this period of uncertainty and excitement.

I am especially grateful to Dr. William D. Wolansky, my major professor, for his encouragement and guidance, during the pursuit of my graduate study here at Iowa State University. His support and advice have sustained me during those phases when I just felt like giving it all up.

With great pleasure and sincere gratitude, I thank Dr. Anton J. Netusil for his time and efforts in guiding me through statistical analysis of the study, always encouraging me and not losing his patience with my endless questions and intrusions, most of the time, without making appointments, and for always finding him helpful and very kind.

I wish to express my sincere appreciation to other members of my graduate committee: Dr. Donna L. Cowan, Dr. Larry H. Ebbers, and Dr. Michael D. Warren, who provided their invaluable time and assistance. I enjoyed Dr. Warren's sense
of humor and appreciate very much his unbiased attitude towards foreigners, which meant a lot to me. Dr. Ebbers has been a good listener, and I appreciate Dr. Cowan for her moral support, from one female to another.

Finally, a note of thanks is extended to my family: especially my mother who has been the driving force behind my coming to Iowa State university and completing this degree. To her I pay my deepest respect. Thanks to my sister for always telling me ‘You can do it’, and my father for just being there for me with moral and financial support, and for being the man I have loved ever since the memory I have of my own existence, for his care, love, understanding, confidence, and encouragement to strive for the best which could be achieved within the constraints of reality.
CHAPTER 1. INTRODUCTION

"One of the best ways to understand the spirit of a civilization and to appreciate its excellences and to realize its limitations is to study the history of the position and status of women in it. Civilization is to a great extent the result of a society's capacity to control some of the strongest and most selfish impulses embedded in the human nature. No class of similar importance and extent as that of women was placed in the infancy of society in a position of such absolute dependence upon men, and the degree in which that dependence has been voluntarily modified and relaxed naturally serves as a rough test of the sense of justice and fair play developed in a community.”

"There are a lot of factors dividing women from each other - class, caste, religion, race, education (or lack of it), field of work (in the house or out of it), and many other complex historical forces. Yet if one looks at the nature and basis of women's oppression, one will discover that being female determines a common predicament.”

Discrimination on the basis of sex is not a modern phenomenon. Females through centuries have faced it all over the world. A woman has been considered a subordinate to man in many societies and has been expected to follow and obey him. This feeling of inferiority that has been assigned to women through generations, is accepted today.
to varying degree by females as normal and natural – so much so, that women, particularly in underdeveloped countries, are afraid to break away for fear of losing femininity.

Women all over the world in all types of jobs face many barriers, the most prominent being sex discrimination. Discrimination is sometimes subtle, sometimes open, and at times demoralizing. It attacks women from all directions – social, psychological and organizational.

Discrimination against women in the labor market shows up in a variety of ways. The most overt kinds of discrimination occur when a woman is paid less than a man for doing the same job, or when a qualified woman is denied access to a job or promotion to a better job on account of her sex.

“Another and less obvious form of discrimination occurs when women are segregated into a pink-collar ghetto of low-paying jobs. These jobs are not necessarily low-skilled, but for a host of social and political reasons they are almost always low-paid. In the first place, women’s occupations have often been overcrowded. Secondly, women’s jobs have generally not been organized by trade unions, and this has weakened the earning power of these jobs. Thirdly, employers have gotten away with paying women less because many of them were, and to some extent still are, secondary wage earners within the family. Finally, women workers have often interrupted their work to bear and raise children. All these factors have depressed wages in women’s fields. So powerful are these factors that any field dominated by women is almost guaranteed to have low wages. Indeed, there are certain occupations in America that used to be dominated by men and used to be well paid until women took them over.”
There is little doubt that over the last few years, the number of women students, faculty and administrators has increased. Numerous anti-discrimination laws have been passed in India as well as in United States. These equal opportunity laws have succeeded in making Indian and American organizations more aware of women in blue-collar as well as managerial positions. Many policies and practices that once limited women's access to higher education have been eliminated. Yet, despite many improvements, some things have not changed at all.

A majority of men still think that women must be exceptionally talented and skilled to “make it” in an administrative position. One man out of three still thinks that women never will be totally accepted in management or leadership positions. Qualified women on their part do not try for these positions because in spite of wisdom acquired through years of education they still believe ‘it’s a man’s world’ and to fight the set-up will cause them to be rebuked and ridiculed.

Barriers such as these, either real or perceived, frequently have blocked the advancement of women into top leadership positions in America’s colleges and universities. Women traditionally have been stereotyped as more people-oriented, more collaborative, and more emotional than men, who historically have been cast as more task-oriented, manipulative, and authoritative than women.

Sandler states that women in the U.S. are still concentrated in a limited number of fields at lower levels. As the rank gets higher, the number of women in such positions get lower. The more prestigious the school or department, the fewer
the women. It is uncommon for women to be department chairs, and rarer still for them to be academic deans. Most often, women administrators remain concentrated in a small number of low-status areas that are traditionally viewed as women’s fields, such as in student affairs, in affirmative action, and as bookstore manager. Women who are in more central administrative areas frequently find themselves locked in the positions of “assistant” to the male deans, provosts, and vice presidents. Same situation holds true for female administrators in Indian higher education institutions

Fewer women are tenured as compared to men: 47% of women faculty are tenured as compared to 69% of men.

The rate of increase for tenured male faculty has been greater than that of women. Between 1972 and 1981, the percentage of tenured male faculty increased by 17.7%; tenured female faculty increased by 13.4%. Although women earn approximately half of the degrees at the undergraduate and masters levels, they earn only 32% of doctorate degrees.

At every rank, in every field, at every type of institution, women still earn less than their male counterparts. In the United States while women make up 39% of the labor force, less than 5% of persons earning more than $10,000 a year in the census category of officials, managers and proprietors are women. Stated another way, men make up 61% of the labor force, yet 95% of the jobs in this census category paying more than $10,000 are held by men. At higher salary levels – $25,000 and above – the representation of women falls even lower – to 2.3% versus 97.7% for men. In absolute numbers, only 11,000 women managers in the United States earn more than $25,000
In comparison with 449,000 men, women have achieved very little. In 1982-83, the American Association of University Professors (AAUP) report on 2,500 institutions of higher education concluded that: "...after a decade of affirmative action women have achieved very little ... at Harvard women are only 4.2% of full professors; at Princeton 3.2%, at Stanford 2.6%, and at Yale 3.0%." Almost a third of the pool of Ph.D.s are women, and more than one-quarter of junior faculty nationwide are women. In India illiteracy is a major problem, particularly among women. Illiteracy and ignorance go hand in hand and opposition to change and adapt to modern ideas and methods that promote progress is most obstinate among the most ignorant. The educational facilities offered fall far short of the need. There is a wide gap between the education of boys and girls. There are heavier drop-outs among girls than boys, more in rural than in urban areas. The reasons are many. To a large extent the causes are economic.

Whether women work outside the home or not, the burden of housework and child care falls upon them. For millions of women in India, the drudgery starts from childhood; when they should be at school and playing, girls toil with their mothers so that the family can be fed and perhaps a brother can go to school. The result is that women represent two-thirds of India's illiterates.

During the decade of 1971-81 female literacy rate improved from 18.7 to 24.82% in India. The data also suggest that though there has been an absolute increase in
female literacy, the growth rate has been declining and there is wide disparity between male literacy and female literacy [1].

If we take the percentage of women in higher education in the age group 17-21, the picture is very depressing. University educated women form only 3% of the female population; however, size of the educated class is large enough to make it significant. There were 18,774 men and 6,643 women enrolled in Ph.D. programs in 1979-80. In master's degree programs there were 197,720 males and 93,621 females in the same year. In the bachelor's degree programs there were 989,116 boys and 4,85,120 girls. There were 51,360 boys and 16,462 girls enrolled in medical programs [2]. As the degree gets higher the number of female students in proportion to male students constantly decreases.

In India growing urbanization and modernization of the economy brought the educated middle class women into the world of work, yet there has been only a slight increase in women at work, from 12.06% in 1971 to 13.97% in 1981. Many studies have indicated that the nature of economic development, agricultural mechanization, commercialization, etc., has adverse impact on women's employment [3]. Women are treated as source of cheap, unskilled secondary labor that can be hired and fired to suit the requirements of the employer. In fact, women constitute two-thirds of the total unemployed persons. Although there has been no obvious discrimination against women in professions in matter of pay and other facilities, in the unorganized sector where 94% of women are employed there is a wide gap between the wages paid to males and females. For example, in iron ore mines, women get 67% less than men in their minimum total pay packet and 80% less in the maximum pay packet. Women
are quite blatantly paid less than men for doing the same jobs.

Equal opportunity laws do not and cannot legislate truly equal access to that opportunity and, most important, they cannot ensure that people who have traditionally been discriminated against will immediately and automatically demonstrate the ability to take advantage of whatever access to opportunity may exist.

Another way of grasping the issue is to consider the often quoted statement about Black movement: "You can legislate against segregation but you cannot legislate integration." In other words, saying a person cannot be kept out does not ensure that that person can get in and, more important, stay in. Beliefs, attitudes and assumptions which people have about each other are untouched by law. At another level, there is the critical issue of competence. Unless people not only are but believe they are, equally able or competent to compete, they will not willingly or successfully integrate with more powerful individuals and groups.

India is today a developing nation while the United States is one of the world’s leading developed nations. It is often stated that the developing nations like India are 30 years behind the developed nations like United States of America in all spheres. But the status of female in the work world is not very much different in both of these nations, even though the number of educated women and the social privileges granted to women in the U.S. are greater. The underlying assumption of the study is that the sex discrimination on the job is not very different in either of these nations, especially the subtle discrimination.
Statement of the Problem

The problem of the study is to investigate the discrimination variables which distinguish female department chairs, heads, directors and deans in colleges and universities within higher educational institutions in India and the United States of America.

Basic Assumptions

For the purpose of this study, the following assumptions are made:

1. The sample for this study is representative of department heads, chairs, directors and deans of higher education in India and the United States of America.

2. The items in the questionnaire are representative of the discrimination faced by female DEOs and CEOs in India and the United States of America.

3. The data gathering instrument (questionnaire) was presented to three female administrators at Iowa State University to get their feedback on the contents and clarity of ideas. Therefore it is assumed that the instrument did not present problems of understanding to the respondents.

4. The DEOs themselves answered the questions.

5. The questions were answered to the best of their ability.

6. They have expressed their true and honest viewpoints.

7. Since sex discrimination has been prevalent through centuries, some measure of prejudice is to be expected.
8. A comparison of data from two different environments (India and the United States) would yield fruitful information in terms of different or similar types of discrimination faced by female administrators.

Limitations

For the purpose of interpreting the findings of this study, the following limitations are applied:

1. Only incumbent department heads, chairs, directors and deans of higher education in the colleges and universities in India and United States of America are included in this study.

2. Generalizations of the findings will be limited to those administrators in similar settings.

3. Only Departmental Executive Officers designated heads, chairs, directors and Central Executive Officers designated Deans were used in data collection.

4. Only a questionnaire survey technique was used in data collection.

5. Data collected from the respondents is used to determine whether female DEOs and CEOs perceive themselves to be discriminated against types of discrimination and attitudes of male colleagues and other females regarding female DEOs and CEOs.

6. Opportunities for the respondents to make suggestions was provided and the suggestions were considered in discussing the findings of the study.
Need for the Study

Women and men need to realize that sex discrimination in higher education is a reality, that it is pervasive, and that it exists in some form in all institutions. Sexism may be overt or covert, blatant or subtle, or all of these. But it is essential to recognize that it exists, and not minimize it. Women today should be especially attuned to two important factors. First, while everything that happens to them is not gender-related, much that happens to them is, and in most situations both factors are operating. Second, women need to be alert to all possibilities, need to try to recognize what factors are operating and why, and need to be able to handle situations in all their complexity.

The disadvantaged situation of women in the labor market is a consequence of their position in the social system, particularly their exclusion from the structures of decision making and power. It is within this structural framework that the institutional and historical aspects of discrimination against women workers in society and in the labor market which has, until recently, been taken for granted, is opposed to equality of opportunity understood in a comprehensive sense to include equality of employment, training and promotional opportunities. In this sense, it is not possible in the sex segregated labor market whose structures ensure that the career patterns of women will normally be marked by discontinuity, unlike the normal male career patterns which assume continuity.

Another aspect that keeps women at a disadvantage is the lack of full and accurate statistics on women in relation to their economic, and political participation. In case of India particularly, the main sources of data on women are the censuses,
national surveys and micro-level research studies. The census data have often pro-
duced a distorted picture of women, particularly of their participation in the economy
and labor force, because of the biases introduced by sex based stereotype and also by
the assumption that data collection methods applicable for men will automatically
suit women. For example, cultural and social stereotypes regarding the concept of
head of household has given rise to unreliable data and serious under-reporting of the
economic contribution of women [\].

In India, especially, census data provide unreliable data on women largely because
women interviewers have not been used in the data collection process. Cultural norms
and social practices which determine the expectations and behavior of women require
data collection methods and tabulation procedures to be sensitive to the changing
roles of women in society [\]. There is therefore great need for specially designed
methodological studies aimed at assessing the quantum of female participation in var-
ious activities in order to undertake effective human resource planning, development
and utilization [\].

No study on female administrators in colleges and universities in India could be
located. This study will be the first attempt of its kind to study the discrimination
faced by female administrators in Indian colleges and universities. Also to the best
of the knowledge of the researcher, no comparative study on female administrators in
India and the United States has been completed so far.

There is a need to assist educational institutions in becoming completely non-
sexist and non-racist. Every individual should have an equal opportunity – not based
on gender or ethnic background. Although efforts have been made to provide equal
opportunities, it hasn't been achieved yet. The first Equity Forum held in 1987 at Iowa State University noted that a number of barriers are still faced by female administrators. Those barriers identified were:

- A lack of education and training for university employees and students on sex equity issues.

- The need for affirmative action in the selection of people to fill positions, especially upper level positions.

- Effects of decisions on sex equity are not considered.

- Leadership of women is not sufficiently recognized and utilized.

- The university has not examined how the climate of the institution creates and maintains barriers.

- Recruitment and retention of women is not being actively pursued.

- Some personnel policies create major barriers to the promotion of women.

- A lack of clarity regarding promotion policies.

- A lack of mentoring effects the promotion and retention of women.

**Null Hypotheses**

The hypothesis of this research study compared discrimination faced by female administrators in India and in the United States of America. Ten areas of discrimination were selected for this study. They were: Salaries and Fringe Benefits, Pro-
motion Possibilities, Status, Barriers to Progress, Nature of Gender Discrimination, Cultural/Social Issues, Male Attitudes, Competence and Accomplishments.

Null Hypothesis 1

It is hypothesized that there is no significant relationship between various categories represented in the demographic data collected from female administrators in India and the United States of America.

Null Hypothesis 2

All female administrators collectively (American and Indian) will not perceive discrimination (see areas below) favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their Higher Education Institution.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

**Null Hypothesis 3**

American female administrators will not perceive discrimination (see areas below) favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their Higher Education Institutions.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

**Null Hypothesis 4**

Indian female administrators will not perceive discrimination (see areas below) favoring their male counterparts (score than or equal to 3.5 on discrimination scale) to occur within their Higher Education Institutions.

Areas of discrimination to be studied included:
1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Null Hypothesis 5

There are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors and deans in institutions of higher education in United States of America when their perceptions are compared on following areas:

Areas of discrimination to be studied included:
1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Null Hypothesis 6

There are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors and deans in institutions of higher education in India when their perceptions are compared on the following areas:

Areas of discrimination to be studied included:
1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.
Null Hypothesis 7

There are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors in institutions of higher education across India and United States of America when their perceptions are compared on the following areas:

Areas of discrimination to be studied included:
1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Null Hypothesis 8

There are no significant differences regarding discrimination between those categorized as deans in institutions of higher education across India and United States of America when their perceptions are compared on the following areas:

Areas of discrimination to be studied included:
1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

General Procedure and Organization of the Study

1. Defining the Problem: An area of interest within the field specialization was identified and a research problem was selected.

2. Related Research: A review of related theoretical and research literature was carried out and pertinent information collected, analyzed and evaluated in an effort to avoid duplication. The review was of particular assistance in defining and delimiting the scope of the study.

3. Considerable time and effort was spent in libraries in India and at the University Grant Commission in New Delhi to collect information on female administrators in Indian higher education. These efforts did not yield much significant success. However it became clear that in India studies and research on female administrators had been almost negligible.
4. Drafting of the Proposal: The first draft of the proposal was then given to Dr. Wolansky for discussion and approval. His suggestions and guidance provided a better understanding and deeper insight into new dimensions and alternative strategies to better identify the research problem and possible methodology.

5. Approval of Proposal by the Program Advisory Committee: After the preliminary approval by the major professor, the research proposal was formally presented to the researcher's Ph.D. committee for review and approval. All suggestions and comments offered by the members of the student's committee were considered in further sharpening the research problem.

6. Identification of the Target Population: First, colleges and universities that had female administrators holding the positions of chairs, heads, directors and deans were selected as the target higher education institutions for both India and the United States. A random selection of female administrators was made from the target higher education institutions in India as well as the United States of America.

7. Development of Data Gathering Instrument: Part of the survey was modeled after the “Mail and Telephone Survey: Total Design Method” by Dillman. The questionnaire had two parts. First part contains demographic questions. The second part included perceptions and experiences about the current status of affairs or conditions related to discrimination faced by academic administrators in both India and the United States of America. The questionnaire was classified according to the ten areas of discrimination with each area used as
a heading. Statements related to the area of discrimination were gathered under the heading for the purpose of making the flow of thought easier for the respondents.

8. Before submitting the draft of the survey instrument to the graduate committee for review and approval it was presented to three female administrators and three female graduate students from India at Iowa State University for their comments and feedback on content and format.

9. The questionnaire was revised based on the recommendations of three female administrators and three graduate students from India at Iowa State University.

10. Data Collection: (1) The survey questionnaire was mailed to each of the research participants. (2) The follow-up letter were sent to non-respondents.

11. Data Analysis Procedure: All returned questionnaires were evaluated for suitability, coded and analyzed by using SPSSx systems procedures. The computer facilities of the Iowa State University were used. Average differences in attitudes as perceived by the two groups and as stated in the hypothesis were compared and appropriate inferences and interpretations were made.

12. The Type I error level was set at .05. The computation of frequencies, mean and standard deviation, student's t-tests, and chi-square were used in the statistical analysis. Value of 3.5 was used as threshold value for comparison of salaries and fringe benefits, cultural and social issues, male attitudes, status, promotion possibilities, potential barrier to advancement, gender discrimination, structure of the institution, competency and accomplishments.
13. Conclusions were drawn based on the results of the data analysis.

14. The findings of the study were reported.

**Definition of Terms**

- **Department Executive Officer (DEO):** The person administratively responsible for the operations of the academic department; the person in authority; the person responsible to the university/college central administration and usually designated head/chair/division director.

- **Central Executive Officer (CEO):** The person holding Deans's position and above.

- **Sex-roll Stereotyping:** The making of statements in teaching and the use of texts and other study materials that reflect traditionally defined roles stressing independence for boys and men while stressing passivity and dependence for girls and women on the other.

- **Sexism:** Treating one sex (usually the female) as if its members were inherently inferior to one's own. This is seen in much sexual discrimination (e.g., in employment) within society. It is also seen in many school books in which girls and women are ignored or patronized or depicted as being involved in trivial and unexciting activities. This may encourage undesirable sex-typing. Sexism is akin to racism.

- **Barrier:** A hindrance to professional and social progress of females.
• **Socialization**: The process of bringing the individual, particularly the female child, to understand and accept the customs, standards, traditions, and culture of the group of which she is a member and to cooperate actively with that group.

• **Status**: Position within the social structure.

• **Structure of the Institution**: A framework of relationships among similar functions, physical factors, and personnel that is set up to facilitate the accomplishment of some mission by promoting cooperation and facilitating an effective exercise of executive leadership.

• **Male Attitude**: A tendency to feel about and act towards females in a particular manner.

• **Subtle Discrimination**: According to Webster’s Dictionary ‘discrimination’ means ‘the act of showing of partiality or prejudice in treatment; specifically action or policies directed against the welfare of minority groups.’ ‘Subtle’ means ‘not open or direct, delicately suggestive; not grossly obvious; not easily detected.’

**Organization of the Study**

This study is divided into five chapters, an appendix and references. Chapter 1, the introduction, includes some background data pertaining to the discrimination faced by female administrators in higher education institutions in India and the
United States of America. Also included are the statement of problem, basic assumptions, limitations, need for the study, research hypothesis, general procedure and organization of the study, definition of terms and organization of the study. Chapter 2 presents a review of the literature summarizing pertinent research related to status and position of women, location of female administrators in higher education institutions in India and the United States, salaries and fringe benefits received by female administrators in both countries, nature of gender discrimination, subtle discrimination, reasons why women occupy limited top level administrative positions, socialization of females, effects of education, structure of organizations, reasons for expanding the role of women in college and university administration, efforts of organizations to dismantle discrimination. First half of Chapter 2 summarizes pertinent research related to female administrators in India and second half of the chapter covers the research related to female administrators in the United States of America. Chapter 3 contains the methodology for this study. The survey instruments and population are described as well as data analysis procedures and techniques. Chapter 4 provides analyses and interpretation of the data. Chapter 5 includes a summary of the research and recommendations for future studies.
CHAPTER 2. REVIEW OF LITERATURE

Sex discrimination implies gender bias, a male-female partition suggesting a set of attitudes that is socially and economically divisive. In higher education as in industry, discrimination has taken different forms. Access discrimination, such as recruitment and hiring practices and treatment discrimination - involving, for example, pay, promotion and termination decisions - have drawn attack from equal opportunity proponents.

Throughout history women have reared and taught the young, yet they are excluded both as subjects and objects of educational thought. As subjects, women's philosophical works on education are ignored. As objects, works by men about women are largely neglected and underrated. Standard texts and contemporary philosophies of education exclude women so that society is denied contact with the great female minds.

Researchers argue that discriminatory practices against women are related to the unconscious influence of factors in the work culture, structure of organizations, and particular career patterns assumed by women rather than to the conscious expression of discriminatory attitudes and preferences. "Members of both sexes are thralls of sexist indoctrination and it is probably nobody's fault that women continue to mindlessly follow the dictates of a sexist society."
Anis and Anis declared that gross discrimination exists against women in higher education, that universities have done nothing to abate it, and that the courts have either refused to enforce the law or have taken an indifferent and non-interventionist posture. They contend that more charges of sexual discrimination in employment have been filed against higher education than against any other industry. But not one dollar has been taken away from an institution.

Women face discrimination in a number of ways. Some forms of discrimination are direct and easy to identify, particularly if the analysis is quantifiable (for example, salary inequity). Other forms are considerably less direct and may not even be recognized as discrimination. "Women must understand and cope with the fact that some people will treat them not as individuals but as members of a class. For example, given the stereotypes that "women are not good in math" and "can't handle budgets," a particular woman's competencies in financial management may be doubted without even checking into her experience and reputation in her current or previous jobs. Another example involves the assumption, also a stereotype, that "women are not willing to move." In reality, geographical mobility is a matter of concern to men as well as women today, given the increasing number of dual-career families. It is a complex issue about which assumptions simply can no longer be made."

Status and Education of Women in India

"The position of women in India is no better than that of women in the rest of the world. In ancient India, woman enjoyed a prestigious position. It used to be said that 'where females are honored the dieties are pleased'. During the vedic age women
were treated as the equal companion of their husbands receiving greater respect and confidence. However, women’s status, through the ages, has declined. Women became illiterate, superstitious and secluded. Women suffered from many barbarous customs such as the burning of sati; dowry; female infanticide and its modern form foeticide, social restrictions on widow remarriage, and purdah to name the few.

Social reformers like Raja Ram Mohan Roy, Karve, Mahatma Gandhi and many others, did the women’s work in restoring to woman her lost position.

Since the 19th century, women have been considered either as victims of social practices or targets for development, but never as participants in development. Gandhi encouraged women to participate in the national movement. He believed that if women did not join the movement India’s march to freedom would be delayed. In response to his call, women came out of their homes to join the freedom struggle. Like men they went to prison, took out processions and demonstrated against the British Raj. Women thus came out of their seclusion. The freedom struggle also paved the way for their emancipation from socio-religious taboos, and therefore, a blessing in disguise as they began fighting all sorts of odds alongside men. This was the most immediate and significant impact of India’s partition as they were to shed almost all such evils to some extent which were forced on their everyday life partly by the society in which they lived and partly by themselves. However, it took a great deal of lobbying to get a substantial part of the analysis on women’s situation incorporated in the final document of sixth five year plan. “There was a growing acceptance of the notion that women have to be considered as equal participants in shaping the new society rather than as victims to be saved or objects of welfare.”
Post independence era

The Constitution of free India provided equal rights and a directive to establish free and compulsory education for all children. A series of five-year plans were enunciated as developmental strategy. These plans established targets for women's education, which have not been fully met. Although an increasing number of women are going to school, the vast majority remain illiterate.

The development of women's education is integrally linked with the perception of roles within the Indian society. "In most societies of the world, women have been defined largely in terms of their functions as wives and mothers, and by cultural images of their sexuality." Even today, the education of girls continues to be influenced by a range of factors which are considerably different from those which affect boys' education. "The historical roots of prejudice against women's education, and later, against its expansion in non-traditional areas, lay in a basic conviction that there was something special about women's nature which would be destroyed by excessive education. Access to various scientific theories from the west served to reinforce the belief in women's uniqueness, if not their inferiority."

The rights of women to become educated and to hold jobs outside of the home have frequently been questioned. Basic skills of reading, writing and some knowledge of arithmetic, hygiene, vernacular language as well as English were regarded as being more than adequate for girls. There were debates on the kind of syllabi and textbooks to which girls should have access, and the amount of education to be given to them. Some radical social reformers advocated education of girls, because they as much as boys needed to develop their total personalities. Supporters of women's right to
education saw “illiterate and ignorant women as poor wives and mothers - women who can not socialize their children to new values”[] at the same time western education had created a new breed of young men who expected something more from their prospective brides. They looked for girls who were more than literate. “An educated young man is no longer satisfied with the prospect of a wife who can only be the acquiescent slave of his desires and the begetter of his children, but looks for intellectual cooperation and participation in the pleasures and joys of life. The educated wife is expected to be a companion who will share his interests, go with him to clubs and films, sports and parties, and thus be united emotionally with him. The new concept of wifehood which is associated with urban living has assigned to the wife a new status in the family, even if it be joint[]. Thus by and large, the education of girls is aimed at competent wives, mothers and intelligent companions for Indian men who have received western education. “Its liberational role emphasized by the radicals was clearly to be subordinate to the wider social goal which stressed willing acquiescence and not a questioning and enquiring mind. Even when girls from a few families ventured into higher education, they were trained to be teachers, nurses and perhaps doctors: in a purdah society there was a growing demand for female doctors to attend to women. Science, engineering, and other male-dominated areas were regarded as being too taxing as well as time-consuming for girls whose chief goal was to be successful wives”.[]

The basic dilemma which has confronted many involved with the expansion of education in post-Independence period is the conflict between two sets of goals - that of quantitative expansion of education and its selective, qualitative growth.
Irrespective of the level of education, boys have an advantage over girls in terms of access, retention and future use of their training. Among the small fraction of the population that has access to higher education, girls are more often concentrated in the lower status, less competitive and rapidly multiplying colleges for general education. In these colleges, girls from the upper middle-class and middle-class share with the first generation literate son of a farmer or shopkeeper, a common destiny. By and large the high status and relatively few medical colleges, institutions of technology, management and engineering are the preserve of boys from privileged backgrounds.
while polytechnics and technical institutions cater to girls as well as to boys who are unable to succeed in highly competitive selection tests which assume a fluency and familiarity with a certain subculture as well as the English language. “Thus, the dual system of higher education which separates a select, self-perpetuating elite from the majority trained in indifferent institutions is divided not only on the basis of socio-economic status but also on the basis of sex. The difference here is that while boys from certain backgrounds often cannot succeed in gaining admission to elite institutions, the girls in question are not allowed to try to succeed.”

The gap in the male and female literacy rate has been consistently widening over the past few decades. However very few fields of education and professional employment are legally or visibly barred to women. Women constitute two thirds of total illiterates in India. The proportion of girls to boys is increasing more rapidly at the higher levels of education than at the primary and secondary stages. Admission of females to Indian universities has been relatively easier for those women in particular who belong to the narrow elite segment of Indian society.

In general, education for girls is aimed at reinforcing the values of consistency and obedience. In addition, the family creates an awareness of and preparation for her future life in her husband’s home. For boys, the stress is on competition and career. “Theoretically, it is difficult to envisage how the same school system can have different sets of aims and consequences.”

Though enrollment as percentage at the corresponding age group of girls has increased at the primary level from 62% in 1975-76 to 81.5% in 1984-85 and at the middle level from 23.3% in 1975-76 to 36.8% in 1984-85, there remains a wide gap
between boy's and girl's enrollment in the corresponding age group. According to Union Education Ministry, 74% of the girls in the 6-14 age group quit school and lapse into illiteracy.

In higher education, particularly in the cities and among the upper and the middle classes, one finds a more positive attitude towards female education. Though there is an improvement in enrollment, in various stages of higher education, the disparity in relation to number of boys is striking. Table 2.1 gives the detailed picture of the number of boys and girls enrolled for various courses in higher education. The disparity in the number of boys and girls is glaring in all disciplines.

Table 2.1: Education by stages - classes, 1979-80

<table>
<thead>
<tr>
<th>Degree</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
<th>% of girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D./D.S.</td>
<td>18,774</td>
<td>6,643</td>
<td>25,447</td>
<td>26.1</td>
</tr>
<tr>
<td>M.A.</td>
<td>108,711</td>
<td>66,300</td>
<td>175,011</td>
<td>37.8</td>
</tr>
<tr>
<td>M.S.</td>
<td>52,545</td>
<td>24,308</td>
<td>76,853</td>
<td>31.6</td>
</tr>
<tr>
<td>M.Com.</td>
<td>36,464</td>
<td>3,013</td>
<td>39,477</td>
<td>7.6</td>
</tr>
<tr>
<td>B.A./B.A.(Hons.)</td>
<td>572,220</td>
<td>318,811</td>
<td>891,031</td>
<td>35.8</td>
</tr>
<tr>
<td>B.S./B.S.(Hons.)</td>
<td>376,536</td>
<td>138,419</td>
<td>514,955</td>
<td>26.8</td>
</tr>
<tr>
<td>B.Ed./BT.</td>
<td>40,360</td>
<td>27,890</td>
<td>68,250</td>
<td>40.9</td>
</tr>
<tr>
<td>M.B.B.S.</td>
<td>51,360</td>
<td>16,462</td>
<td>67,822</td>
<td>24.3</td>
</tr>
<tr>
<td>B.Com./B.Com.(Hons.)</td>
<td>413,081</td>
<td>67,361</td>
<td>480,442</td>
<td>14.0</td>
</tr>
<tr>
<td>B.E./B.S./Eng./B.Arch./B.Tech.</td>
<td>99,510</td>
<td>3,685</td>
<td>103,195</td>
<td>3.5</td>
</tr>
<tr>
<td>Intermediate/Junior College</td>
<td>1,162,054</td>
<td>308,951</td>
<td>1,471,005</td>
<td>21.0</td>
</tr>
<tr>
<td>Pre-Degree/Pre.Univ.</td>
<td>146,280</td>
<td>94,326</td>
<td>240,606</td>
<td>39.2</td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>983,628</td>
<td>321,877</td>
<td>1,305,505</td>
<td>24.7</td>
</tr>
<tr>
<td>Teacher Training School</td>
<td>54,101</td>
<td>51,487</td>
<td>105,588</td>
<td>48.8</td>
</tr>
<tr>
<td>Technical and Industrial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training School</td>
<td>293,098</td>
<td>69,206</td>
<td>362,304</td>
<td>19.1</td>
</tr>
</tbody>
</table>

There are a number of reasons which keep girls away from school. Important among these are: (1) The high cost of education in relation to the poverty of families.
Poor families heavily depend on the work of children and of women. Girls have to help with domestic chores, look after younger brothers and sisters and earn their livelihood. Being in school means foregoing the opportunity to earn or help in the home. Poor families regard education as a fruitless investment which provides no definite access to better employment. If there is a question of choices, boys are more likely to be given the option of a few years of schooling while girls are sent to get jobs. (2) Another important factor affecting participation in education is early marriage. Though girls now marry at an average age of 17, pre-pubertal and child marriages are not uncommon. Increasingly, among the middle-class, an educated, if not employed daughter is an asset in a competitive marriage market; (3) There are certain processes within the school system which work to reinforce stereotyped notions of what it means to be a girl and a perpetuation of inequality between the sexes. Textbooks, through the use of characters and symbols in certain situations, have been found to become a powerful medium for the perpetuation of stereotypes and role models. For example, National Center for Educational Research and Technology-sponsored study of Hindi text books used in India found that the ratio of boy-centered stories to girl-centered stories was 21:0. This signifies that all 21 stories examined were boy-centered, and none depicted a girl as a central character. The study also found that 94 out of 110 books made biographical references to prominent men. In the thirteen English language textbooks published by the Central Institute of English, Hyderabad, 81 stories were found to be boy-centered while only 9 stories had girls as the central character. In general, books in both languages tended to portray boys as courageous, achieving and interested in science and technology; girls and women
were rarely portrayed in roles associated with economic activity or independence. A study of Marathi language text books found that even when girls were seen as being employed they were portrayed in menial and subordinate roles [1].

Indian Women in Administration

In India, literature and studies on female administrators in post secondary educational institutions is almost nonexistent. This researcher could not find any book in Indian libraries in Delhi or Bombay dealing with the topic of this dissertation. Some books were located where women in managerial positions, law colleges and administrative positions in Central and State Governments were interviewed to determine the extent of discrimination faced by them. Since this researcher could not find studies related directly to the topic of this dissertation, an attempt was made to draw inferences from females employed in administrative positions in government and industries. Also the education, status, socialization of women would help determine the differential treatment of girls in Indian society, which naturally affects women at work in all fields.

Due to increased technology in the Indian economy, jobs, which were done by women were eliminated and were replaced by a category of new skills rendering women unemployable [2]. Employment in the organized sector requires certain minimum educational qualifications, and in such a case the logical trend would be 'the lesser the level of educational facilities the lesser would be the opportunities for employment in it'. As a result in comparison to men, women are pushed backward. Hence their participation in the organized and white collar world is at its lowest ebb because
their level of education always falls short of the required minimum in the general competition.

An examination of women's employment trends indicates that major forces affecting women's employment are due to structural changes within the economy as a whole and from the intensification of socio-economic inequalities.

Among the organized sectors, service sector, to some extent offer wide scope for women's employment. Besides the profession of teaching, medicine, nursing, scientific and clerical work, women have room for jobs such as telephone operators as sales assistants or as secretarial functionaries and other white collar jobs. Interestingly the government also discriminates in offering its jobs to women. A mere 2.5% of the Central Government's (1.87 million) employees were women in 1973.

Speaking of changes, in the social lives of Indian women, the late Pandit Jawaharlal Nehru remarked: "We talk of revolutions, political and economic, and yet the greatest revolution in a country is the one that affects the status and living conditions of women. It is in so far as our revolution has affected our women that it is basic. I believe it has done so, not perhaps in a dramatic, aggressive way but rather after the old Indian fashion of combining change in our time..."
Before independence (1947), women were conspicuous by their absence in national, state, district or village civil services. Women were not permitted to appear in ICS (Indian Civil Services) or IRS (Indian Revenue Services) or IPS (Indian Police Services). Administrative services were considered jobs for men. After independence, though, this prohibition ended, there were some restrictions. Only unmarried women or widows without encumbrances could join the services, and the government reserved the right not to select a woman even if she qualified through the examination process.

In 1954 government relaxed its restrictions and allowed married women also to join the civil service on the condition that they could be asked to resign if their marriage proved to be a hurdle in efficiency at the job in some way. This restriction was rarely used and it was finally deleted in 1972 after women members of parliament denounced it in parliament.

The first female officer was Miss Anna George (1951). In choosing a career she picked on Indian Administrative Services as she saw no reason why women would...
Table 2.2: Females employed in government administrative services

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Profession</th>
<th>Year</th>
<th>no. of Males</th>
<th>no. of females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indian Administrative Service</td>
<td>1977</td>
<td>2338</td>
<td>218</td>
</tr>
<tr>
<td>2</td>
<td>Indian Foreign Service</td>
<td>1977</td>
<td>371</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>Indian Police Service</td>
<td>1977</td>
<td>1907</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Indian Forest Service</td>
<td>1977</td>
<td>1098</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Central Information Service</td>
<td>1977</td>
<td>709</td>
<td>33</td>
</tr>
<tr>
<td>6</td>
<td>Indian Economic Service</td>
<td>1977</td>
<td>426</td>
<td>22</td>
</tr>
<tr>
<td>7</td>
<td>Indian Statistical Service</td>
<td>1977</td>
<td>222</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Central Secretariat</td>
<td>1977</td>
<td>795</td>
<td>9</td>
</tr>
</tbody>
</table>

not be able to handle such jobs. She said, "If you do your job well, you will be respected." In 1970, she was Joint Secretary in charge of personnel in the Ministry of Home Affairs.

First female to be employed in the Indian Police Service was Kiran Bedi (1972). Until 1972 the Indian Police Service refused to accept women on the grounds that women and policing were incompatible.

These pioneer women administrators were extremely conscious of the impact their performance would have on the future recruitment of women in administrative services. They were conscious that if they performed poorly at their jobs, their failure would be generalized to all women.

Through the years, number of females in Civil Services have increased gradually. In 1974, 200 women were in Indian Administrative Services comprising 8.8% of the services. These figures rose to mere 218 in 1977. Indian Police Service had 7 women police officers in 1976. The Table 2.2 indicates trends of female employment in administrative services for the year 1978.

"In the Indian Administrative Service (IAS)/Indian Foreign Service (IFS)/Indian
Police Service (IPS) examinations, the ratio of women to men recommended for appointment, improved from 1:81.6 in 1960 to 1:7.8 in 1972. But in the other services, the Indian Economic Service, Statistical Service and Engineering Service their proportion remains very low. The Committee on Status of Women in India (CSWI) report says: “We are unofficially informed that in the ten Class I services of the Railway Ministry women are accepted only in the accounts and medical services and have been denied the opportunity to enter the traffic or other services.” In most of the higher administrative posts, professional and business categories, the number of women in the 1936-37 survey was negligible. In 1954 their number had however gone up.

“Disparities in the proportion of women at higher levels of responsibility are due to both prejudice and discriminatory recruitment policies as well as lack of career orientation and commitment on the part of women.”

The committee on the Status of Women in India (CSWI) report states that “many private concerns and even a few in public sector, in response to our questionnaire, admitted that they do no recruit women at managerial level as a matter of policy.” The report also states that “while there is no doubt that opportunities for women have widened in the tertiary sector it has to be remembered that part of this is the reflection of the rapid growth of the tertiary sector in general and the public sector in particular because of the expanded role of government at all levels of the development process.”
Location of female administrators in higher education

At the University Grant Commission, in New Delhi, figures on university administrators were not available beyond 1971, which seemed quite old to be of importance. All universities and colleges in India fill out data for the University Grant Commission. In the office of University Grant Commission, figures regarding administrators were collected for the year 1984-85, which give some idea about female administrators in India.

In India, job classification is different from America. Firstly, a head of the department of a college is supposed to teach a few courses and comes under the category of a professor. All heads of departments have to be of professor’s rank but all professors need not be heads of departments. Secondly, the non-teaching staff is grouped as Class I officers, Class II officers, Class III officers and Class IV officers. Class I consists of registrars, vice chancellors, proctors, deputy registrar, and assistant registrar. Class II consists of superintendents, supervisors and section officers, the ministerial staff, assistants, the upper division clerks, and lower division clerks. Other clerks and secretaries are included in Class III and Class IV consists of sweepers, messengers and caretakers.

Information found in University Grant Commission about number of male and female educators and other staff in some of the major universities in India in 1984-85 is as follows: In Sardar Patel University in Gujarat there were 33 males and only 1 female full professor; 54 men holding position of Readers/Ass. Professors but only 3 women holding the same position; there were 56 males and 10 females holding the position of Ass. Prof/Lecturers. In University of Hyderabad there were 18 male
full Professors but no female holding the same position; there were 38 males and only 3 females in the position of Reader/Ass. Professor and 36 male and 12 female Ass. Prof/Lecturers. At Vishva Bharti University in West Bengal there were 51 male and 4 female full professors; 116 male to 12 female Reader/Ass. Professors; 94 male and only 19 Ass. Prof/Lecturers; 104 male and 41 female Ass. Lect./Jr. Lecturers. Gauhati University had 35 male and only 3 female full professors; 80 male and 9 female Reader/Ass. Professors; 126 male and 27 female Ass. Prof/Lecturers. Bombay University had 54 male and only 6 female Professors; 71 male and only 19 Reader/Ass. Professors; 59 male and 23 female Ass. Prof/Lecturers.

Among the non-teaching administrative staff, Sardar Patel University had 7 male Class I officers and no female holding the same position. There were 71 male and 4 female Class II officers; 17 male and 5 female Class III officers. University of Hyderabad had 6 male and no female Class I officers; 13 male and no female Class II officers and 72 male and 4 female Class III officers. Vishva Bharati University in West Bengal had 40 male and 5 female Class I officers; 74 male and 6 female Class II officers; 544 male and 32 female Class III officers. Gauhati University had 9 male and no female Class I officer; 43 male and 2 female Class II officer and 380 male and 30 Class III officers. Bombay University had 9 male and no female Class I officers; 20 male and no female Class II officers and 296 male and 4 female Class III officers.

The above figures show that, as in the United States of America, in India there are very few female administrators and they tend to be clustered in entry and middle level administrative positions, most often in women's colleges and universities.

However, at the government level, as far as overt discrimination is concerned, a
female at least in theory is treated equal to males. A female gets the same salary as a male for the same job, experience and qualification. As discussed earlier, the Equal Remuneration Act states that there would be no discrimination in public or private sector as far as finances are concerned.

According to a study done by DeSouza [1], one of the reason for lack of females in high administrative and other types of prestigious jobs is that when both husband and wife work, there is a remarkable link between the occupational prestige of wives and husbands. In general Indian females tend to have occupations that are either of the same prestige levels or of levels one step lower than those of their husbands.

In male dominated societies, the wife occupies a slightly lower status in the family as compared to the husband. Therefore, to maintain the consistency in family status husband is given slightly superior status as compared to his wife. On the other hand, the status of an individual is derived from his/her occupational prestige. Since men are considered to be the breadwinner in the family, wife and other members of the family derive their status from his occupational standing. If the wife also works, she is expected to take up an occupation which is almost equal or slightly lower to her husband's. If a wife is not able to fulfill this condition she does not participate in work.

Census data provide unreliable data on women which keeps women at a disadvantage. Often women interviewers are not used in the data collection process. The information on the work done by women is obtained from male members of the household. This leads to under-reporting of the activity of women particularly those who are engaged in part-time work. Cultural norms and social practices which determine
the expectations and behavior of women require data collection methods and tabulation procedures to be sensitive to the changing roles of women in society. As Shah and Shah point out that there is need for specially designed methodological studies aimed at assessing the quantum of female participation in various activities in order to undertake effective human resource planning, development and utilization.

Although in recent years, women have done well in administrative jobs, but in administration, the difficulties are of a somewhat different nature. At the utmost, men are prepared to accept a woman as an equal, but men still do not relish working under a woman boss. The traditional conception of women's limitations and their proper place prompted the Chief Minister Mr. Charan Singh (who later became Prime Minister for 18 months) to state that women officers should not be entrusted with administrative responsibility. He thought women were unfit for administrative jobs. The press said that the Chief Minister was of the opinion that women were too "delicate" to be entrusted with executive jobs. He also refused to meet a delegation of women officers wanting to convey their protest. Earlier he had abolished the 'Mahila Yojna' (women's association). According to press reports, he exhorted women to go back to their kitchen, and look after their children. This may be an extreme case but it indicates a certain way of thinking.

Middle class women who are employed in professional jobs stand at an important intersection of the class structure and the gender structure, since they are employed at the top of the occupational hierarchy where many of the material benefits of class are located for middle class men. But where professional and middle class men reap the benefits of both gender and class privilege, working class women suffer the dis-
advantages of both class and gender oppression, professional women experience the advantages of class and the penalties of gender. By looking at this group of women, it is possible to disentangle some of the connections between class and gender and to examine the nature of these connections.

Paradoxically, the lead in this approach has been taken not by socialist feminist writers, who have concentrated almost exclusively on working class women, but by radical feminists seeking to demonstrate that gender operates independently of class and that gender generally takes priority over class divisions.

The constitutional guarantee of "equality of opportunity" and nondiscrimination "on grounds of sex" in employment and office under the state and the specific directive "to promote with special care the educational and economic interests of the weaker sections of the people" had a direct bearing on the employment aspirations of middle class women. The emphasis on women's equality that emerged during the last phase of the freedom movement had influenced the attitudes of educated middle class women in a most marked manner. The immediate expression of this in the period after independence could be found in three spheres: (1) in higher education, (2) in the employment market, particularly for jobs requiring higher education, and (3) in politics.

Women began to enter the competition for services under the government from the very beginning, and the success of a few in these most prestigious occupations, which had been the monopoly of men, inspired others and helped them to shake off their traditional inhibitions and lack of confidence. They set in motion the attitudinal change of society, particularly of men in government agencies.
The expansion of women's education that characterized the post-independence period both contributed to and gained momentum from this process. Until this time, women's education had been seen more as a measure for promoting social justice and family welfare. The possibility of employment under government provided the stimulus that women's education had lacked so far, particularly in the field of higher education.

Apart from education, the most important force behind this increasing entry of a new class of women in the field of wage employment is sometimes described as "emancipation born out of necessity." With a few exceptions in the higher strata of society, the majority of women take to work for economic reasons.

Discrimination and Biases Faced by Women in India

"Conflicting reports exist about the presence or absence of discrimination against women in the higher administrative services. Most of the Indian Administrative Services women agree that they faced an initial test of proving themselves in district
administration where the villagers are not used to women in positions of authority”

“For those women who belong to the educated, progressive, and well-to-do urban families equality is close to reality. They have almost the same privileges and opportunities as men from birth onwards” [1]. But these women constitute a miniscule minority in a large country like India, and even for them equality is not absolute; discrimination and a double standard of morality still continue [1].

Increasing visibility of these very few women in big cities lends credibility to the myth of progress and advancement of women in India. Even though they are small in number. “They exert such a powerful ideological influence that for years their achievement came to obscure the fact that even within middle class, despite education, women remain powerless and vulnerable” [1].

In an interview conducted by Everett, most female administrators felt that they were treated fairly once their colleagues, superiors and subordinates got used to working with a woman. However, a senior woman in the Foreign services asserted, “A woman has to be tough as nails and really ten times better than a man to survive in this type of job — it is a matter of a basic inability to accept a woman as an equal professionally” [1].

Some women administrators were of the opinion that women were rewarded for mediocre accomplishments that would not be considered significant if done by men. An unmarried IAS officer felt that unmarried women faced discrimination: “They were victims of gossip, scandal and sexual innuendos by male superiors” [1].

Since almost all their colleagues, superiors, and subordinates are men female
administrators are isolated. They have few contacts with women of similar rank in their work environment. This isolation might prevent them from interpreting the behavior of other administrators toward them as discriminatory.

Most of the female administrators interviewed wanted more in career responsibilities but they also wanted to make sure they would be able to maintain the balance between family and career.

Not only in the area of administration, discrimination against women is found in every area of work. It has blocked the country’s economic growth for too long. Many working women believe that they have to work harder to receive the same recognition and reward as men.

Men resent working under women and women are afraid to point out the mistakes of men working with them. Women in factories and industries are given jobs of unskilled nature because they are not trained as skilled labor. A few who receive training are not selected on the ground that they lack experience.

Teaching is one of the most acceptable jobs for women, especially since it is possible, as in medicine to work only with women, in girls’ schools and colleges. Their acceptability is significant since both professions represent an extension of women’s domestic nurturing roles. But there is job segregation even within subject areas. Few women teach Science, Maths, or Engineering at university level. Most female professors teach “female” subjects of Arts, Social Science and Humanities; women doctors are concentrated in areas where there is no competition with men, such as gynecology, obstetrics and pediatrics. Other women are predominantly in desk jobs, rather than “field jobs” in government and management.
Joana Liddle and Rama Joshi, in their book "Daughters of Independence," talked to many educated professional women and investigated discrimination faced by female doctors, lawyers, civil servants, manager, professors and women holding high level positions. A woman university professor stated that she faced lot of discrimination, especially in the U.S. She was refused a job in many places because she was a woman. In her opinion jobs for women are treated as a part time thing. In her words, "Equal promotion? No! The unwritten rule is: no women – but only the most candid people will admit. In my present job I was prevented for years from being reader for that specific reason. It takes you all your life to prove you're good enough and then you're too old."

Another female reported facing discrimination and biases in faculty of law. She did not face problems when she joined as teaching faculty. She was offered this job because of her excellent performance at law school as a student. Later she took leave from her job to do a Ph.D. from Cambridge. On her return to India she faced problems from the Dean of law faculty and had to struggle for a long time to get the position of Reader; and then the chair (Professorship). Even though her male colleagues accepted her as equal her superiors did not. After offering her the position of Deanship, the Vice Chancellor declared in the newspaper that she was offered this position only on temporary basis. This procedure was never followed for men, so she refused to accept the position. She felt that there is a lot discrimination in general in India. Even if women work harder, they can not get the same recognition. According to her although in the educational institutions it is difficult to pin down whether the discrimination is on the grounds of sex, it is much more obvious in factories and
public fields.

After talking to women employed in management position Liddle and Joshi discovered that in the area of management there is most widespread discrimination against women than in any other field. Many companies, both Indian and foreign multinational, reject women regardless of suitability, experience or qualifications. Some companies are quite explicit about their "no women" policy, including American and British multinationals who would not be so overt at home. Many of the foreign banks do not accept women above a certain level. IBM specifically excludes women from Engineering. In terms of women's employment, the multinationals are far from being progressive representatives of western individualism.

Job segregation occurs in specific areas such as Operations Research and Engineering. In engineering, some companies will not take women for jobs in marketing, supposedly because travelling is involved. Even in jobs dealing with personnel, women are not trusted in labor relations and dealing with workers. Women's jobs are regarded as temporary and part-time. It is assumed they will marry and leave. Women emerging from college with postgraduate degrees in management (MBAs) find themselves at a disadvantage in getting jobs. A bright young woman was offered a job by a leading business house, following their policy of offering places to the top two students out of 120 on the MBA. When they realized that one of these students was a woman, they withdrew their offer and changed the company policy.

Companies impose conditions that women can't fulfill (such as mobility). Bosses refuse to send women employees to outside training courses or abroad, and sometimes pay them less than men. Promotion is generally agreed to be equal up to the lower
levels of management, in those companies which take women at all, but at higher levels women are considered unsuitable.

A female junior manager interviewed by Liddle and Joshi experienced problems even in getting job interviews even with an MBA degree with much higher ranks than her male classmates who got the interviews because of sex. She was of the opinion that a woman has to prove herself more capable.

A personnel manager in the public sector felt that “discrimination is so much part of the system, it’s difficult to do anything about it.” She further states that promotion at lower levels is equal, but not in higher levels. “I have to prove myself all the time.”

There is high degree of job segregation in the field of medicine. The majority of females who choose medicine as their career specialize in gynecology and some in pediatrics but there are very few women surgeons, neurologists or cardiologists.

One student felt discrimination all through her student life at the post graduate level in medicine. She was the only girl with 13 boys in her class and one of the examiners didn’t want to pass her at the first sitting just because she was a girl.

A female radiologist was refused a job of medical officer because she was a woman. A male Registrar with much less experience than her was promoted to a specialist position while she did not receive any promotion with her better qualifications and experience.

Another female holding position of Dean stated that bosses have reservations about females. They are always asking themselves the question that would not come to their mind if a man was considered for the same position. 
The job division and their respective status in the administrative hierarchy indicates that they cluster into few types of jobs at the lower rungs of administrative ladder. Only a small percentage of women are found in high positions based on their social and economic background. Added to this, it was found that women receive lower salaries despite obtaining similar qualifications.

A young export executive working for a small private company interviewed by Liddle and Joshi says, "there's discrimination in every job — Promotion is not equal. When they take you on, you are on a scale, and you have to be exceptional to get higher. In the export business, men can move around India and abroad and prove themselves, where as women are office-bound and can't do so. We must sit at a desk and turn out 'wonders' before we're acknowledged as much as a boy who is out proving himself."

The restriction on physical mobility adversely affects women's ability to do their work in most of the professions. They can not travel as easily, they can not go out at night, they can not stay away from home, go on a tour, take fieldwork trips, or work on-site in the way that men take for granted. This aspect also hinders their progress and gives their male counterparts an added advantage and a reason to hold back promotions and equal pay for females in the work force. Thus it is easy to see who will fall behind in the competition.

Four reasons were put forward by the women in an attempt to find some meaning to their restricted mobility. They are (1) Lack of facilities, (2) the call of household duties, (3) lack of safety and (4) notion of morality. The problem of women's restricted mobility is expressed at its most concrete level in the lack of facilities for women in
public places away from home. Arrangements such as sanitary facilities, a safe place to sleep are made for male visitors but rarely for women.

Working women also see domestic responsibilities as a problem. Not only that, their mobility is actively constrained by the men because they would not allow it.

"The idea of what women should do and should not do is the embodiment of what actually happens in practice but in more abstract form, simply reflecting the reality in the form of a moral prescription. But it has an additional component, for its very abstractness enables a neat trick to be played, in the form of a complete reversal of reality: although it is men who threaten women with sexual assault if they stray too far from home, it is the women who are accused of sexual immorality, not the men. The idea of immorality justifies the sexual control by men over women, and the idea is used by men to persuade the women that it is their own fault that they are subjected to this harassment" [\].

Government Policy and Actions Supporting the Status of Indian Women

"Woman is the companion of man gifted with equal mental capacities. She has the right to participate in the minutest details of the activities of man, and she has the same right of freedom and liberty as he. She is entitled to a supreme place in her own sphere of activity as man is in his.

Man and woman are equal in status, but are not identical. They are a peerless pair being complementary to one another; each helps the other, so that without the one the existence of the other can not be conceived; and therefore, it follows as a necessary corollary from these facts that anything that will impair the status of
either of them will involve the equal ruin of both”.

Late President Dr. Radhakrishna in his inaugural speech at the Gandhi Peace Foundation in 1978, said, “Mahatma Gandhi had been an ardent advocate of women’s rights and assigned to them a especial role in India’s freedom struggle based essentially on non-violent resistance and satyagraha. They had responded magnificently to his call, and came forth, from all walks of life, rich and poor, young and old, urban and rural, university graduates and illiterate women. They were responsible for the moral and economic regeneration of India – by picketing liquor shops, by championing the cause of khadi and carrying the message of the spinning wheel, and participating in the boycott of foreign clothes with a zeal that might put many men to shame.

Yet, now, three decades after the Mahatma’s death, where do women stand? Largely, the lot of most Indian women remains as bleak as it ever was; the women of Gandhi’s India seem to be a part of history with no role to play in the present. The word “liberation” has assumed many dubious connotations following the extreme which the women’s movement in the west has exhibited and, therefore, cautions many to tread warily when women’s issues are talked of.

The Constitution of free India brought Indian women at par with men. Article 326 gave them the right to vote. Articles 14, 15, and 16 ensure equality of opportunity and equality before the law and sex. The state was required by constitution to secure in all citizens – men and women – equality, the right of education and to adequate means of livelihood. Women acquired full political rights including the right to vote, to contest elections and to enter administrative services. Thus the Indian constitution gives equality to Indian women through its fundamental rights
and Directive Principles of State Policy.

The Factories Act 1948, the Plantation Act 1951 and the Mines Act 1952 legislated for equal pay for equal work, maternity benefits, creches and nursing time, and maximum hours for women in workplaces where fifty or more women are employed. It is illegal to employ women for night work, on underground or dangerous work, to restrict the employment and to terminate employment on the grounds of pregnancy.

These reforms benefited middle class women the most, for the majority of poor, illiterate women were unaware of their legal rights and had no resources to fight for them through the courts. Even for middle class women, the improvements were limited, but there is no doubt that economic opportunities for professional women increased after independence. Not only were public services expanded at this time, with women's needs particularly in view, but legal and customary barriers to women's employment were removed, particularly in government services.

In 1958 the Government of India appointed a committee under the chairmanship of Mrs. Durgabai Deshmukh to enquire into low enrollments, reasons for wastage,
the scope for vocationalization, and to suggest special measures necessary to improve women’s education at primary and secondary levels. A year later the Committee presented its report with a number of recommendations. The education of women was to be regarded as a major program for years to come, and a bold and determined effort was made for closing the existing gap between the education of men and women in as short a time as possible. An important outcome of the recommendations of this committee was the setting up of the National Council for Women’s Education to advise the government on issues relating to Women’s Education and to suggest policies, programs, targets and priorities for the expansion and improvement of the education of girls. The National Council has been able to focus the attention of the government and the public on the problems pertaining to the education of girls and women.

The Committee also felt that “to a greater or lesser degree some of the subjects taught to boys are not related to the aptitudes, interests and needs of girls.” A need was expressed for the introduction of more courses in the Fine Arts, Nursing, Home Science, Dietetics, etc. The views on the differentiation of curricula reflect in enrollment figures: In 1955-1956, there were 31 girls to a hundred boys in vocational courses in schools. Their number decreased rapidly at the college level where there were only 7 girls to a hundred boys studying for a professional degree.

In 1962 a committee headed by Ms. Hansa Mehta was appointed by the National Council for Women’s Education on the Differentiation of Curricula for boys and girls to investigate the basis of such streaming. The Committee recommended that no differentiation should be made in the curricula for boys and girls at the primary level.
In its report, the Committee stated that while girls did have responsibilities at home, these could not be made the criteria for dividing subjects on the basis of sex and to regard some of them as "masculine" and others as "feminine". The Committee also felt that such stereotypes did more harm than good, and pointed out that the "so-called psychological differences between the two sexes arise not out of sex but out of social conditioning". "Thus the blame for discrimination in access was laid on the home and wider society. Recognizing that social transformation could not be achieved overnight, the Committee agreed that for some time to come certain psychological differences as well as those in roles and responsibilities would have to be accepted as matters of fact. The long-term aim, however, should be to fight against such prejudices".

In 1964 the Kothari Commission spoke of the need for equalization of educational opportunities. The Commission accepted women's right to work outside the home, adding that there was no case for a differentiation of curricula. "In other words, the modern Indian woman had to be equipped to carry the dual burden of rearing the right type of citizens as well as for bringing home a pay-packet. Education had no role to play in disturbing the sexual division of labor within the home, based on the convenient argument that women are better at certain tasks than men.".

In 1971, the Government of India appointed a committee to examine the legislative, administrative and constitutional provisions which have a bearing on the status of women and to make recommendations in the background of existing rights and facilities, to enable women to play their full and legitimate role in the building of the nation. The committee made its report available to the government at the
commencement of the International Year of women.

The report which is based on evidence and data collected from the census, National Sample Survey, reports of committees and commissions and special studies relating to women, provides some alarming findings. Modernization and urbanization had tended to drive women backwards, to put matters in reverse gear; there was no homogeneity in the concept of "the Indian women" since the geography, size and diversity of conditions in the country gave a variety to the status of its women. The existence of several religions in the country with a different set of personal laws for each, touching a whole range of aspects affecting women, like marriage, divorce, succession, etc., cannot be overlooked. All these factors highlight extraordinary challenges that India faces in the task of improving the status of women.

The Report of the all-women committee in 1974 on the Status of Women in India felt that there was need for evaluation of attitudes towards women and their education: reiterating the Hansa Mehta Committee's position, the CSWI felt: "Inequality of the sexes is built in the minds of men and women through a socialization process which continues to be extremely powerful." Rather than acting as agents of equality, schools "reflect and strengthen the traditional prejudices through curricular differentiation and the classification of subjects on the basis of sex and the unwritten code enforced on their pupils are in fact agents of the existing social system based on gender and class inequalities." The Committee proposed a common curriculum upto Grade X for both boys and girls and felt that at the senior secondary level, girls should have free access to vocational and professional courses in keeping with local needs. University education needed to be more relevant for all.
Keeping in view the recommendation and findings of various committees, the government constituted a nodal point in the Department of Social Welfare in March 1975 to deal with matters concerning women. Since then, there has been a constant search for responses, from policy makers and agents of change, urging them to take into account the impact of their plans and programs on women, and to recognize the “woman dimension” in them so that we can consciously shape the future for women.

In its latest document on the state of education in the country, the ministry of Education points out that girls’ enrollment is far lower than what it should be and recommends the need for “special remedial programs for girls and children of poor and illiterate families.” The document also notes: “Though the performance of girls compares favorably with that of boys, relatively fewer girls seek admission to professional courses other than those pertaining to medicine, teacher-training and nursing.” However, the document ignores some of the drawbacks in the system, and lays the blame for low enrollment rates exclusively on family bias. It states: “To a great extent this disparity is more the result of economic and occupational problems and cultural biases of society than the accessibility of education facilities.”

The government is concentrating its efforts on providing or improving education and employment opportunities, health and welfare amenities, and reducing the disparities in these spheres, for women. Change has to be directed toward requirements rather than towards an abstract concept of equality. There is no intention to belittle the role of women needs and rights of women in whatever fields they choose to work, whether it be as home-maker or in the world of work. To achieve this goal they need
help in developing a positive self-image by equipping them with education, skills and training, and influence society to accept their freedom of choice.

The government prepared a Blueprint of Action Points. This document was endorsed by the National Committee at its valedictory meeting held in February 1976. It outlines the priorities of action required in the fields of education, employment, health, social welfare and legislation.

The Blueprint of Action Points summarizes the substance of the National Plan of Action for women prepared at the central level with the aid of the Institute of applied manpower research. Its ideas have been discussed by representatives of many departments of the government and have been assembled with the help of the recommendation of the report of the Committee on the Status of Women in India, the resolution on women passed by both houses of parliament in 1975 and the World Plan of Action adopted at the United Nations and Women’s Conference held in Mexico in 1975. The National Plan of Action is intended to provide guidelines for state governments to draw up priorities in the light of conditions existing in their states. The State Governments were required to work out a State Plan with the help of district, block and village so that the plans are realistic. The State Plan for women will then be included into the Five Year Plan. The size and diversities of India is so great and the social fabric so delicate that the solutions, programs and prescriptions need to be custom-made and need to be preceded by micro-studies for each area. What can be done at the national level is only to provide a very broad lead and direction.

At the level of village administration now law requires that there must be at least one female panch (one of the five village councilors elected by the villagers to take
care of day to day administration and needs of their village) in every gram panchayat (village council). However, most of the rural women are ignorant of the developments in their villages. For every meeting they give their thumb impressions without even attending it.

In the areas of legal measures, the government, besides enacting laws, has taken two or three measures in the direction of providing justice to women.

Government of India has established a special cell to help women in distress. The responsibility of this cell is with the office of the Commissioner of Police. Similarly the Central Government for the first time has appointed a woman Minister with Cabinet rank to deal with women's issues.

Another useful step taken by the government is a National Plan of Legal Literacy. Women must be aware of their legal status and also procedures to be followed in times of trouble. Some of the universities have taken up the responsibility of providing legal literacy to the community.

Ms. Gandhi said that "the government can never be too far ahead of its people. It can not force the people to accept something they are not ready for." She said, "The modern Indian woman has a special responsibility to be a catalyst of change synthesizing the best of the old and best of the new." Laws have been enacted to make the lives of Indian women less miserable, but a very small number have benefited because a very large number of women are uneducated and unaware of their rights.
Salaries and Fringe Benefits

In 1976, the government of India promulgated an Equal Remuneration Act (ERA) No. 25 of 1976. According to this law it became the "duty of the employer to pay equal remuneration to men and women workers for same work or work of similar nature." The act also provides for no discrimination on the grounds of sex at the time of recruiting men and women workers. It covers any employment carried on by or under the authority of the central government or railway administration, or in relation to a banking company, mine, oil field or major part of any corporation established by or under the government auspices.

This significant piece of legislation was intended to meet the demand for equality in employment voiced by working women. Although the constitution of India guarantees equality before law and equality of opportunity in employment and guarantees that there will be no discrimination based on sex, it must be noted that this guarantee is available against the state only.

Among the women interviewed by Jonna Liddle and Rama Joshi the doctors, lecturers and government servants all received equal pay with men, but 12% of the managers received lower pay than their male equivalents. There are three categories of pay scales in India, which apply to both professional as well as nonprofessional colleges. The monthly scales laid down by the University Grant Commission are:
1. Professor  Rs. 4500 X 150-5700 X 200-7300

2. Reader    Rs. 3700 X 125-4700 X 150-5300
          Rs. 4500 X 150-5700

3. Lecturer  Rs. 2200 X 75-2800 X 100-4000
          Rs. 3000 X 100-3500 X 125-5000
          Rs. 3700 X 125-4700 X 150-5300

In addition to the basic salary, teachers are entitled to dearness allowance, and city compensatory allowance. In the case of major cities, leave travel concession, medical aid, subsidized housing or house rent allowance at the rate of 15% of basic salary, and a few other benefits. Female educators who are married do not get subsidized housing or housing allowance and children allowance if their husbands get the same from their place of work. In case of unmarried female educators, fathers usually get housing allowance. If a female lives separately then she gets these allowances.

The above mentioned scales were recommended by a committee appointed by the University Grant Commission. There was some dispute regarding their implementation. Most of the controversies have been settled but it will be a long while before the scales are implemented all over the country. Each state is competent to take a decision in respect to how the institutions are financed and controlled by it. Thus the matter has to be sorted out between States and Center. The rate of subsidy is uniform: 80% of the additional expenditure for a period for five years. However, all states do not adopt the same approach as the center does.

A contributory provident fund is available to almost all teachers. Less than one-quarter of them have the option of getting a pension instead of the contributory
provident fund. No other old-age insurance or help is available except that 5-10 percent of teachers also get a gratuity when they retire. This is a relatively recent development.

Until 1973 teachers in affiliated colleges usually had a lower scale of pay than those appointed to university departments. Now the same scale of pay applies in both universities and colleges, though in the case of those serving in government colleges pay scales are somewhat different but in no way inferior to those of their colleagues.

**Location of Female Administrators in the United States of America**

Although the number of women senior administrators increased 90% during the period 1975-1983, the actual number is still quite small – an average of 1.1 per campus in 1983, compared to 0.6 in 1975. In 1979, less than 200 out of more than 2,500 accredited institutions had women as chief executive officers. Frances and Mensel indicate that in 1978 women held approximately 20% of the top 81 administrative positions in 1222 institutions surveyed. The top five positions (i.e., chief executive, academic, planning, business and student life officers) were dominated by males in both the public and private sectors. This pattern had not changed much since 1975. While there were slight increases in the percentages of women holding the positions of chief academic, planning and business officers, there was virtually no change in the percentage of women chief executive and a decrease in the percentage holding the position of chief student life officer.

According to the Digest of Education Statistics, although a woman may advance to the presidency in higher education administration, it is more
likely that she will be found in middle and low levels of academic administration.

According to Shavlik and Touchton, only 10% of higher education institutions are headed by women, only two or three of the higher education associations have women chief executive officers, few disciplinary associations or refereed journals have women heads, and only a few outstanding women college presidents were named by their colleagues as "effective presidents" in a recent study on the college presidency. Significantly, none of the studies on higher education of the past couple of years was conducted by women.

Women constituted a distinct minority of presidents (6%), chief business officers (5%), chief development officer (8%), deans (18%) and full time faculty (25%). Salaries and ranks held by women were found to consistently lag behind those for men.

There have been very few changes in employment pattern of women over 50 of the top level administrative positions between 1975 and 1978. The greatest shift within white co-educational institutions was in external affairs positions. In private women's colleges, the largest increase occurred among chief executive officers. Overall, more changes occurred in the private than in the public sector.

In 1978, the only administrative positions with more than 50% women in white co-educational institutions were those of deans of nursing, deans of home economics, directors of affirmative action and (in private institutions only) director of student health services. Furthermore, half of all women administrators in white co-educational institutions were concentrated in ten positions: nursing dean, library director, book store manager, registrar, health service director, financial aid director,
affirmative action director, student counseling director, information office director, and chief public relations officer. As Gappa and Uehling have noted, these positions are primarily in the area of student services rather than academic administration — in line with white stereotypes of feminine interest in the helping role. For example in the field of engineering the number of female engineering graduates peaked at 17% in 1986 and now is dropping. Only 6% of practicing engineers and 2% of engineering faculty members are women. The main reason engineering does not attract women is its negative image. People, in general do not consider engineers as problem solvers, who can make life better for everyone but as damagers of environment, academic nerds, or people who do "dirty work."

In a study done by Moore and Sagaria, men held proportionally more line positions than women, while the near reverse was true for staff positions. Men tended to be slightly older than women in both line and staff positions, and had married more frequently (over 90%) than women (50%). In a study of line positions, it was discovered that 15% more men had earned the doctorate (a total of 74.2%). In staff positions, 7.5% more men had earned the doctorate (a total of 69.9%) than women (a total of 61.9%). Almost all women respondents holding current administrative positions had a doctorate degree. With respect to rank, twice as many women as men had no academic rank at all. Both men and women staff personnel found most opportunities in research and doctorate granting institutions, but overall, men dominate the staff positions in all except the liberal arts college. For men and women line personnel, men have more opportunity in comprehensive colleges and universities and women fare better in the liberal arts colleges and universities.
In 1973, the Carnegie Commission conducted a comprehensive study on women in education profession. Based on the data the report concluded that (1) women were underutilized in education, (2) the higher the position, the greater underutilization of women; that is why the proportions of women in the upper levels is significantly smaller and (3) situational or external variables in educational institutions, rather than variables within women themselves, produced a "system effect" or "ecosystem" which, if unchanged would perpetuate the underutilization of women in education.

Salary in the United States of America

There is research evidence that academic women are paid less than their male colleagues. Tuckman and Tuckman analyzed a large national data sample for the academic year 1972-1973 and found that data implied gender bias. On an average, male full professors received $1410 per year more than females. At each professorial rank, women consistently earned less than men. More recently average faculty salaries by rank and sex for the 1982-83 year were published for more than 2700 institutions of higher education. Women's salaries again trailed men's salaries varying on an average by as much as 62% in some places and 93% in others.

Sex difference in administrators' salary parallel the pattern found for faculty salaries. In 1978, women typically earned less than white men in practically all administrative positions and at all types of institutions. In white co-educational educational institutions, women were paid between 68% and 80% of the salary earned by white men holding the same job.
In 1975 women were paid somewhat more at private women's colleges but still earned only 78% to 83% of what white men were paid. This picture had not changed much since 1975. According to Frances and Mensel, in 1978, 11% of white women were in the top salary quartile as compared to 19% of white men, whereas 40% of white women, and only 31% of white men were in the lowest salary quartile. These figures had slightly improved since 1975. Differences in salary of women and men were not related to number of years on the job.

Women feel successful when promoted to administrative positions. However, they are disappointed to discover that male administrators earn an average of $5,000 per year more than their female counterparts.

The reasoning that women need not earn as much as men because they have husbands to support them is no more valid. According to..., two-thirds (66%) of all women in the labor force in March 1982 were single (25%), widowed (5%), divorced (11%), or separated (4%), or had husbands whose earnings in 1981 were less than $15,000 (21%). Nearly all working women were working for compelling economic reasons. The largest group of people living below the poverty level are older women.

One explanation advanced for this discrepancy is that women in post secondary institutions are concentrated in the low paying faculty positions or in low-level administrative posts such as director of admissions, director of financial aid, and head librarian. For example, in 1979 fewer than 200 of over 2500 accredited institutions were headed by women. Another explanation for the disparity of salaries is that more men are involved in research and administration than women.
tracks command more prestige and financial reward than faculty teaching positions. As a result, female faculty salaries tend to be lower than male salaries.

Part-time teaching is one area of employment where the percentage of women often surpasses the 19% average of women employed at all levels. Positions in this area do not have the status or fringe benefits of full-time positions and are also rarely tenured. When men hold such positions, it is nearly always because they have another full-time job. They are invited by universities because of their expertise in some relevant area to teach one or two courses. Women in part-time positions, however, often do not have full-time jobs, although some have other part-time jobs. Women who wish to teach full-time are often unable to do so because of family responsibilities, or because their husbands are also employed by a university which maintains a so-called anti-nepotism regulation.

**Nature of Sex Discrimination**

Women aspiring to higher administrative positions indicate deep interest in managerial careers and look forward to additional responsibilities that such administrative work involves. However, at all levels they discover that their applications are kept aside and that less qualified men are employed for the positions. Most frequently, women complain that they are not taken seriously even when they have had experience in an administrative capacity, meet the full requirements of the job, and have excellent credentials as academicians.

The first barrier for women seeking positions of department heads occurs in their own departments. Most often a qualified male is appointed on the pretext that "a
man's speciality is required for the new head of the department."

Unadvertised positions and missing job descriptions also make it difficult for qualified women to be considered for administrative positions coveted by men. Lack of fair selection procedures and male dominated screening committees, if they exist at all, work to exclude women in favor of preferred male candidates or aspirants already in the system seeking higher-level positions.

In applying for the position of dean on a campus in which she was an associate dean, one woman who lost out to a man with lesser qualifications found the entire committee making fun of her ambitions when she admitted during her interview that she might eventually be interested in becoming a vice president of a university.

It is often stated: "I would be happy to appoint a qualified woman, but there aren't any around." The papers presented by Drs. Nordin, Cummings, and Randley at a conference on "Women and the Management of Post-Secondary Education" in Dec. of 1973 in New York, all respond to this mythical statement. First of these
authors dispute the claim that there are few qualified women. Secondly, they point out ways for persons trained primarily as academicians to receive some special training and experience in management. Virginia Nordin describes in detail the summer institute for administrative advancement held at university of Michigan campus from May 21 to June 29 of 1973. Dr. Cummings discusses the services available through the cooperative college registry [ ].

Lyon discussed sex discrimination in student admissions. According to her, married women are locked out of graduate programs first because of family responsibility and then because of age and insensitivity of university policy. She cited a church sponsored men's college as an example, that excludes lay women from Ph.D. work because of uncertainty that women can benefit from such degrees. She recommended that higher education must strive to reinforce women's aspirations by eliminating institutional barriers that discourage them.

Another obstacle for women seeking administrative positions is that they do not meet the requirement of "several years" experience in administration. The requirement is overlooked for males if they have other coveted qualities. Several women noted that they did not bother to apply for any further positions after discovering in interviews that the "several years" noted in the advertisement was a time period arbitrarily decided and intended to exclude them. Most women applying for top-level administrative positions suspected that the entire appointment and promotion process in administration was pre-determined regardless of whether or not the woman was outside or inside the system [ ].

Women as a group, more than men as a group, encounter the nepotism rule,
problems with granting of sick/pregnancy leave and sabbaticals, fewer considerations for "choice" assignments or tasks, and less support and encouragement for their obtaining valuable career development training or other job-related experience [...]. Many of these practices provide men with the opportunity to broaden their preparation and experience, thus facilitating their eventual movement to higher, more generalized, management positions.

In her article on the shortage of women engineers, Eleanor Baum in 1989[16] points out that there are very few women in engineering faculty and they often do not have power to intervene to create a more positive climate for female students. They are generally excluded from the departmental decision-making process and the informal social interactions their colleagues engage in. At the same time, they bear most of the responsibility for advising female students. They are given excessive committee assignments, which are likely to jeopardize their promotion and tenure because they interfere with research.

Marilyn Neidig [17] maintains that because of "self doubt", "self depreciation" and a built-in bias about the inherent inferiority of women relative to men in decision-making and leadership, many women see themselves as unable to perform effectively or to be happy in such roles. And as long as women feel inferior to the job or think they won't be happy, they will not seek it [...].

In any case, society does not view a woman as a decision maker and have it accepted. Every administrator deals with conflict situations. However, a woman, once set upon a pedestal by society, is not expected to deal with such sordid matters. Every administrator wishes to advance professionally but a woman is expected by
society to play a supportive role, to aid her husband, family or boss, but never to
desire her own professional development.

Epstein's research with women in top occupations indicated that even the
most talented and productive women have not been fully accepted into the elite
of their professions. She reported that dropping out or being pressured out was a
noticeable pattern where discrimination has existed.

According to Holmstrom, some women had been demoted in terms of the
prestige of the formal positions they held, even though their professional skills and
reputations were on the rise.

Stephanie Marshall, in her study about women leaders in elementary and
secondary education points out that perhaps the most far reaching barrier is role
prejudice – a preconceived preference for a specific behavior on the part of the visibly
identifiable group. Society views superintendency as a predominately masculine job.
Therefore, women are not supposed to aspire to superintendency. Same views hold
ture in education and in part account for women’s reluctance to achieve leadership
positions and society’s struggle to accept them. Therefore, it is not surprising that
persons seeking leaders often cling to stereotypes of leaders, demanding that women
behave like their male counterparts rather than providing fresh perspectives with their
new and varied talents.

Several administrators feel that "things" had been better before the emphasis on
women's rights. The impact of the women's movement has in some instances created
an invisible barrier rather than a bridge. These women administrators believe that
they are now being viewed as a threat instead of being respected for their abilities
Rose reported that "vestiges of sexism remain on all levels of the academic ladder, and the higher the rung, the fewer the women," Bartel declared it as "the filtering process" with respect to sex and race.

Subtle discrimination

Most people are comfortable dealing with women in terms of personal and social relationships to them as mothers, sisters, wives, girlfriends, and hostesses, but are uncomfortable when the social expectations do not follow the traditional patterns. There are "rules" telling people how to treat women in social situations. There are, however, few rules as to how to treat them in professional settings where they no longer fit many of the social stereotypes. Consequently, social etiquette designed primarily to flatter and protect women is often inappropriately interjected into the professional setting.

Men and women with identical marital and parental status are viewed in very different ways. For women, the presumption is sometimes made that family responsibility will automatically interfere with professional activities. For men the presumption is often that marriage and children will make for greater stability and professional success. For example, if a woman leaves a meeting early or requests a change in meeting time, it may be assumed that she must take care of a household matter and therefore her request is often resented. When a man does the same, the more common assumption is that he has some important matter to attend to and that his request is justified. If a man is widowed or divorced and takes on family responsibility, he
is more often praised for doing so, and there may be far more accommodation to his needs than to women with the same responsibilities.

Expecting women to behave in typically “feminine” ways subjects women to the double-bind situation. A woman administrator who speaks softly may be seen as weak and lacking in leadership ability. If she is directive and assertive, she may be seen as “the iron maiden” and/or “humorless”, “unfeminine” or simply “strange”

When a man and woman enter a room, often those present assume that the man is the higher status person. Women administrators accompanied by a male are often mistaken for his junior colleague. Thus, because of a women’s recent entry into the leadership positions, women in administration may face doubt and disbelief about their professional status and authority – even when a woman is the chief executive officer.

Colleagues working closely need to have trust and good rapport, which are crucial to administrative advancement beyond a certain level. As in other professions, administrators in the academy are chosen by those already in power because it is felt that they can be counted upon to uphold and advance the values of the institution. In addition, individuals are more comfortable and find it easier to communicate with those most like themselves, whose behavior is more predictable than those of one’s own social group and one’s own sex – and who can be counted on when situation are complex. In her discussion of the tendency to limit managerial jobs to those who are socially homogeneous, Rosabeth Kanter in 1986 commented that “social certainty, at least, (can) compensate for some other sources of uncertainty in the tasks
of management."

Women who accept the challenge of high administrative positions face numerous risks. First, they are even fewer in number than women faculty and thus may be even more isolated. On the average, colleges and universities throughout the United States employ only 1.1 senior women (dean and above) per institution (Office of Women in Higher Education 1975-1983). Many women administrators feel isolated because they are. They may perceive this isolation both in relation to men, who appear surrounded by male colleagues in similar or higher positions, and to women, whom they see in other contexts. Women administrators may have less access than women faculty to communication and feedback about the work she is doing, and to informal channels of information about institution-wide issues, problems, challenges, directions, and politics. Isolation may lead also to greater feelings of loneliness, to the persistent awareness of not "fitting in," to always being on guard, and to the fatigue that comes from always having to be one's own support system. These issues are especially relevant for minority women, who often suffer extreme isolation because of their small numbers in higher education.

A phenomenon called role of "tokens" is usually found when an institution is put under pressure to share its privileges and power with a group that has been excluded before. Women administrators who are new in their positions are more apt to be treated as tokens. They are allowed to operate in the institution and are often highly visible. While they have credential for their positions, they are still considered outsiders. They are frequently placed into positions where they serve as gate-keepers for their own group (restricting their entry into the profession) and retaining the
system they have entered. According to Sandler, they are sometimes treated as representatives of their class and at other times as exceptional performers, both of which work to their disadvantage. A woman administrator is rarely regarded simply as an individual; she is a woman. It is often hard for women to earn recognition and distinction they deserve. If she succeeds, she is often seen as exceptional, that is, nonrepresentative of her class. However, if she fails to measure up, many observers will regard this as proof that "a woman couldn't do the job" thus is treated as representative of her class. Consequently one is likely to hear "I hired a woman once, and it was a mistake - next time I'll get a man for the job" than "I hired a man once and he really did not work out well - next time I'll hire a woman." (1988).

For minority women, the issue of visibility is especially important because visibility is heightened by race as well as by sex.

The social and "lifestyle" dimensions of an administrator's responsibilities play an increasingly important part as one advances the organizational hierarchy. Moreover careers in educational institutions have been so demanding that marital partner has often been deemed necessary to entertain, make contacts, and give other needed intellectual and emotional support. Entertaining colleagues and members of various constituent groups is often a key part of the job. Many people are most comfortable with the traditional model in higher education - the husband-wife team, with the husband as administrator and the wife as a support person. In effect, the family has acted as subcontract for work in academic systems. Because husband and wife have been expected to put their energies into the development of his career, the wife is often seen as an extension of the husband, expecting to have her life shaped...
by the demands of his employment. Further, institutional administrators, board
members, and others may be concerned about how a single woman will manage, how
they will feel with a woman in that particular position, and/or how to treat a male
spouse deciding who shall lead.

Whenever hiring takes place in the faculty or the administration, there is an
underlying assumption of hetero-sexuality. The only other socially acceptable option is
invisibility of sexual preference. Although this is a problem for both men and women,
the issue is more difficult for women because of the customary focus on women’s
personal and family life, and also because the majority of women administrators (in
contrast to their male peers) are unmarried, thus leaving them more open to questions
about sexual orientation.
Too often, with regard to acceptance into graduate studies and also to acceptance into various academic positions, particularly administrative posts, it is assumed that if a woman is not married, she will get married. If she is married, she will probably relocate with her mobile husband or have a child and resign. If she returns to the profession after her husband is well launched in his career and the children are in school, it is pointed out to her disadvantage that she did not start earlier.

Hoferek points out that a declining number of women leave work for marriage and children. Even among those who leave, a majority return when their children are in school. In 1977 an average 16-year-old woman could expect to spend 27.7 years of her life in the work force, compared with 38.5 years for men. Studies on labor turnover indicated that net differences for men and women are generally small. Since assumptions and rationalizations are probably not maliciously intended, they are operative and they need to be identified, surfaced and examined.

Reason Why Women Occupy Limited Top Level Administrative Positions

Researchers argue that discriminatory practices against women are related to the unconscious influence of factors in the American work culture, structure of organizations, and particular career patterns assumed by women rather than to the conscious
expression of discriminatory attitudes and preferences.

"The female role" or "women's place"

"Women more than any other group have been subjugated by ancient and universal edicts declaring their eternal inferiority." They have been trained to accept a narrow, restricting, societal definition of their role that tells them what they can and cannot do and be. Women are constantly told that certain activities are for women and others are for men. Sexism cuts both ways for men are afflicted similarly, but sex role stereotyping is more restrictive for women, particularly in the work world, where occupational choice is much narrower for women than for men.

A woman is expected to find fulfillment in being a wife, mother, daughter, or sister and act always to bolster and buttress others, not be successful in her own right. She is constantly told by the society that "a woman's place is in the home." Because of these deep rooted myths, women accept their inferior status as genuine. Hoferek refutes such views by pointing out that homemaking in itself is no longer a full time job for most people. Labor saving devices have lightened or eliminated much work around the house. 62% of all women 18 to 64 years of age were workers in 1981, compared to 91% of men. Labor force participation was highest among women ages 20 to 24 (70%). About 47 million women were in the labor force in 1971.

Professional women's socialization to work usually begins with parental expectations. Parents instill the idea in their daughter's mind that although work and career
are important, they will always be secondary to marriage, husband and children. These beliefs and expectations are reinforced by those of peers, school counselors, church and the media, which results in lower career aspirations among females, while their lack of self confidence is greater than men. Consequently, men have higher job expectations, and thus are more likely to achieve superior job performance.

In the past, society demanded that women who worked outside the home remain in the “appropriate” service careers of nursing, secretarial work, teaching and home economics because these jobs would be useful for future home makers and mothers. Even today teenagers are afraid to be different from their peers and often confuse choosing a non-traditional career with being “strange” or “weird”. Moreover, for women to work outside the home for pay usually had three purposes: (1) to provide temporary activity until marriage (2) to supplement husband’s income, or (3) to substitute husband’s income when he was sick/disabled/had died or deserted her. Therefore, traditionally for women work was secondary to their own traditional roles as wives and mothers and to their husband’s work. For men, work has always been central to their lives. They are expected to work and work should provide them with purpose and self definition as well as concrete rewards in income and status. Because men are expected to work and are socialized to be “bread winners” they face fewer internal and external conflicts and barriers to work than women. Their roles of husbands, father and “bread winner” are harmonious mutually reinforcing and consistent. Work for professional women with husband and family is inconsistent with the traditional personal roles.

These stereotypes have led both men and women to believe that women should
play subordinate roles in society. Specifically, they operate "to limit the participation of women in higher education and subsequently the professions." According to Bird et al., differences in family structure and function may be as important as personal, educational, and career characteristics in explaining gender-based dissimilarities. Marital status and family structure are important factors in predicting major difference between women and men colleagues. "In choosing to marry or not, in selecting a spouse, and in deciding whether to have children, females face a much different set of options and costs than do males.

In a discussion of the characteristics of professional women, Coser and Rokoff suggested that conflicts between family responsibilities and employment roles are influenced by an underlying value system according to which professional women "are expected to be committed to their work "just like a man" at the same time that they are normatively required to give priority to their family." This issue is of importance to women administrators who come to realize that they can not have the same expectations of role performance from husband that husbands can expect from wives. This realization is particularly significant for women who are married to fellow professionals with demanding careers as their own. Women have been found to be even more condemning than men of women who break out of traditional roles. Ramey, as cited in an article by...
Pogrebin believes that the most difficult change of all is changing women's attitudes about themselves, and Howe recognizes that women accept and believe in the legitimacy of their inferior status. It is often suggested that women have internalized the inferiority of their sex to such an extent that they are the worst offenders in subverting their own feeling of worthiness. "They sell themselves short and expect little of other women." The tendency is to feel that if a woman is successful, she must be some kind of genius to have made it in spite of her dreadful handicap of being female. The fact that female high school graduates have higher achievement records and lower vocational goals than males may suggest an acceptance by women of their inferior status and its legitimacy. Women have lower self-esteem and they have felt unfeminine if they achieved an administrative position.

There is a tendency among women to experience a phenomenon called minority group self-hatred. In self-hatred, a minority individual sees members of his/her own group through the eyes of the dominant group. Mentally, the minority person identifies with the outlook, prejudices and practices of the dominant group. The minority person may feel ashamed about the characteristics of her/his own groups; however, she/he hates a part of herself/himself. Minority group self-hatred can work to keep low-level women down or to demote high-level women. High-level women who actively keep other women down have been called "Queen Bees" in the popular literature because, in a beehive, there is only one queen bee - where any challengers are killed. Self-hatred may also cause women to undermine high-level women. As a result often a woman who has achieved outstanding success openly discourages other
women from following her example. She sometimes adopts the attitudes of her male colleagues toward women who would aspire for leadership positions. Her words of discouragement and her lack of supportive attitude confuse and present a kind of “double bind” situation to women who look to her for encouragement.

Crawford states that women already in leadership position sometimes distance themselves emotionally from other women, which has led to the phrase, the “frigid sisterhood.” This reflects the intention of women leaders not to be personally involved. They may be even conducting research studies on women’s issues, but they would avoid interactions, and an emotional involvement with their study. They believe in “to succeed, separate yourself from other women – Act like a man but fight sexism.”

According to Tibbetts, examples set by pioneer educational leaders such as Caroline Hazard (1900), a former president of Wellesley College, and Kate Mueller (1954), then an Associate Professor at Indiana University, illustrate how women have contributed to the inferior status and subjugation of their sex (many however feel that Mueller was a strong supporter of women). Hazard’s views of the “ideal woman” were that an “ideal woman” must learn to obey and that blind obedience was better than no obedience. Mueller believed that grooming, manners, personal attractiveness and ethical standards were much more important for a woman than for a man, and that it was “more becoming” for a girl to be dependent while a man should be independent. In her opinion young women were motivated to attend college to find eligible men. While boys were expected to be sincerely interested in an education women came to college to snare spouses. Such attitudes and double standards main-
tained by articulate and influential women have had a great deal to do with keeping women "in place".

The so-called freedom to choose is illusory, and it cannot be invoked to justify the society which controls the motivation to choose. Society rewards the male who is masculine and take the superior position, but it regards the woman who tries to be successful and independent in a man's world as "deviant".

According to McMillin among women the likelihood of accepting leadership in a school or educational organization decreased as the level of responsibility increased. Most women do not aspire beyond teaching elementary schools.

Advancement frequently indicated a need to return to school for additional training. Older women may find this a frightening experience. Financial support is usually not given to women, and career counseling is either negative or not given at all.

Women choose to be inferior because (a) they have been taught to believe they are inferior to men, (b) they are afraid to appear "unfeminine" or (c) they are not fully aware of their status and do not realize that they are being treated as second-class citizens. Instead of holding women entirely responsible for their position in society, it is more accurate to view them as "victims" of a culture so steeped in patriarchy that women and men cannot help internalizing the notion of female inferiority and transmitting it to the next generation. These attitudes of sexism and male supremacy that are accepted by members of both sexes are the "real enemy." In time, these sexist beliefs harden into "emotional habits" which account for the widespread belief that women are innately inferior.

One way of learning modes of appropriate behavior is to observe models. If
women observe other women in leadership positions such as department heads and chairs, high level researchers, writers of books and articles, participants in policy-making bodies, and serving on advisory boards then women are likely to regard themselves as capable of performing similar tasks. Therefore, the perception each woman develops of herself as a professional in the discipline is related to what she sees other women doing in the field. If women are not present in high level positions, their absence would suggest that those positions are for men only.

Role models or identification models of behavior are essential for the development of a self-concept, yet there are too few models of women in leadership positions for females to look up to and emulate. Social system directly restricts the visibility of qualified women and denies women the possibility of gaining support and confidence from other women. For example, a lack of positive role models makes it hard for many young women to consider engineering as a career. When guidance counselors do suggest engineering as a career for women they do so only to their best and brightest female students. While a male student with average interest and background in mathematics are encouraged by counselors and parents to become engineers, the modern woman and warns her to suppress her natural assertive strivings.

Hoferek points out that most men who complain about women supervisors have never worked for a woman. In a survey in which 41% of the reporting firms indicated that they hired women executives, none rated their performance as unsat-
isfactory, 50% rated them adequate, 42% rated them the same as their predecessors, and 8% rated them better than their predecessors.

The question of personality characteristics which clearly distinguish men and women who support or oppose the women's liberation movement was researched by [ ... ]. Their findings suggest that men who oppose women's liberation are more concerned with social status, with being proper and respectable. Such men tend to be influenced and controlled by the opinions of others and have lower confidence in their ability to guide their own destiny. They tend to be rigid, conforming, inflexible, and submissive to authority in dealing with others. Men who supported the women's liberation movement were found to be more independent, capable, thoughtful, self determined individuals who considered the world from a logical point of view. They appear secure in their own capabilities, therefore are less dependent upon the opinions of others, they do not fear social change as readily.

Women who strive for independence and intellectual achievement may be thought of or may think themselves as acting in opposition to the convention of sex-appropriate behaviors. The qualities associated with top level administration—leadership, intellectual achievement, competence, independence and competition—are also associated with masculinity and are thus inconsistent with the popular concept of femininity. Therefore women are not typically employed in administrative positions. Their femininity is perceived to be in conflict with the masculinity required in executive roles.

Fear of social rejection seems to be a factor in the perpetuation of behavior that is consistent with traditional sex-role stereotyping. Some women may feel threat-
ened by what they perceive as the negative consequences of success and fear that if they are successful, they will for having broken away from the feminine stereotypes, be labeled as “deviant” and “asexual” and rejected for being “unfeminine”. These perceived consequences quite logically act as barriers to women’s occupational aspirations.

The female administrator suffers from damned-if-she-does and damned-if-she-doesn’t predicament. If she is assertive and strong minded, she is considered to be aggressive and tough; if jovial and casual, she is too permissive. If she chooses to be a “good” administrator, she is hard-headed, high powered, over-bearing and excessively ambitious, but if she is “feminine,” she is not fulfilling managerial duties and responsibilities.

Even if a woman achieves an administrative position, she will not receive the same sort of support from her male colleagues as men receive from one another.

Females are aware that they might not be accepted as superiors by their male subordinate workers and therefore consider it worthless to change their life style. The realization that they face potential rejection by subordinates and peers may serve to divert their interest from positions where they would have to “go it alone” among men who may not fully back them.

Iowa Law Review of 1970 stated that when the demand for higher education exceeds institutional capacity to educate, exclusion of females becomes a selection tool. The same could be true in employment that is sex becomes the critical factor as it does in a tight academic market.

Men have a strong power base supported by the “old boy network”. Even with
outstanding qualifications, administrative candidates must have visibility and contacts with the “old boy network” to be included in the chosen few. While women’s networks have been formed, less than one-half of one per cent of the superintendents being females, opportunities are extremely limited for the employment of female administrators.

The informal social interactions that occur among men over lunch, on the golf course, or behind closed doors also provide situations in which major decisions and major support structures are developed. The fact that women have very little access to these informal networks limits their use of available career facilitators, and therefore, limits their organizational flexibility and career mobility.

Dorothy Smith described women’s exclusion from formal/informal networks as a “circle effect”. It is a process whereby men attend to and treat as significant only what men say. Women have been mostly excluded from the work of producing the forms of thought and the images and symbols in which thought is expressed and ordered.

Lack of encouragement is another reason for few women aspiring for the administrative post. Typically, women are encouraged to fail, not only by the generally sexist societal view about successful women in traditionally male dominated jobs, but by more specific, on-the-job factors such as lack of support for professional growth. Through overt sex discrimination, such as formal organizational rules and regulations calling for differential treatment based solely on sex, through their traditions organizations have communicated to women that their advancement potential is limited.
Whatever the case, imagined or real, these norms are viewed as "psychological barriers" to women climbing the organizational ladder.

The effects of education

As in the case of India discussed earlier, in the United States too, the essence of educational institutions is being scrutinized to determine the core of discrimination. What is really taught is being questioned. For example, with the exception of women's studies, most college curricula focus on men and men's issues. Books written by males are the basic texts for female students. Researchers are exploring how the "hidden curriculum" in schools affects the self-perception of female students development. The presence or absence of role models, focus on women's issues, and teacher expectations for high performance by females are only some of the variables in educational settings that shape a vision of what is possible.

According to Cromin, cited by Thurston, the curriculum of most school systems, both consciously and unconsciously prepares males for leadership roles and females for subordinate, helping roles. Schools transmit the prevailing culture.

In their study, David and Myra state that at all levels and in all subjects male students were involved in more interactions than female students. It did not matter whether the teacher was black or white, female or male, the pattern remained the same. Male students received more attention from teachers and are given more time to talk in the classrooms. Educators are generally unaware of the presence or the impact of this bias. David and Myra also state that the data collected in the post secondary and secondary schools continue in higher education. Male students receive
significantly more attention, and sex bias persists. Boys are being trained to be assertive while girls are being trained to be passive – spectators relegated to the sidelines of classroom discussion.

National measures of academic progress support the thesis that girls and boys are experiencing different educational environment. In early grades, girls' scores are equal to or better than boys' scores. However, by the end of high school, boys are scoring higher.

Teacher expectations of her students play a significant role in student performance. Those researchers who believe that self fulfilling phenomenon may affect student performance assert that students read teachers' unspoken expectations for high or low performance and behave according to those expectations.

The most valuable resource in a classroom is the teacher's attention. If the teacher is giving more of that valuable resource to one group, it should not be surprising that that group shows greater educational gains. In fourth-, sixth-, and eighth-grade classes, 25% of the students did not interact with the teacher at all. In college classes this number rose to half. The research also shows that college women experience a decline in self-esteem as they progress through college.

Therefore, the most obvious evidence of sexism in the schools is the percentage of women actually assuming leading roles in education. Women do not generally occupy positions of authority in equal proportion to their number in the profession.
"The staffing patterns in schools serve to prepare students to accept the inequities that society practices." In addition, those who believe that schools are perpetuating stereotypes especially harmful to girls cite teacher attitudes, dress codes, assignment of chores, counseling practices, text book content, segregation of classes, athletic programs and emphasis on the importance of boys' sports and the teacher - principal relationship as areas where damaging sex-role stereotyping is evident.

However Lupine placed educational practices and material where they belong in acknowledging that the educational system is but a reflection of community values - of "a society that is sexist." The educational setup is only one part of the sexist environment in which we all marinated.

The structure of organizations

The structure of organizations, especially the educational institutions, have also been viewed as deterrents to aspiring women leaders. A function of its size, its type (research university - doctorate granting, comprehensive four year college, comprehensive community college), and the kind of control under which it operates (public, private, religious, affiliation, for profit), all in part influence the job opportunities of female administrators. Further, the history of an institution, its governance structure, fiscal health, reputation, exemplars (heroes, heroines), its mission, values, beliefs, customs, rituals, and traditions, etc., operate to affect the institution climate in addition to the personalities and age of those who manage and lead the institution from its students to faculty and administrators.

The tradition of organizational homogeneity limits women's career success. Or-
ganizational homogeneity is based on the belief that heterogeneity in managers and executives is harmful to an organization's stability and survival. Such a notion may account for many of the discriminatory organizational practices. Moreover because of this belief structure, a woman's visibility in an organization is more often related to her sex rather than her achievements. Most often women are given differential assignments and lower salaries than men even though they possess equal qualifications and perform equal duties. Sometimes women are given managerial positions because of external pressures from advocate groups or laws such as affirmative action, than to individual competence.

Institutions that prefer to use internal selection in hiring for instance, a director of library may consider it a minor administrative position for maintaining the status quo. Thus the position is seen as appropriate for an insider who is non threatening and easy to find. Moreover an internal candidate is known with proven administrative competence or potential. Thus internal succession has been recognized as a common means for women to obtain a directorship, although internal successors to library directorships are paid an average of almost 6% less than outside appointees. Although women direct 45% of the small college libraries in the Mid West, they tend to be found at the smallest of the small colleges. Women tend to hold fewer graduate degrees, are older and less mobile than men. Nationally, the median salary paid a male director is 33% higher than that of a female director.

The organization structure of an institution is also affected by what administrators know about equity issues. Marshall's study indicated that reviews of books about women in education and equity issues in articles on equity in general are absent.
in four professional journals from 1972 through mid 1983. She concluded that adminis-
trative knowledge is shallow and scant and the valuing of sex equity as a priority is low.

It appears that the institutional climate for affirmative action for women and minorities involves passive rather than active behaviors.

Even people trained in fair and equal employment practices discriminate sub-
consciously on the basis of sex [Kovach found gender differences in simulation attempts to deal with and retain employees, using subjects who were college stu-
dents. Male employees were viewed as more worthy of retaining than females, even with identical qualifications. When problems arose, more severe disciplinary actions were taken against females than males.

The willingness to risk losing an employee through more severe disciplinary ac-
tions and the lesser effort made to retain females provide insight into the value sub-
jects placed on employees of different sexes. The response patterns indicated that even when all other qualifications and traits are equal males are viewed as more valued employees. More effort is put into retaining them and severe discipline is less likely to be used for fear of losing them.

The loss of administrative positions by women was studied by Williams and Miller. When departments of inter-collegiate athletics have merged men’s and women’s programs, male athletic directors are promoted to top management positions while women are relegated to assistant roles. Their review of the literature on sex roles in a male dominated field ends with the need to study the entire organizational culture if women are not simply to be forced into male management styles.
Reasons for Expanding the Role of Women in University Administration

A question often asked is “Why should a college or university have any interest in increasing the number of women in academic administration?” A call for equity is not very well received in a time of declining enrollments, decreasing budgets, and demands from the federal government for even more numerous and expensive reporting and compliance procedures.

Although there are many intelligent men in the universities’ decision-making bodies, they need some fresh ideas. Men have been brought up in a remarkably uniform kind of culture. They are terrific producers when the climate is exactly right, but vulnerable when times are tough or changing. On the other hand, from an early age females acquire diplomatic skills and learn to redefine issues so that they may be viewed from a fresh perspective and find ways of resolving disputes. Women develop special skills in interpersonal relationships and learn to achieve their ends by less direct means. They are sensitive to the emotional state of those whom they interact.

Women tend to simplify things. Most institutions have a complex bureaucratic system. If women are given power and authority they can suggest short cuts in situations. Women are also more willing to ask “dumb questions” and sometimes find out that in a group of men no one else knew the answer either. His ego makes it hard for him to admit ignorance.

Even though females are often accused of being emotional it is men who quickly lose their temper, yell, rage, storm out of the room and the next day everything is normal again. They seemingly do not lose respect or authority. Females, to a greater
extent, keep cool and do not lose their composure.

"Women will find it helpful to recognize in themselves their “traditional” abilities and talents, which recently have been rediscovered and celebrated as the “new directions or discoveries” of management gurus." The concept of quality circles (work groups that promote effectiveness through interaction and cooperation), wherein each person has a unique contribution to the whole, where diversity is recognized as a way to increase productivity, intuition regarded as a trusted tool for leader/managers, and caring and nurturance as essential characteristics of successful leaders will bring out women's “traditional” abilities and talents in new light.

Women who have achieved positions of leadership and responsibility in Academia are extraordinarily conscious of equality and excellence and impatient with sloppiness and mediocrity. They tend to be more uncompromising and intolerant of decisions made by default. A study shows that in making difficult decisions, such as those on budget or in personnel situations, women were likely to be more humane in rendering these decisions.

Females are new in the fields that were dominated by men for centuries and work harder to prove their capability. They try to avoid hearing remarks such as “she was incapable or too weak or frail for the job.”

A woman in a visible position has enormous effect on the aspirations of the young women in that institution and on others too. In this connection, women's colleges are valuable. They have a greater number of women in administrative positions and in faculty, so women students in particular see these role models. In women's colleges, faculty consists of 45% of women. At co-educational institutions the average is around
20% and at men's colleges, 8% or less. This means that at women's colleges females have a substantial number of women role models.

**Efforts of Organizations to Dismantle Discrimination**

There are a number of forces that have influenced women's leadership in higher education in recent times. Federal legislations, leadership training programs, and public and private philanthropy are some of the major forces exerting their effort in this direction.

In 1965, President Johnson issued an executive order for affirmative action in order to combat discrimination by federal contractors against minorities. Since 1968, all educational institutions with federal contracts over $410,000 have been prohibited from discriminating in employment on the basis of sex. In addition, since 1973, all educational institutions public and private receiving $50,000 or more in federal contracts or grant funds, have been required by the federal government to have affirmative action plans, including numerical goals and timetables. Institutions in violation are subject to delay of pending government contracts and/or ineligibility for future contracts. Guidelines provided by the government in October, 1972 emphasize that affirmative action goes beyond non-discrimination in that it involves "deliberate and positive efforts on the part of institutions to rectify existing inequities that result from past discrimination."

Since 1972 a number of laws, regulations and executive orders have been promulgated to improve the status of equality for women in education. Executive order 11246 (as amended by Executive Order 11375), mandated the use of affirmative ac-
tion; Title VII of the Civil Rights Act of 1964 (as amended) prohibited discrimination in employment on the basis of sex, race, color, or national origin. The Age Discrimination in Employment Act of 1967 (as amended), prohibited discrimination on the basis of age, the Equal Pay Act of 1963 (as amended), prohibiting differential pay rates for women and men doing the same work, and the Pregnancy Discrimination Act of 1978, amending Title VII and asserting that pregnant women shall be treated the same for all employment-related purposes, as other persons not so affected but similar in their ability or inability to work.

Affirmative action and other laws and acts were introduced to broaden educational and employment opportunities for members of minority population. They were initiated, according to Tidball [59], because of the women's movement and because of public recognition that the essence of higher education lies in its ability to endorse the artistic and professional growth of individual and raise the intellectual and cultural level of society.

Some federal agencies either directly or indirectly, helped in fostering better climate for women and in encouraging women leaders. The Fund for the Improvement of Post Secondary Education (FIPSE), the Women's Educational Equity Act Program (WEEAP), the National Institute of Education (NIE), the National Endowment for the Humanities (NEH) and the National Institute of Mental Health (NIMH) are some of the important contributors. These agencies not only funded projects and programs that provided data on the status of women but also provided model training programs, helped to develop networks designed to promote women's advancement and created materials to help people recognize and deal with discrimination and stereotyping.
Private foundations also displayed significant sensitivity in promoting women leaders in higher education. Carnegie Corporation of New York and Ford foundation have supported many leadership programs established for women in early 1970s'.

All these efforts by federal government and private foundations did not however change the prevailing perceptions about women seeking leadership position fundamentally. The perception that women needed to be extremely qualified, have proven records of accomplishment, and be over prepared for their positions have caused many women to doubt themselves and limit their leadership aspirations [1].

Silvestri and Kane [2] and Dingerson, Rodman and Wade [3] found that although the average cost was the same for hiring a minority member or a white male, the latter maintained a stronghold on nationally advertised administrative vacancies. In their study Silvestri and Kane [2] also concluded that women's rights groups, black opportunity organizations, and government agencies have been unable to prevent campus tokenism and governmental ineptitude.

The Carnegie Commission [4] estimates that to reach an average percentage of women in the professoriate of 30% by 1990, it would be necessary to maintain a constant proportion of women among new hires to 50%, and not even the most ambitious affirmative action plan can promise this. Further, according to government enforcement of affirmative action programs cannot be counted on for immediate action since the federal government, with all its attempts to enforce opportunities, is too swamped to be effective.
Summary

From olden times, when man was struggling to survive against all odds, woman being the weaker sex was not in a position to independently fight and overcome difficulties because that required physical strength. In order to survive, women took protection from men. Therefore, her activities were restricted to managing the house, rearing children and always remaining under the command of a man. This created psychological barriers in the minds of both males and females in total development of women. Now the world is civilized. Physical strength is not the only requirement for solving problems and women can do almost all types of jobs.

According to Dietrich, as a result of years of stereotyping via the socialization process, both males and females fail to recognize indirect discrimination against women because it is built into the social system. Little wonder that it is difficult for anybody - male or female to perceive any woman capable of leading others. Society must create awareness among both males and females and fight discrimination.

The Economic Policy Council in 1985 recognized the existence of widespread wage discrimination and support movement towards greater parity between salaries for men and women began. The panel endorsed the use of collective bargaining, stricter enforcement of existing legislation and job evaluations as potentially effective solutions. The strengthened women’s earnings will enable many female headed households to pull themselves out of poverty and to become self-sustaining.

It is necessary to provide more support for women in training programs. Most faculties in department of educational administration are male dominated. They therefore identify with and recommend a disproportionate number of men for financial
support. Women do not have adequate role models that would provide even an emotional support base on most administrative faculties.

Institutions must make a commitment to identify, encourage and develop both men and women who have potential for making a difference. The commission on Strengthening Presidential Leadership in 1984 declares that leaders must be sensitive to the feelings, thoughts and cultures of new and continually emerging constituencies. A major priority of every institution should be developing new talent at every level.

Male faculties must provide opportunities for women in training to gain visibility. National Administrative organizations can also provide this visibility by electing women to offices at the decision-making level. They can provide meetings bringing female administrators together so they can become acquainted with their female colleagues.

Women need to know how to be effective in “the system” and to recognize that there is no single approach that works. Women must recognize their own styles, trust what they do, recognize that there can be other effective ways and give other women room to develop their own styles. They must learn to respect diversity among themselves as well as the diversity among male administrators. To appreciate diversity it does not mean accepting second class, a decrease in excellence, or change for the sake of change; rather it holds potential for discovery, richness, innovation and enlightenment. Shift in values has always brought dramatic changes, similarly diversity would bring new vigor to educational institutions.

Women executive need to form groups where they can discuss issues and concerns
common to them. These networks would help women judge whether their concerns are gender related or can be attributed to the normal conduct of the job and help them assess their performance accurately.

Today's issues of equal employment may well be tomorrow's issues of equal rights to survival - survival as individuals, families and corporations. Society can no longer afford the ease of self-definition obtained from measuring and maintaining the differences between persons. The struggle must be to find the strength of all common humanity, and working from that strength to move forward and to attack those issues which threaten each person's rights to a just, decent and rewarding work life.

When Freud raised his arms to the heavens and said, "Oh God! what does a woman want?" there should have been a female reply: "The same things a man wants. An opportunity to be anything I have the potential to be; the right to learn and develop through my failures, the right to be recognized for my success, and the right to love and be loved."
CHAPTER 3. METHODOLOGY

This chapter contains a summary of the procedures utilized for this study. The procedures have been divided into the following sections:

1. Resources utilized to locate pertinent literature related to female administrators in higher education institutions in India and the United States of America.

2. Definition of the population and selection of the sample.

3. Instrument development.

4. Data collection.

5. Independent and dependent variables.

6. Data analysis.

This study was designed to investigate the discrimination variables which distinguish female department chairs, heads, directors and deans in colleges and universities within higher education institutions in India and the United States of America.

Resources Utilized to Locate Literature Related to this Study

A number of sources were utilized in reviewing the relevant literature. The information was gathered through computer searches including Bibliographic Re-
trieval System (BRS) information technologies. The computer searches yielded more than 1000 articles and research papers dealing with American female administrators in higher education. No comparable material could be located for their counterparts in India. The search was narrowed to include only topics related to "barriers/discrimination/female administrators/higher education." Some 264 titles were reviewed for this study.

The computer searches also revealed two research papers that recommended latest books, studies and recent research (published and unpublished) on the subject. From this list approximately 25 recommended books and studies were also reviewed.

In India computer search facilities are not available. Most of the books, studies and research papers on women in India were located by the researcher doing a personal search in the Department of Sociology of the Jawaharlal Nehru University, New Delhi. A study conducted on discrimination faced by female scientists was uncovered in S.N.D.T. University (Women's Research Center), Bombay. Unfortunately no books or studies on female administrators in Indian higher education could be located. A number of books were found devoted to female administrators employed in Indian industry and government. These were reviewed to draw potential inferences.

Identification of the Target Population

The first consideration was to limit the population to colleges and universities that employed female administrators holding the positions of chairs, heads, directors and deans for both India and the United States. Consideration was limited to only those Indian colleges which included some graduate level programs in their institution.
to make them somewhat more comparable with higher education institutions in the United States of America. A random selection of female administrators was made from the target higher education institutions in India as well as the United States of America. The Universities Handbook of 1989 published by the Association of Indian Universities, provided the list of incumbent department executive officers and deans of higher education in India. World of Learning published in 1989 was used to verify the identification of the female administrators in India. However, some differences in the names of administrators was encountered when the two sources were reviewed. To minimize the conflict, it was decided to select a larger sample from India. Peterson's Graduate Directory published in 1986 was used to locate Department executive officers and deans in higher education institutions in the United States. Permission to use the names listed in the above mentioned books was obtained from the respective publishing authorities and submitted to the Human Subject Committee at Iowa State University. A total of 1109 department executive officers and 237 deans were found from all the colleges and universities listed in the directory within United States. From 1109 DEOs and 237 CEOs, a sample of 146 and 54, respectively, was randomly selected with the aid of a computer. All higher education institutions were reviewed to locate female administrators in India. The search for female administrators in India revealed 54 females holding Dean's positions and 1068 females holding positions of DEOs (department executive officers).

All of the 54 Indian female administrators holding the position of Dean were included in the sample, while 246 Indian female administrators holding the position of department executive officers were randomly selected with the aid of a computer.
The sample size of 300 from India and 200 from the United States of America was selected to minimize Type II error while maintaining Type I error level at the .05 level.

Instrument Development

Part of the instrument used to gather the data for this study was modeled after the "Mail and Telephone Survey: Total Design Method" by Dillman which was included in Appendix A. It is a self administered questionnaire consisting of two sections. The first section of the questionnaire was developed to provide basic data designed to obtain demographic information about the respondents and includes the position held by the respondents, the department of college or university the respondents were working in, marital status of the respondents, the highest degree obtained, total number of years spent in the profession and number of years spent in their present position, the age of respondents, their annual salary (for U.S in dollars and for India in Rs.) and the type of organization the respondents worked in. These basic data served as the primary independent variables of this study. The second section of the questionnaire requested each respondent to express their perception about the current status of affairs or conditions in their respective country (i.e., do they think this was really happening/not happening generally ...) as listed in the statements. Perceptions were solicited in ten areas of discrimination faced by women administrators in India and the United States within higher education institutions which were identified from the review of the literature. These ten areas and their location of the items in each are presented in Table 3.1.
The questionnaire consisted of nine items in part one and 87 items in part two.

Table 3.1: No. and location of statements related to each area of discrimination

<table>
<thead>
<tr>
<th>Areas of Discrimination</th>
<th>Item no.</th>
<th>Total items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and fringe benefits</td>
<td>10 to 15</td>
<td>6</td>
</tr>
<tr>
<td>Cultural/social issues</td>
<td>16 to 31</td>
<td>16</td>
</tr>
<tr>
<td>Male attitudes</td>
<td>32 to 38</td>
<td>7</td>
</tr>
<tr>
<td>Status</td>
<td>39 to 47</td>
<td>9</td>
</tr>
<tr>
<td>Potential barriers to advancement</td>
<td>48 to 54</td>
<td>7</td>
</tr>
<tr>
<td>Promotion possibility</td>
<td>55 to 60</td>
<td>6</td>
</tr>
<tr>
<td>Nature of discrimination</td>
<td>61 to 80</td>
<td>20</td>
</tr>
<tr>
<td>Structure hierarchy of institution</td>
<td>81 to 83</td>
<td>3</td>
</tr>
<tr>
<td>Competence</td>
<td>84 to 92</td>
<td>9</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>93 to 95</td>
<td>3</td>
</tr>
</tbody>
</table>

The response made to the second part of the questionnaire was made of five scale responses: number 1 was identified as “strongly disagree”, number 2 as “disagree”, number 3 as “neutral/undecided”, number 4 as “agree” and number 5 as “strongly agree”. Item 96 was an open response mode and requested respondents to share their views on the issue. Five blank lines were provided for this purpose.

Two of the ten areas included in the questionnaire had a slight variation in the format of the questionnaire. Two statements in the questionnaire contained sub-statements which were relevant only if the respondents agreed or strongly agreed with previous statement. In case of disagreement or when the respondents felt that they were undecided about these statements they were requested to skip the next few related sub-statements and respond to the indicated statement number. This procedure was adopted for statements number 40 and for number 48. If the response to statement number 40 was “1” (strongly disagree), “2” (disagree) or “3”
(neutral/undecided, the respondents were requested to skip to statement number 45 because responses to statements nos. 41 thru 44 were relevant only if the respondents agreed "4" or strongly agreed "5" with statement number 40. Similarly if the response to statement number 48 was other than "4" (agree), or "5" (strong agree), the respondents were requested to skip statements 49 thru 54.

Prior to submitting the draft of the survey instrument to the graduate committee for review and approval, it was presented to three female administrators and two female graduate students from India at Iowa State University for their comments and feedback on content, format and readability.

The revised questionnaire was then presented to the Graduate Committee for their review and approval. After the questionnaire was approved by the members of the graduate committee, it was then submitted to the Human Subject Committee at Iowa State University for their approval and permission to use human subjects for the study. Once the approval from the Human Subject Committee was received the questionnaire was then photo reduced and developed into a three page 5 X 8.5" booklet.

**Data Collection**

The approved questionnaire booklets were mailed first class to 300 female administrators in India and 200 female administrators in United States randomly selected by computer. The questionnaire booklets and cover letter to India was sent to a particular point within the country and from there they were forwarded to the addresses's along with the cover letter signed by the major professor which contained a brief note
on the purposes and objectives of the study. The questionnaire booklets were mailed with self addressed return envelopes and prepaid postage. One stamp was affixed on the envelope and the second stamp for return postage was affixed at the back of the questionnaire booklets with return address for direct mailing by the respondent to the researcher. The respondents were requested to simply staple the questionnaire booklet on two sides and mail. These questionnaire booklets were collected at the point of distribution in India and then returned to the researcher in Ames. The questionnaire booklets in United States were mailed to the participants directly by the researcher. A numerical code was given to each booklet enabling the researcher to follow-up if the respondent did not return the completed instrument in two weeks. After a two week period of time, a follow up letter was sent to non-respondents. Two weeks after the follow up request, another copy of the instrument was sent to each non-respondent. This researcher visited India for a period of five weeks to improve the response rate since response by mail was not satisfactory.

After the questionnaire booklets were collected, the data were coded to facilitate data entry process in WYLBUR for statistical analysis. Those demographic statements which were open ended, were coded in the form of intervals to make the data more manageable.

Table 3.2 reveals the details about the number of questionnaire mailed and responses received from India and the United States of America.

For the purposes of identification code ‘1’ was given to India and code ‘2’ to United States of America.

Position of chair was coded as ‘1’, code ‘2’ was used for head of departments, code
Table 3.2: Numerical details of data collection

<table>
<thead>
<tr>
<th>Country</th>
<th>Ques. Mailed</th>
<th>Res. Rec.</th>
<th>Rep Dead/Ret/Left</th>
<th>% Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>300</td>
<td>206</td>
<td>15</td>
<td>72.2807</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>200</td>
<td>120</td>
<td>41</td>
<td>73.6196</td>
</tr>
</tbody>
</table>

1. Ques = No. of questionnaires mailed. 2. Res. Rec. = No of responses received back. 3. Rep. Dead/Ret/Left = No. reported to be dead/retired or left the institution.

'3' was used for directors and code '4' was used for deans. The positions of chairs, heads, and directors were collectively addressed as department executive officers for convenience at most places in the study.

In the questionnaire, respondents were requested to fill in the name of the department they belonged to as an open ended statement with a blank line. At the time of coding the data all departments were labeled under six categories and a code from '1' to '6' was used to define them. The six categories the departments were grouped into were as follows: (1) Sciences, (2) Arts and Humanities, (3) Home Economics, (4) Fine Arts and Design, (5) Management and Public Administration, and (6) Other.

The departments grouped under 'Sciences' were: Computer Science, Mathematics, Microbiology, Gynecology, Biochemistry, Chemistry, Botany, Physics, Zoology, and Medicine.

The departments included in Arts and Humanities were: History, Humanities and Behavior Sciences, Geography, Economics, Sociology, Political Science, Languages, Philosophy, and Anthropology.

The departments included in Home Economics were: Home Economics, Nursing, Education, and Psychology.

The department of Fine Arts and Design consisted of: Fine Arts, Interior Design,
Architecture, Theatre, and Music.

The department of Management and Public Administration consisted of: Management, Public Administration, Graduate Studies, Commerce and Business. Any other department not covered under these categories was included under the category ‘other’.

For coding marital status of the respondents ‘1’ was used for single females, code ‘2’ was used to identify married females ‘3’ for divorced and ‘4’ for widows.

Degrees obtained had code ‘1’ as master’s, ‘2’ as Ph.D. ‘3’ as Ed.D., ‘4’ as Post Doc, and ‘5’ as Others.

Total number of years spent in the profession, and number of years spent in the present position by female administrators were presented in the questionnaire as open ended statements with blank space provided for the responses. At the time of coding the data, number of years for both these variables were grouped into intervals and then entered into the computer. The interval use were: 1 to 3 years = ‘01’, 4 to 6 years = ‘02’, 7 to 9 years = ‘03’, 10 to 12 years = ‘04’, 13 to 15 years = ‘05’, 16 to 18 years = ‘06’, 19 to 21 years = ‘07’, 22 to 24 years = ‘10’, 25 to 27 years = ‘11’, 28 to 30 years = ‘12’, 31 to 33 years = ‘13’, 34 to 36 years = ‘14’, 37 to 39 = ‘15’, 40 to 42 years = ‘16’ and 43 to 45 years = ‘17’.

Code ‘1’ was given to the age of the female administrator belonging to age group of ‘less than 29’, ‘2’ was used for females between 30 to 35 years of age, ‘3’ was used for females between 36 to 40 years of age, ‘4’ was used for females between 41 to 45 years old, and ‘5’ to females between the age group of 46 to 50, and ‘6’ was used for females who were 50 years and over.
Since annual salaries for Indian female administrators and female administrators in the United States were two different currencies, i.e., in Rupees for India and in dollar for United States, two different coding sets were used and later value of Rupees in U.S. dollars were calculated and written in parentheses. Along with salary in Rupees, the current rate of exchange was used to calculate salaries of Indian female administrators, which was Rs. 16 for one American dollar. Codes '01' to '07' were used for salaries of administrators in the United States while codes '10' to '16' were used to identify salaries of females in India.

Types of institutions were categorized into 5 groups in the questionnaire and accordingly code '1' was used to identify all men’s colleges and universities, code '2' was given to all women’s colleges and universities, code '3' was used for small co-educational colleges and university and codes '4' and '5' used for medium and large co-educational colleges and universities.

The scale of 1 to 5 for salaries and fringe benefits was reverted to make it compatible with rest of the questionnaire.

Independent and Dependent Variables

This study attempted to compare (1) Discrimination (score means more than 3.5 on discrimination scale) faced by female administrators collectively (American and Indian). (2) Discrimination (score means more than 3.5 on discrimination scale) faced by American female administrators. (3) Discrimination (score means more than 3.5 on discrimination scale) faced by Indian female administrators. (4) Discrimination faced by female administrators (chair/head of departments/director vs

**Dependent variable**

The dependent variable used in this study was perceptions of female administrators regarding discrimination faced by them and their female colleagues as compared to their male counterparts within higher education institutions in India and the United States of America.

The dependent variables were measured by the response to part II, item 10 through 95 of the questionnaire which asks the respondents to circle one of the responses on a scale of 1 to 5. Response 1 = strongly disagree with the statement, 2 = disagree, 3 = neutral/undecided, 4 = agree and 5 = strongly agree with the statement regarding discrimination faced by female administrators.

**Independent variables**

The independent variables for the dependent variable in the study were (1) country of origin (India or U.S.A.), (2) level of administrative position held (chair, head, director, or dean).
Data Analysis

The first step in data analysis was to run a test to verify if the data entered correspond and agree with the coding scheme.

Once it was determined to be in accordance with the coding scheme, internal consistency reliability (Cronbach's Alpha), using SPSSX program in the computer, was computed for each of the ten areas of discrimination which is presented in Table 3.3.

Table 3.3: Internal consistency reliability

<table>
<thead>
<tr>
<th>Scale of Dis.</th>
<th>no. of cases</th>
<th>no. of items</th>
<th>alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries/fringe benefits</td>
<td>317.0</td>
<td>6</td>
<td>0.9074</td>
</tr>
<tr>
<td>Cultural/social issues</td>
<td>288.0</td>
<td>16</td>
<td>0.8634</td>
</tr>
<tr>
<td>Male attitude</td>
<td>315.0</td>
<td>7</td>
<td>0.8460</td>
</tr>
<tr>
<td>Status</td>
<td>215.0</td>
<td>9</td>
<td>0.7427</td>
</tr>
<tr>
<td>Potential barrier</td>
<td>232.0</td>
<td>7</td>
<td>0.6920</td>
</tr>
<tr>
<td>Promotion possibility</td>
<td>309.0</td>
<td>6</td>
<td>0.8570</td>
</tr>
<tr>
<td>Gender discrimination</td>
<td>273.0</td>
<td>20</td>
<td>0.9413</td>
</tr>
<tr>
<td>Structure of institution</td>
<td>319.0</td>
<td>3</td>
<td>0.7256</td>
</tr>
<tr>
<td>Competence</td>
<td>299.0</td>
<td>9</td>
<td>0.9240</td>
</tr>
<tr>
<td>Accomplishments</td>
<td>325.0</td>
<td>3</td>
<td>0.8769</td>
</tr>
</tbody>
</table>

A number of frequency distribution tables were created with the help of the computer on the items related to demographic information about the subjects. This was done to get a broad overall picture of the subjects.

Table 3.4 reveals the frequency distribution of female administrators by position in India and U.S.A.

Table 3.5 shows marital status of female administrators in India and the United States of America. Married females constitute the largest number in both countries.

Table 3.6 presents frequency distribution of degrees earned by female adminis-
Table 3.4: Frequency distribution of position in India and U.S.A.

<table>
<thead>
<tr>
<th>Position</th>
<th>INDIA</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>Chairperson</td>
<td>16</td>
<td>7.8</td>
</tr>
<tr>
<td>Dept. Head</td>
<td>152</td>
<td>73.8</td>
</tr>
<tr>
<td>Director</td>
<td>7</td>
<td>3.4</td>
</tr>
<tr>
<td>Dean</td>
<td>27</td>
<td>13.1</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3.5: Frequency distribution of marital status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>INDIA</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>Single</td>
<td>37</td>
<td>18.0</td>
</tr>
<tr>
<td>Married</td>
<td>143</td>
<td>69.4</td>
</tr>
<tr>
<td>Divorced</td>
<td>8</td>
<td>3.9</td>
</tr>
<tr>
<td>Widow</td>
<td>12</td>
<td>5.8</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Female administrators included in this study. Females with the Ph.D. degree form the largest group in both countries.

Table 3.7 indicates various age groups to which the sampled female administrators belong. The largest number of female administrators in India belong to the age group of 41 to 45 whereas the sample largest number of subjects sampled from United States belonged to the age group of 50 years and over.

Table 3.8 presents the total number of years spent in the profession by female administrators in India and the United States of America.

Table 3.9 shows number of years female administrators spent in their present position in India and the United States.
Table 3.6: Frequency distribution showing degrees earned

<table>
<thead>
<tr>
<th>Degree</th>
<th>INDIA</th>
<th></th>
<th>U.S.A.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Cum %</td>
<td>Freq.</td>
</tr>
<tr>
<td>Masters</td>
<td>47</td>
<td>22.8</td>
<td>24.2</td>
<td>4</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>100</td>
<td>48.5</td>
<td>75.8</td>
<td>84</td>
</tr>
<tr>
<td>Ed.D.</td>
<td>1</td>
<td>.5</td>
<td>76.3</td>
<td>23</td>
</tr>
<tr>
<td>Other</td>
<td>46</td>
<td>22.3</td>
<td>100.0</td>
<td>4</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>12</td>
<td>5.8</td>
<td>76.3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
<td></td>
<td>120</td>
</tr>
</tbody>
</table>

Table 3.7: Frequency distribution showing age of female administrators

<table>
<thead>
<tr>
<th>Age</th>
<th>INDIA</th>
<th></th>
<th>U.S.A.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Cum %</td>
<td>Freq.</td>
</tr>
<tr>
<td>Less than 29</td>
<td>8</td>
<td>3.9</td>
<td>3.9</td>
<td>11</td>
</tr>
<tr>
<td>30 to 35</td>
<td>17</td>
<td>8.3</td>
<td>12.3</td>
<td>16</td>
</tr>
<tr>
<td>36 to 40</td>
<td>29</td>
<td>14.1</td>
<td>26.5</td>
<td></td>
</tr>
<tr>
<td>41 to 45</td>
<td>42</td>
<td>20.4</td>
<td>47.1</td>
<td></td>
</tr>
<tr>
<td>46 to 50</td>
<td>37</td>
<td>18.0</td>
<td>65.2</td>
<td>22</td>
</tr>
<tr>
<td>50 and over</td>
<td>71</td>
<td>34.5</td>
<td>100.0</td>
<td>69</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>2</td>
<td>1.0</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
<td></td>
<td>120</td>
</tr>
</tbody>
</table>

Table 3.10 represents frequency distribution showing female administrators in various type of educational institutions in India and the United States. As the table indicates for both India and the United States of America the largest number of female administrators belong to small size co-educational institutions.
Table 3.8: Frequency distribution showing total years in the profession

<table>
<thead>
<tr>
<th>Total years in Prof.</th>
<th>INDIA</th>
<th></th>
<th>U.S.A.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Cum %</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>4 to 6 years</td>
<td>5</td>
<td>2.4</td>
<td>2.5</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>7 to 9 years</td>
<td>6</td>
<td>2.9</td>
<td>5.4</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>10 to 12 years</td>
<td>14</td>
<td>6.8</td>
<td>12.4</td>
<td>10</td>
<td>8.3</td>
</tr>
<tr>
<td>13 to 15 years</td>
<td>15</td>
<td>7.3</td>
<td>19.8</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td>16 to 18 years</td>
<td>16</td>
<td>7.8</td>
<td>27.7</td>
<td>14</td>
<td>11.7</td>
</tr>
<tr>
<td>19 to 21 years</td>
<td>22</td>
<td>10.7</td>
<td>38.6</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>22 to 24 years</td>
<td>22</td>
<td>10.7</td>
<td>49.5</td>
<td>13</td>
<td>10.8</td>
</tr>
<tr>
<td>25 to 27 years</td>
<td>29</td>
<td>14.1</td>
<td>63.9</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>28 to 30 years</td>
<td>27</td>
<td>13.1</td>
<td>77.2</td>
<td>13</td>
<td>10.8</td>
</tr>
<tr>
<td>31 to 33 years</td>
<td>24</td>
<td>11.7</td>
<td>89.1</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>34 to 36 years</td>
<td>14</td>
<td>6.8</td>
<td>96.0</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>37 to 39 years</td>
<td>3</td>
<td>1.5</td>
<td>97.5</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>40 to 42 years</td>
<td>3</td>
<td>1.5</td>
<td>99.0</td>
<td>7</td>
<td>5.8</td>
</tr>
<tr>
<td>43 to 45 years</td>
<td>2</td>
<td>1.0</td>
<td>100.0</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>4</td>
<td>1.9</td>
<td></td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
<td></td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3.9: Frequency distribution showing number of years spent in present position

<table>
<thead>
<tr>
<th>Years in present pos.</th>
<th>INDIA</th>
<th></th>
<th>U.S.A.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Cum %</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>65</td>
<td>31.6</td>
<td>32.8</td>
<td>26</td>
<td>21.7</td>
</tr>
<tr>
<td>4 to 6 years</td>
<td>46</td>
<td>22.3</td>
<td>56.1</td>
<td>25</td>
<td>20.8</td>
</tr>
<tr>
<td>7 to 9 years</td>
<td>24</td>
<td>11.7</td>
<td>68.2</td>
<td>20</td>
<td>16.7</td>
</tr>
<tr>
<td>10 to 12 years</td>
<td>22</td>
<td>10.7</td>
<td>79.3</td>
<td>24</td>
<td>20.0</td>
</tr>
<tr>
<td>13 to 15 years</td>
<td>17</td>
<td>8.3</td>
<td>87.9</td>
<td>10</td>
<td>8.3</td>
</tr>
<tr>
<td>16 to 18 years</td>
<td>10</td>
<td>4.9</td>
<td>92.9</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>19 to 21 years</td>
<td>6</td>
<td>2.9</td>
<td>96.0</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>22 to 24 years</td>
<td>5</td>
<td>2.4</td>
<td>98.5</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>25 to 27 years</td>
<td>2</td>
<td>1.0</td>
<td>99.5</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>28 to 30 years</td>
<td>1</td>
<td>.5</td>
<td>100.0</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>8</td>
<td>3.9</td>
<td></td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
<td></td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 3.10: Frequency distribution showing type of institutions female administrators belong to

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>INDIA</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>An all Women’s ed. inst.</td>
<td>55</td>
<td>4</td>
</tr>
<tr>
<td>An all Mens’ ed. inst.</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>A Co-educ small ed. inst.</td>
<td>98</td>
<td>48</td>
</tr>
<tr>
<td>A Co-educ medium ed. inst.</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>A Co-educ large ed. inst.</td>
<td>15</td>
<td>42</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>120</td>
</tr>
</tbody>
</table>

Table 3.11 represents frequency distribution of salaries received by female administrators in the United States of America.

Table 3.11: Frequency distribution showing salaries received by female administrators in U.S.A.

<table>
<thead>
<tr>
<th>Salaries Received</th>
<th>U.S.A.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $34,999</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>$35,000 to $39,999</td>
<td>10</td>
<td>8.3</td>
</tr>
<tr>
<td>$40,000 to $44,999</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>$45,000 to $49,999</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>$50,000 to $54,999</td>
<td>13</td>
<td>10.8</td>
</tr>
<tr>
<td>$55,000 to $59,999</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td>$60,000 and above</td>
<td>45</td>
<td>37.5</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3.12 represents the frequency distribution of salaries received by female administrators in India.

Table 3.13 identifies the frequency of female administrators by departments in the sample. The table indicated that maximum number of females in administration
Table 3.12: Frequency distribution showing salaries received by female administrators in India

<table>
<thead>
<tr>
<th>Salaries Received</th>
<th>Freq.</th>
<th>%</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than Rs 35,999</td>
<td>11</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>($2249.9375)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 36,000 to Rs. 47,999</td>
<td>37</td>
<td>18.0</td>
<td>23.8</td>
</tr>
<tr>
<td>($2250 to $2999.9375)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 48,000 to Rs. 59,999</td>
<td>53</td>
<td>25.7</td>
<td>50.0</td>
</tr>
<tr>
<td>($3,000 to $3749.9375)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 60,000 to Rs. 71,999</td>
<td>50</td>
<td>24.3</td>
<td>74.8</td>
</tr>
<tr>
<td>($3,750 to $4499.9375)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 72,000 to Rs. 83,999</td>
<td>39</td>
<td>18.9</td>
<td>94.1</td>
</tr>
<tr>
<td>($4,500 to $5,249.9375)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs. 84,000 to Rs. 95,999</td>
<td>9</td>
<td>4.4</td>
<td>98.5</td>
</tr>
<tr>
<td>($5,250 to $5,999.9375)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rs 96,000 and above</td>
<td>3</td>
<td>1.5</td>
<td>100.0</td>
</tr>
<tr>
<td>($6,000 and above)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mis. Val</td>
<td>4</td>
<td>1.9</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

belong to department of Hindi in India (39) and department of Education (23) in the United States of America. Home Economics (14) and Nursing (12) occupy a second place. No female administrator within this sample belonged to the department of Engineering.

After tabulating frequencies, the cluster mean scores on the items for each area of discrimination were computed. These scores represent the average scores of a cluster of related items. For instance, if one area of discrimination consisted of six items on the questionnaire, then the score of that area of discrimination is the sum of the scores for these items divided by 6.

After the computation of frequencies, means, and standard deviations, students'
t-tests, and chi-square analysis were applied. The alpha level was set at .05 and 3.5 was used as the threshold value for comparisons to determine if existence of discrimination was perceived in the areas of salaries and fringe benefits, cultural and social issues, male attitudes, status, promotion possibilities, potential barriers to advancement, structure of the institution, gender discrimination, competency and accomplishments.
Table 3.13: Frequency distribution of major departments female administrators belong to

<table>
<thead>
<tr>
<th>Department</th>
<th>INDIA</th>
<th></th>
<th></th>
<th>U.S.A.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Cum%</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>Home Economics</td>
<td>14</td>
<td>6.8</td>
<td>8.0</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>Nursing</td>
<td>2</td>
<td>1.0</td>
<td>9.1</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td>Sociology</td>
<td>5</td>
<td>2.4</td>
<td>12.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>11</td>
<td>5.3</td>
<td>18.2</td>
<td>23</td>
<td>19.2</td>
</tr>
<tr>
<td>Computer Science</td>
<td>1</td>
<td>.5</td>
<td>18.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>10</td>
<td>4.9</td>
<td>24.4</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Anthropology</td>
<td>2</td>
<td>1.0</td>
<td>26.0</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>English/Hindi</td>
<td>39</td>
<td>18.9</td>
<td>48.0</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>1.5</td>
<td>49.4</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>History/geog.</td>
<td>10</td>
<td>4.9</td>
<td>55.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>2</td>
<td>1.0</td>
<td>56.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td>.5</td>
<td>57.0</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Design/Arch.</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Theatre</td>
<td>1</td>
<td>.5</td>
<td>57.4</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>.5</td>
<td>58.0</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Graduate Studies</td>
<td>8</td>
<td>3.9</td>
<td>63.0</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>Psychology</td>
<td>2</td>
<td>1.0</td>
<td>64.0</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Fine/perf. Arts</td>
<td>2</td>
<td>1.0</td>
<td></td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>Interior Des.</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Social/Beh. Sc.</td>
<td>4</td>
<td>1.9</td>
<td>66.0</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Microbiology</td>
<td>4</td>
<td>1.9</td>
<td>68.2</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Public Adminis.</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>3</td>
<td>1.5</td>
<td>70.0</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Gynecology</td>
<td>3</td>
<td>1.5</td>
<td>72.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>6</td>
<td>2.9</td>
<td>76.0</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Botany</td>
<td>5</td>
<td>2.4</td>
<td>78.4</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Physics</td>
<td>5</td>
<td>2.4</td>
<td>81.25</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Zoology</td>
<td>3</td>
<td>1.5</td>
<td>83.0</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Economics</td>
<td>5</td>
<td>2.4</td>
<td>85.8</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Medicine</td>
<td>4</td>
<td>1.9</td>
<td>88.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>1</td>
<td>.5</td>
<td>88.6</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>Commerce</td>
<td>6</td>
<td>2.9</td>
<td>92.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>14.6</td>
<td>100.0</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>Mis. Val</td>
<td>30</td>
<td>14.6</td>
<td></td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>206</td>
<td>100.0</td>
<td></td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>
CHAPTER 4. STATISTICAL ANALYSIS

Analysis of Categorical Data

The purpose of this chapter is to provide analysis and interpretation of the data.

Null Hypothesis 1

The null hypothesis tested was that there was no significant relationship between various categories represented in the demographic information collected from female administrators in India and the United States of America.

The chi-square technique was used to test independence between the various categories. Significant chi-square values and their probabilities are reported in Table 4.1.

1. The country of residence of female administrators was not independent of the position they held. The chi-square value of country by position was 32.16 with significance of 0.01 at the .01 Alpha level after applying the Yates correction.

2. The country of origin of the females administrators was not independent of the degree earned. The chi-square value of this relationship was 55.11 with significance of 0.01 at the .01 Alpha level.
Table 4.1: Statistical analysis of categorical data

<table>
<thead>
<tr>
<th>Variable/Category</th>
<th>Chi-square</th>
<th>significance</th>
<th>Levels combined for analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count. by Pos.</td>
<td>1</td>
<td>32.16</td>
<td>.01</td>
</tr>
<tr>
<td>Count. by Deg.</td>
<td>2</td>
<td>55.11</td>
<td>.01</td>
</tr>
<tr>
<td>Count. by Dept.</td>
<td>2</td>
<td>44.21</td>
<td>.01</td>
</tr>
<tr>
<td>Count. by Mar. Status</td>
<td>2</td>
<td>13.77</td>
<td>.01</td>
</tr>
<tr>
<td>Count. by Age</td>
<td>4</td>
<td>27.60</td>
<td>.01</td>
</tr>
<tr>
<td>Count. by Type of Inst.</td>
<td>3</td>
<td>60.79</td>
<td>.01</td>
</tr>
<tr>
<td>Count. by Yrs in Prof.</td>
<td>2</td>
<td>13.84</td>
<td>.01</td>
</tr>
<tr>
<td>Pos. by Deg.</td>
<td>2</td>
<td>13.55</td>
<td>.01</td>
</tr>
<tr>
<td>Pos. by Dept.</td>
<td>3</td>
<td>32.91</td>
<td>.01</td>
</tr>
<tr>
<td>Pos. by Age</td>
<td>4</td>
<td>18.26</td>
<td>.01</td>
</tr>
<tr>
<td>Pos. by Type of Inst.</td>
<td>1</td>
<td>9.53</td>
<td>.01</td>
</tr>
<tr>
<td>Pos. by yrs in Prof</td>
<td>1</td>
<td>20.42</td>
<td>.01</td>
</tr>
<tr>
<td>Pos. by Sal.</td>
<td>5</td>
<td>57.86</td>
<td>.01</td>
</tr>
<tr>
<td>Type of Inst. by Yrs in Prof.</td>
<td>1</td>
<td>4.58</td>
<td>.03</td>
</tr>
<tr>
<td>Type of Inst. by Deg.</td>
<td>2</td>
<td>18.65</td>
<td>.01</td>
</tr>
<tr>
<td>Type of Inst. by Sal.</td>
<td>5</td>
<td>49.11</td>
<td>.01</td>
</tr>
<tr>
<td>Yrs. in Prof by Yrs in Pre. Pos.</td>
<td>1</td>
<td>9.99</td>
<td>.01</td>
</tr>
</tbody>
</table>

Source: [Primary Source]
### Table 4.1: Statistical analysis of categorical data

<table>
<thead>
<tr>
<th>Df.</th>
<th>Chi-square</th>
<th>Significance</th>
<th>Levels combined for analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32.16</td>
<td>.01</td>
<td>Ph.D &amp; Ed.D</td>
</tr>
<tr>
<td>2</td>
<td>55.11</td>
<td>.01</td>
<td>Widows &amp; divorcee</td>
</tr>
<tr>
<td>2</td>
<td>44.21</td>
<td>.01</td>
<td>&lt; .29 &amp; 30 to 35 yrs of age</td>
</tr>
<tr>
<td>3</td>
<td>60.79</td>
<td>.01</td>
<td>Women's &amp; Men's inst.</td>
</tr>
<tr>
<td>2</td>
<td>13.84</td>
<td>.01</td>
<td>1 - 15 yrs</td>
</tr>
<tr>
<td>2</td>
<td>13.55</td>
<td>.01</td>
<td>Ed.D &amp; Ph.D</td>
</tr>
<tr>
<td>3</td>
<td>32.91</td>
<td>.01</td>
<td>Fine Arts, Mang. &amp; other</td>
</tr>
<tr>
<td>4</td>
<td>18.26</td>
<td>.01</td>
<td>Less than 29 &amp; 30 to 35 yrs</td>
</tr>
<tr>
<td>1</td>
<td>9.53</td>
<td>.01</td>
<td>Men's &amp; Women's inst.</td>
</tr>
<tr>
<td>1</td>
<td>20.42</td>
<td>.01</td>
<td>1 to 21 yrs</td>
</tr>
<tr>
<td>5</td>
<td>57.86</td>
<td>.01</td>
<td>$34,999 to $39,999</td>
</tr>
<tr>
<td>1</td>
<td>4.58</td>
<td>.03</td>
<td>All men's &amp; women's inst.</td>
</tr>
<tr>
<td>2</td>
<td>18.65</td>
<td>.01</td>
<td>Men's &amp; Women's inst.</td>
</tr>
<tr>
<td>5</td>
<td>49.11</td>
<td>.01</td>
<td>Men's &amp; Women's inst.</td>
</tr>
<tr>
<td>1</td>
<td>9.99</td>
<td>.01</td>
<td>21 yrs or less</td>
</tr>
<tr>
<td>Pos.</td>
<td>1.48</td>
<td>.03</td>
<td>All coed. inst.</td>
</tr>
<tr>
<td>2</td>
<td>1.96</td>
<td>.01</td>
<td>Ph.D &amp; Ed.D</td>
</tr>
<tr>
<td>5</td>
<td>5.01</td>
<td>.01</td>
<td>Co-educ. inst.</td>
</tr>
<tr>
<td>1</td>
<td>9.99</td>
<td>.01</td>
<td>21 yrs or less</td>
</tr>
</tbody>
</table>

- **Post Doc. & Other**
- **Co-educ. inst.**
- **More than 21 yrs**
- **$40,000 to $49,999**
- **$50,000-60,000 & over**
- **31 & more**
- **16-30 yrs**
- **Ed.D & Other**
- **Post Doc & Other**
- **Less than 29 & 30 to 35 yrs**
- **Men's & Women's inst.**
- **More than 21 yrs**
- **Men's & Women's inst.**
- **All coed. inst.**
- **Ph.D & Ed.D**
- **Men's & Women's inst.**
- **Co-educ. inst.**
- **More than 21 yrs**
- **Co-educ. inst.**
- **50,000-60,000 & over**
- **31 & more**
- **16-30 yrs**
- **Ed.D & Other**
- **Post Doc & Other**
- **Less than 29 & 30 to 35 yrs**
- **Men's & Women's inst.**
- **More than 21 yrs**
- **Men's & Women's inst.**
- **Co-educ. inst.**
- **More than 21 yrs**
3. The country the female administrators originated from was not independent of the department the female administrators administer. The chi-square value for country by department was 44.21 with significance of 0.01 at .01 Alpha level.

4. Marital Status of female administrators was not independent of the country they come from according to the finding of this study. Chi-square value for country by marital status of female administrators was 13.77 with significance of 0.01 at .01 Alpha level.

5. The country female administrators belonged to was not independent of their Age. The chi-square value for country by age was 27.60 with significance of 0.01 at .01 Alpha level.

6. The country the female administrator belonged to was not independent of type of institution they worked in. Chi-square value for country by type of institution was 60.80 with significance of 0.01 at .01 Alpha level.

7. The category total number of years spent in the profession by female administrators was not independent of the country they came from. The chi-square value of no of years spent in the profession by female administrators and country they came from was 13.84 with significance of 0.01 at .01 Alpha level.

8. Degree earned by female administrators was not independent of the position they held. The chi-square for degree earned by female administrators and their position was 13.55 with significance of 0.01 at .01 alpha level.

9. The position of the female administrator was not independent of the department
they worked in. The chi-square value for position by department was 32.91 with significance of 0.01 at .01 alpha level.

10. The age of the female administrator was not independent of the their position. The chi-square value for age by position was 18.26 with significance of 0.01 at .01 Alpha level.

11. The type of Institution female administrators worked in was not independent of their position. The chi-square value for type of institution female administrators worked in and their position was 9.53 with significance of 0.01 at .01 alpha level after applying the Yates correction.

12. The total number of years spent in the profession by female administrators was not independent of their position. The chi-square value for total number of years spent in the profession by position was 20.42 with significance of 0.01 at .01 Alpha level after applying Yates correction.

- Before presenting the analysis of salary with other categories, the reader is cautioned that income and standard of living as well as fringe benefits are difficult to equate and compare for the two countries even if one takes into consideration the current rate of exchange for the currency used in either of the two countries.

13. Annual salary earned was not independent of the position held by female administrators. The chi-square value for salary by position was 57.86 with significance of 0.01 at .01 Alpha level.
14. The total number of years spent in the profession by female administrators was not independent of type of institution they worked in. The chi-square value for total number of years spent in the profession by type of institution was 4.58 with significance of 0.03 at .05 alpha level after applying the Yates correction.

15. Degrees earned by female administrators was not independent of the type of institution they worked in. The chi-square value for degree by type of institution was 18.65 with significance of 0.01 at .01 alpha level.

16. Annual salaries received by female administrators was not independent of the type of institutions they worked in. The chi-square value for salary by type of institution was 49.11 with significance of 0.01 at .01 alpha level.

17. The total number of years spent in the profession was not independent of the number of years spent in the present position. The chi-square value for number of years spent in the profession by number of years spent in present position was 9.99 with significance of 0.01 at .01 Alpha level after applying the Yates correction.

Table 4.2 presents the cells with the largest chi-square value for each of the various categories listed in Table 4.1. These cells were the largest contributors to the significant relationships between the categories presented in Table 4.1.

The study of the largest contributors to the relationships between various categories revealed that:

1. Female administrators holding the position of deans were significantly more likely to be employed in the U.S.A. as compared to India.
Table 4.2: Cells that were largest contributors to the significant relationships between categories listed in table 4.1

<table>
<thead>
<tr>
<th>Cat./Var.</th>
<th>Chi-square</th>
<th>Exp.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A. X Deans</td>
<td>16.22</td>
<td>28.5</td>
<td>50</td>
</tr>
<tr>
<td>U.S.A. X Masters</td>
<td>11.84</td>
<td>19.0</td>
<td>04</td>
</tr>
<tr>
<td>U.S.A. X Arts &amp; Hum.</td>
<td>7.39</td>
<td>32.5</td>
<td>17</td>
</tr>
<tr>
<td>U.S.A. X Widow/Divorcee</td>
<td>3.52</td>
<td>16.4</td>
<td>24</td>
</tr>
<tr>
<td>U.S.A. X 35 or less age</td>
<td>9.2</td>
<td>9.2</td>
<td>00</td>
</tr>
<tr>
<td>U.S.A. X Co-educ.</td>
<td>19.35</td>
<td>21.5</td>
<td>42</td>
</tr>
<tr>
<td>U.S.A. X 31 or &gt; yrs in Prof.</td>
<td>5.67</td>
<td>18.7</td>
<td>29</td>
</tr>
<tr>
<td>Deans X Other Deg.</td>
<td>3.84</td>
<td>11.7</td>
<td>05</td>
</tr>
<tr>
<td>Deans X Home Eco.</td>
<td>9.53</td>
<td>19.4</td>
<td>33</td>
</tr>
<tr>
<td>Deans X over 50 in age</td>
<td>6.17</td>
<td>33.6</td>
<td>48</td>
</tr>
<tr>
<td>Deans X All M/W's inst.</td>
<td>6.49</td>
<td>14.8</td>
<td>05</td>
</tr>
<tr>
<td>Deans X 1 to 21 yrs in Prof.</td>
<td>8.78</td>
<td>35.7</td>
<td>18</td>
</tr>
<tr>
<td>Deans X $60,000 or more sal.</td>
<td>30.68</td>
<td>16.5</td>
<td>39</td>
</tr>
<tr>
<td>1 to 21 yr in Prof. X M/W's inst.</td>
<td>2.30</td>
<td>2.1</td>
<td>35</td>
</tr>
<tr>
<td>Masters deg X M/W's inst.</td>
<td>8.64</td>
<td>9.8</td>
<td>19</td>
</tr>
<tr>
<td>Sal Rs. 48,000-71,999 X M/W's inst.</td>
<td>20.42</td>
<td>19.1</td>
<td>39</td>
</tr>
<tr>
<td>19 yrs &gt; in Prof. X 21 or &lt; Pres. Pos</td>
<td>5.92</td>
<td>9.5</td>
<td>02</td>
</tr>
</tbody>
</table>

*M/W's inst. = all mens's or all women's college or university.

2. Female administrators in U.S.A. were significantly less likely to have earned master's degree as compared to India.

3. Female administrators in U.S.A. were significantly less likely to work in the departments included under Arts and Humanities (i.e., History, Humanities, Behavior Sciences, Geography, Economics, Sociology, Political Science, Languages, Philosophy, and Anthropology).

4. In U.S.A. female administrators were significantly more likely to be either divorcees or widows as compared to India.
5. Female administrators in U.S.A. were significantly less likely to be in the age group of 35 or less as compared to India.

6. In U.S.A. female administrators were more likely to work in co-educational institutions than in India.

7. Female administrators who had been in the profession for 31 or more years were significantly more likely to be administrators in U.S.A. as compared to India.

8. Female deans were significantly less likely to have earned degrees combined under 'other' as compared to department executive officers or departments.

9. Female administrators working in the department included under Home Economics (i.e., Home Economics, Education, Nursing, and Psychology) were significantly more likely to be deans as compared to department executive officers.

10. Female deans were significantly more likely to be 50 years of age or older rather than females in the position of department executive officers.

11. Female deans were significantly less likely to work in gender exclusive college or university.

12. Females with 1 to 21 years in the profession were significantly less likely to hold the position of deans.

13. Female deans in U.S.A. were significantly more likely to earn the annual salary between $50,000 to $60,000 and above.
14. Female deans in India were less likely to earn annual salary between Rs. 48,000 and Rs. 71,999.

15. Female administrators who had spent 1 to 21 years in the profession were significantly more likely to belong to all women’s or all men’s college or university.

16. Female administrators with master’s degree were significantly more likely to work in all men’s/women’s college or university as compared to female administrators who had earned master’s degree and were working in co-educational college or university.

17. In India female administrators working in all men’s/women’s college or university were significantly more likely to receive a salary between Rs. 48,000 to Rs. 71,999 as compared to those female administrators earning annual salary of Rs. 48,00 to Rs. 71,999 working in co-educational institutions.

18. Female who had spent 21 years in profession were less likely to have spent 19 years and more in their present position as compared to female administrators who had spent less than 19 years in the present position and more than 21 years spent in the profession.

Table 4.3 presents the cells which were the second largest contributors to the significant relationship between various categories listed in Table 4.1.

The study of the second largest contributors to the relationship between various categories revealed that:

1. Female administrators in the U.S.A. were significantly more likely to work in the
Table 4.3: Cells that were second largest contributors to the significant relationship between various categories presented in Table 4.1

<table>
<thead>
<tr>
<th>Cat./Var.</th>
<th>Chi-Square</th>
<th>Exp.</th>
<th>Obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A. X Home Economics</td>
<td>6.19</td>
<td>30.3</td>
<td>44</td>
</tr>
<tr>
<td>U.S.A. X Married</td>
<td>3.00</td>
<td>76.1</td>
<td>61</td>
</tr>
<tr>
<td>U.S.A. X 50 &amp; over age</td>
<td>6.12</td>
<td>51.3</td>
<td>69</td>
</tr>
<tr>
<td>U.S.A. X All M/W's col.</td>
<td>15.70</td>
<td>23.0</td>
<td>04</td>
</tr>
<tr>
<td>U.S.A. X 1 to 15 yrs in Prof.</td>
<td>3.06</td>
<td>27.1</td>
<td>18</td>
</tr>
<tr>
<td>Deans X Ph.D.</td>
<td>3.39</td>
<td>49.1</td>
<td>62</td>
</tr>
<tr>
<td>Deans X Sciences</td>
<td>6.60</td>
<td>13.4</td>
<td>04</td>
</tr>
<tr>
<td>Deans X Less than 29 to 35 yr age</td>
<td>4.17</td>
<td>06.0</td>
<td>01</td>
</tr>
<tr>
<td>Deans X Sal Rs. 48,000-71,999</td>
<td>5.18</td>
<td>24.2</td>
<td>13</td>
</tr>
<tr>
<td>Ph.D./Ed.D. X All M/W's inst.</td>
<td>4.56</td>
<td>39.4</td>
<td>26</td>
</tr>
<tr>
<td>Sal. $50,000 or more X All M/W's inst.</td>
<td>9.99</td>
<td>13.7</td>
<td>02</td>
</tr>
</tbody>
</table>

*aM/W's inst. = All men's or all women's college or university.

departments included under Home Economics (Home Economics, Education, Nursing, Psychology).

2. In the U.S.A. female administrators were less likely to be married as compared to India.

3. Female administrators in the U.S.A. were significantly more likely to be 50 years or older as compared to India.

4. Female administrators in the U.S.A. were significantly less likely to work in gender exclusive college or university than in India.

5. Female administrators who had spent between 1 to 15 years in the profession were significantly less likely to be administrators in the U.S.A. as compared to India.
6. Female deans were significantly more likely to have earned Ph.D. or Ed.D. degrees.

7. Female deans were significantly less likely to work in department grouped under Sciences (Computer Science, Mathematics, Microbiology, Gynecology, Biochemistry, Chemistry, Botany, Physics, Zoology and Medicine).

8. Female deans were significantly less likely to be less than 29 to 35 years of age.

9. Female deans in India were significantly less likely to earn annual salary between Rs. 48,000 and Rs. 71,999.

10. Female administrators in all men's/women's college or university were significantly less likely to have earned Ph.D or Ed.D. degree.

11. Females in U.S.A. working in all men's/women's college or university were significantly less likely to receive salaries between $50,000 to $60,000 and more.

Null Hypothesis 2

The second null hypothesis tested stated that all female administrators collectively (American and Indian) will not perceive discrimination favoring (see areas below) their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their Higher Education Institution.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.

5. Potential Barrier to Advancement.

6. Promotion Possibilities.


10. Accomplishments.

Table 4.4 represents the analysis of the t-test pairs for data collected across countries (America and India) for the ten areas of discrimination stated above.

Table 4.4: Analysis of areas of discrimination across countries

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Number of Cases</th>
<th>Mean</th>
<th>Diff.</th>
<th>Standard Deviation</th>
<th>t-val 1 tail</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sal./Fr.</td>
<td>317</td>
<td>1.87</td>
<td>-1.63</td>
<td>0.85</td>
<td>-34.29</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Cul./Soc. Iss.</td>
<td>288</td>
<td>3.03</td>
<td>-0.47</td>
<td>0.68</td>
<td>-11.63</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Mal. Att.</td>
<td>315</td>
<td>3.29</td>
<td>-0.21</td>
<td>0.82</td>
<td>-4.65</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Status</td>
<td>215</td>
<td>3.90</td>
<td>0.40</td>
<td>0.50</td>
<td>11.67</td>
<td>.01</td>
</tr>
<tr>
<td>Pot. Bar.</td>
<td>232</td>
<td>3.92</td>
<td>0.42</td>
<td>0.50</td>
<td>12.69</td>
<td>.01</td>
</tr>
<tr>
<td>Pro. Pos.</td>
<td>309</td>
<td>3.26</td>
<td>-0.24</td>
<td>0.85</td>
<td>-4.91</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Gen. Dis.</td>
<td>273</td>
<td>3.26</td>
<td>-0.24</td>
<td>0.78</td>
<td>-4.98</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Str. of Inst.</td>
<td>319</td>
<td>3.20</td>
<td>0.42</td>
<td>0.80</td>
<td>9.39</td>
<td>0.1</td>
</tr>
<tr>
<td>Comp.</td>
<td>299</td>
<td>3.38</td>
<td>-0.12</td>
<td>0.89</td>
<td>-2.27</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Accomp.</td>
<td>325</td>
<td>3.16</td>
<td>-0.34</td>
<td>1.03</td>
<td>-5.89</td>
<td>&gt; .05</td>
</tr>
</tbody>
</table>

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination (areas stated in hypothesis one) favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was tested using t-test pairs.\(^1\)

\(^1\) t-tests are made by subtracting 2 means and dividing by the standard error of
The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding salaries and fringe benefits favoring their male counterparts to occur within their higher education institutions could not be rejected. Therefore, the null hypothesis was retained. This indicated that female administrators collectively (American and Indian) did not perceive discrimination regarding salaries and fringe benefits favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding cultural and social issues favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators collectively did not perceive discrimination concerning cultural and social issues favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding male attitudes favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators collectively did not perceive discrimination concerning male attitudes favoring their male counterparts to occur within their higher education institutions.

the difference of the 2 means. If the first of the two means is smaller than the second mean, then the t-value will have a negative significance. In the following analysis each of the negative t-values indicate that tested mean was less than 3.5.
The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding status favoring their male counterparts to occur within their higher education institutions was rejected, indicating that female administrators collectively (American and Indian) did perceive discrimination regarding status favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding potential barriers to advancement favoring their male counterparts to occur within their higher education institutions was rejected, indicating that female administrators collectively (American and Indian) did perceive discrimination regarding potential barrier to advancement favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding promotion possibilities favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions could not be rejected. Therefore, the null hypothesis was retained. This indicated that female administrators collectively did not perceive discrimination concerning promotion possibilities favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding gender related discrimination favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions could not be rejected. Therefore, the null
hypothesis was retained. This indicated that female administrators collectively did not perceive discrimination concerning gender related discrimination favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding structure of the institution favoring their male counterparts to occur within their higher education institutions was rejected, indicating that female administrators collectively (American and Indian) did perceive discrimination regarding structure of the institution favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding competence favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators collectively did not perceive discrimination regarding competence favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators collectively (American and Indian) will not perceive discrimination regarding accomplishments favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators collectively did not perceive discrimination regarding accomplishments favoring their male counterparts to occur within their higher education institutions.
Null Hypothesis 3

The third null hypothesis tested stated that American female administrators will not perceive discrimination (see area below) favoring their male counterparts, (score less than or equal to 3.5 on discrimination scale) to occur within their Higher Education Institutions.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Table 4.5 represents an analysis of areas of discrimination as stated in hypothesis three for the data supplied by female administrators from the United States of America.

The hypothesis that American female administrators will not perceive discrimination favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was tested using t-test pairs.

The hypothesis that all female administrators in United States of America will
not perceive discrimination regarding salary and fringe benefits favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in United States of America did not perceive discrimination concerning salaries and fringe benefits favoring their male counterparts to occur.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding cultural and social issues favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in United States of America did not perceive discrimination concerning cultural and social issues favoring their male counterparts to occur.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding cultural and social issues favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in United States of America did not perceive discrimination concerning cultural and social issues favoring their male counterparts to occur.
not perceive discrimination regarding male attitude favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in United States of America did not perceive discrimination concerning male attitude favoring their male counterparts to occur.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding status favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was rejected, indicating that female administrators in United States of America did perceive discrimination regarding status favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding potential barriers to advancement favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was rejected, indicating that female administrators in United States of America did perceive discrimination regarding potential barriers to advancement favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding promotion possibilities to advancement favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was rejected, indicating that female
administrators in United States of America did perceive discrimination regarding promotion possibilities favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding gender related discrimination favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in United States of America did not perceive discrimination concerning gender related discrimination favoring their male counterparts to occur.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding structure of the institution favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was rejected, indicating that female administrators in United States of America did perceive discrimination regarding structure of institution favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding competence favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in United States of America did not perceive discrimination concerning competence
favoring their male counterparts to occur.

The hypothesis that all female administrators in United States of America will not perceive discrimination regarding accomplishments favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in United States of America did not perceive discrimination concerning accomplishments favoring their male counterparts to occur.

**Null Hypothesis 4**

The fourth null hypothesis tested stated that Indian female administrators will not perceive discrimination (see areas below) favoring their male counterparts, (score less than or equal to 3.5 on discrimination scale) to occur within their Higher Education Institutions.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.

10. Accomplishments.

The hypothesis that Indian female administrators will not perceive discrimination favoring their male counterparts (score less or equal to 3.5 on discrimination scale) to occur within their higher education was tested using t-test pairs.

Table 4.6 represents an analysis of areas of discrimination as stated in hypothesis four for data supplied by female administrators from India.

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Number of Cases</th>
<th>Mean</th>
<th>Diff.</th>
<th>Standard Deviation</th>
<th>t-val 1 tail</th>
<th>prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sal. and Fr.</td>
<td>200</td>
<td>1.58</td>
<td>-0.92</td>
<td>0.69</td>
<td>-39.21</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Cul./Soc. Iss.</td>
<td>178</td>
<td>2.99</td>
<td>-0.51</td>
<td>0.80</td>
<td>-9.66</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Mal. Att.</td>
<td>197</td>
<td>3.37</td>
<td>-0.13</td>
<td>0.83</td>
<td>-2.14</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Status</td>
<td>122</td>
<td>3.79</td>
<td>0.29</td>
<td>0.51</td>
<td>6.24</td>
<td>.01</td>
</tr>
<tr>
<td>Pot. Bar.</td>
<td>176</td>
<td>3.94</td>
<td>0.44</td>
<td>0.47</td>
<td>12.32</td>
<td>.01</td>
</tr>
<tr>
<td>Pro. Pos.</td>
<td>193</td>
<td>2.99</td>
<td>-0.51</td>
<td>0.81</td>
<td>-8.77</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Gen. Dis.</td>
<td>167</td>
<td>3.16</td>
<td>-0.34</td>
<td>0.76</td>
<td>-5.84</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Str. of Inst.</td>
<td>200</td>
<td>3.82</td>
<td>0.32</td>
<td>0.81</td>
<td>5.53</td>
<td>.01</td>
</tr>
<tr>
<td>Comp.</td>
<td>184</td>
<td>3.29</td>
<td>-0.21</td>
<td>0.90</td>
<td>-3.20</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Accomp.</td>
<td>205</td>
<td>3.34</td>
<td>-0.16</td>
<td>1.05</td>
<td>-2.17</td>
<td>&gt; .05</td>
</tr>
</tbody>
</table>

The hypothesis that all female administrators in India will not perceive discrimination regarding salaries and fringe benefits favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not rejected. Therefore, the null hypothesis was retained, indicating that female administrators in India did not perceive discrimination regarding salaries and fringe benefits favoring their male counterparts to occur within their higher education institutions.
The hypothesis that all female administrators in India will not perceive discrimination regarding cultural and social issues favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in India did not perceive discrimination concerning cultural and social issues favoring their male counterparts to occur.

The hypothesis that all female administrators in India will not perceive discrimination regarding male attitude favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in India did not perceive discrimination concerning male attitude favoring their male counterparts to occur.

The hypothesis that all female administrators in India will not perceive discrimination regarding status favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was rejected, indicating that female administrators in India did perceive discrimination regarding status favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators in India will not perceive discrimination regarding potential barriers to advancement favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was rejected, indicating that female administrators in India did
perceive discrimination regarding potential barriers to advancement favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators in India will not perceive discrimination regarding promotion possibilities favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in India did not perceive discrimination concerning promotion possibilities favoring their male counterparts to occur.

The hypothesis that all female administrators in India will not perceive discrimination regarding gender related discrimination favoring their male counterparts (score less than or equal to .3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in India did not perceive discrimination concerning gender related discrimination favoring their male counterparts to occur.

The hypothesis that all female administrators in India will not perceive discrimination regarding structure of the institution favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution was rejected, indicating that female administrators in India did perceive discrimination regarding structure of institution favoring their male counterparts to occur within their higher education institutions.

The hypothesis that all female administrators in India will not perceive discrimi-
ination regarding competence favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in India did not perceive discrimination concerning competence favoring their male counterparts to occur.

The hypothesis that all female administrators in India will not perceive discrimination regarding accomplishments favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institution could not be rejected. Therefore, the null hypothesis was retained. This indicates that female administrators in higher education institutions in India did not perceive discrimination concerning accomplishments favoring their male counterparts to occur.

Null Hypothesis 5

The null tested here was that there are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors and deans in institutions of higher education in United States of America when their perceptions are compared on following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.


10. Accomplishments.

The analysis of data supplied by the deans vs department executive officers for United States of America is shown in Table 4.7.

Significant mean differences were found between female chairs/heads/directors of departments as compared to female deans regarding (1) promotion possibilities and (2) gender discrimination.

The mean promotion possibilities for female department executive officers of departments was 3.89 whereas the mean promotion possibilities for female deans was .41 lower or 3.48.

The mean gender discrimination for female department executive officers of departments was 3.61 whereas mean gender discrimination for female deans was .41 lower or 3.21.

No significant mean differences were found between female department executive officers and deans regarding (1) salaries and fringe benefits, (2) cultural and social issues, (3) male attitudes, (4) status, (5) potential barrier to success, (6) structure of the institutions, (7) competence, and (8) accomplishments.

No significant difference in variance was found between chairs/head of departments/directors and deans regarding each of the ten areas of discrimination.
Table 4.7: Areas of discrimination by position in United States of America

<table>
<thead>
<tr>
<th>Areas of Discrimination</th>
<th>Mean CH/HD/DIR</th>
<th>Mean DEAN</th>
<th>t-val</th>
<th>2 tail prob</th>
<th>Variance CH/HD/DIR</th>
<th>Variance DEAN</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Fringe Benefits</td>
<td>2.42 (n = 68)</td>
<td>2.26 (n = 48)</td>
<td>0.97</td>
<td>0.34</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural &amp; Social Issues</td>
<td>3.15 (n = 60)</td>
<td>3.06 (n = 49)</td>
<td>0.72</td>
<td>0.47</td>
<td>0.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Attitudes</td>
<td>3.21 (n = 68)</td>
<td>3.03 (n = 49)</td>
<td>1.25</td>
<td>0.22</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>4.06 (n = 56)</td>
<td>4.03 (n = 36)</td>
<td>0.22</td>
<td>0.83</td>
<td>.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Barriers Advancement</td>
<td>3.83 (n = 35)</td>
<td>3.87 (n = 20)</td>
<td>-0.26</td>
<td>0.79</td>
<td>.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion Possibilities</td>
<td>3.89 (n = 66)</td>
<td>3.48 (n = 49)</td>
<td>3.16</td>
<td>0.01</td>
<td>.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender Discrimination</td>
<td>3.61 (n = 59)</td>
<td>3.21 (n = 46)</td>
<td>2.68</td>
<td>0.01</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure of the Institution</td>
<td>4.09 (n = 68)</td>
<td>4.08 (n = 50)</td>
<td>-0.01</td>
<td>0.99</td>
<td>.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>3.66 (n = 64)</td>
<td>3.36 (n = 50)</td>
<td>1.87</td>
<td>0.064</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomplishments</td>
<td>2.96 (n = 69)</td>
<td>2.71 (n = 50)</td>
<td>1.44</td>
<td>0.15</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 4.7: Areas of discrimination by position in United States of America

<table>
<thead>
<tr>
<th>CH/HD/DIR</th>
<th>DEAN</th>
<th>t-val</th>
<th>2 tail prob</th>
<th>CH/HD/DIR</th>
<th>DEAN</th>
<th>Variance</th>
<th>F-val</th>
<th>2 tail prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 68)</td>
<td>(n = 48)</td>
<td>2.42</td>
<td>0.97</td>
<td>0.34</td>
<td>(n = 68)</td>
<td>(n = 48)</td>
<td>.82</td>
<td>1.30</td>
</tr>
<tr>
<td>(n = 60)</td>
<td>(n = 49)</td>
<td>3.15</td>
<td>0.72</td>
<td>0.47</td>
<td>(n = 60)</td>
<td>(n = 49)</td>
<td>.40</td>
<td>1.06</td>
</tr>
<tr>
<td>(n = 68)</td>
<td>(n = 49)</td>
<td>3.21</td>
<td>1.25</td>
<td>0.22</td>
<td>(n = 68)</td>
<td>(n = 49)</td>
<td>.57</td>
<td>1.17</td>
</tr>
<tr>
<td>(n = 56)</td>
<td>(n = 36)</td>
<td>4.06</td>
<td>0.22</td>
<td>0.83</td>
<td>(n = 56)</td>
<td>(n = 36)</td>
<td>.22</td>
<td>1.02</td>
</tr>
<tr>
<td>(n = 35)</td>
<td>(n = 20)</td>
<td>3.83</td>
<td>0.26</td>
<td>0.79</td>
<td>(n = 35)</td>
<td>(n = 20)</td>
<td>.31</td>
<td>1.24</td>
</tr>
<tr>
<td>(n = 66)</td>
<td>(n = 49)</td>
<td>3.89</td>
<td>3.16</td>
<td>0.01</td>
<td>(n = 66)</td>
<td>(n = 49)</td>
<td>.45</td>
<td>1.10</td>
</tr>
<tr>
<td>(n = 59)</td>
<td>(n = 46)</td>
<td>3.61</td>
<td>2.68</td>
<td>0.01</td>
<td>(n = 59)</td>
<td>(n = 46)</td>
<td>.47</td>
<td>1.66</td>
</tr>
<tr>
<td>(n = 68)</td>
<td>(n = 50)</td>
<td>4.09</td>
<td>0.01</td>
<td>0.99</td>
<td>(n = 68)</td>
<td>(n = 50)</td>
<td>.45</td>
<td>1.52</td>
</tr>
<tr>
<td>(n = 64)</td>
<td>(n = 50)</td>
<td>3.66</td>
<td>1.87</td>
<td>0.064</td>
<td>(n = 64)</td>
<td>(n = 50)</td>
<td>.70</td>
<td>1.77</td>
</tr>
<tr>
<td>(n = 69)</td>
<td>(n = 50)</td>
<td>2.96</td>
<td>1.44</td>
<td>0.15</td>
<td>(n = 69)</td>
<td>(n = 50)</td>
<td>.87</td>
<td>1.02</td>
</tr>
</tbody>
</table>
Null Hypothesis 6

The hypothesis tested here is that there are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors and deans in institutions of higher education in India when their perceptions are compared on the following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

The analysis of data provided by the department executive officers vs deans for data collected from India is shown in Table 4.8.

Significant mean differences were found between department executive officers and deans regarding (1) male attitude, (2) competence, and (3) accomplishments.

The Null hypothesis that there was no significant difference between female department executive officers as compared to the female deans in higher education institutions in India regarding (1) male attitudes, (2) competence, and (3) accomplishments was rejected.
Table 4.8: Areas of discrimination by position (chairs, heads, directors of departments vs deans within India)

<table>
<thead>
<tr>
<th>Areas of Discrimination</th>
<th>CH/HD/DIR</th>
<th>DEAN</th>
<th>CH/HD/DIR</th>
<th>DEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Fringe (n = 169)</td>
<td>1.56</td>
<td>1.71</td>
<td>-0.78</td>
<td>0.44</td>
</tr>
<tr>
<td>Cultural &amp; Social Issues (n = 150)</td>
<td>2.97</td>
<td>3.12</td>
<td>-1.31</td>
<td>0.20</td>
</tr>
<tr>
<td>Male Attitudes (n = 168)</td>
<td>3.32</td>
<td>3.72</td>
<td>-2.28</td>
<td>0.02</td>
</tr>
<tr>
<td>Status (n = 99)</td>
<td>3.78</td>
<td>3.82</td>
<td>-0.35</td>
<td>0.73</td>
</tr>
<tr>
<td>Potential Barriers (n = 149)</td>
<td>3.95</td>
<td>3.90</td>
<td>0.54</td>
<td>0.59</td>
</tr>
<tr>
<td>Advancement (n = 164)</td>
<td>2.96</td>
<td>3.16</td>
<td>-1.17</td>
<td>0.25</td>
</tr>
<tr>
<td>Promotion (n = 144)</td>
<td>3.14</td>
<td>3.35</td>
<td>-1.13</td>
<td>0.26</td>
</tr>
<tr>
<td>Gender Discrimination (n = 170)</td>
<td>3.80</td>
<td>4.05</td>
<td>-1.49</td>
<td>0.14</td>
</tr>
<tr>
<td>Structure of the Institution (n = 159)</td>
<td>3.25</td>
<td>3.68</td>
<td>-2.09</td>
<td>0.04</td>
</tr>
<tr>
<td>Competence (n = 174)</td>
<td>3.26</td>
<td>3.89</td>
<td>-3.81</td>
<td>0.01</td>
</tr>
<tr>
<td>Accomplishments (n = 174)</td>
<td>3.26</td>
<td>3.89</td>
<td>-3.81</td>
<td>0.01</td>
</tr>
</tbody>
</table>
8: Areas of discrimination by position (chairs, heads, directors of departments vs deans within India)

<table>
<thead>
<tr>
<th>CH/HD/DIR</th>
<th>DEAN</th>
<th>t-val</th>
<th>2 tail prob</th>
<th>CH/HD/DIR</th>
<th>DEAN</th>
<th>Variance</th>
<th>F-val</th>
<th>2 tail prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 169)</td>
<td>(n = 27)</td>
<td>1.56</td>
<td>1.71</td>
<td>-0.78</td>
<td>0.44</td>
<td>(n = 169)</td>
<td>(n = 27)</td>
<td>.41</td>
</tr>
<tr>
<td>(n = 150)</td>
<td>(n = 24)</td>
<td>2.97</td>
<td>3.12</td>
<td>-1.31</td>
<td>0.20</td>
<td>(n = 150)</td>
<td>(n = 24)</td>
<td>.53</td>
</tr>
<tr>
<td>(n = 168)</td>
<td>(n = 25)</td>
<td>3.32</td>
<td>3.72</td>
<td>-2.28</td>
<td>0.02</td>
<td>(n = 168)</td>
<td>(n = 25)</td>
<td>.711</td>
</tr>
<tr>
<td>(n = 99)</td>
<td>(n = 21)</td>
<td>3.78</td>
<td>3.82</td>
<td>-0.35</td>
<td>0.73</td>
<td>(n = 99)</td>
<td>(n = 21)</td>
<td>.26</td>
</tr>
<tr>
<td>(n = 149)</td>
<td>(n = 25)</td>
<td>3.95</td>
<td>3.90</td>
<td>0.54</td>
<td>0.59</td>
<td>(n = 149)</td>
<td>(n = 25)</td>
<td>.23</td>
</tr>
<tr>
<td>(n = 164)</td>
<td>(n = 25)</td>
<td>2.96</td>
<td>3.16</td>
<td>-1.17</td>
<td>0.25</td>
<td>(n = 164)</td>
<td>(n = 25)</td>
<td>.65</td>
</tr>
<tr>
<td>(n = 144)</td>
<td>(n = 20)</td>
<td>3.14</td>
<td>3.35</td>
<td>-1.13</td>
<td>0.26</td>
<td>(n = 144)</td>
<td>(n = 20)</td>
<td>.59</td>
</tr>
<tr>
<td>(n = 170)</td>
<td>(n = 26)</td>
<td>3.80</td>
<td>4.05</td>
<td>-1.49</td>
<td>0.14</td>
<td>(n = 170)</td>
<td>(n = 26)</td>
<td>.67</td>
</tr>
<tr>
<td>(n = 159)</td>
<td>(n = 21)</td>
<td>3.25</td>
<td>3.68</td>
<td>-2.09</td>
<td>0.04</td>
<td>(n = 159)</td>
<td>(n = 21)</td>
<td>.81</td>
</tr>
<tr>
<td>(n = 174)</td>
<td>(n = 27)</td>
<td>3.26</td>
<td>3.89</td>
<td>-3.81</td>
<td>0.01</td>
<td>(n = 174)</td>
<td>(n = 27)</td>
<td>1.10</td>
</tr>
</tbody>
</table>
The mean regarding female perception of male attitude towards female department executive officers was 3.32 whereas the mean regarding female perception of male attitude towards female deans was .40 higher or 3.72.

The mean competence for female department executive officers was 3.25 whereas the mean competence for deans was .43 higher or 3.68.

The mean accomplishments for female department executive officers was 3.26 whereas accomplishments for female deans was .62 higher or 3.89.

No significant mean differences between department executive officers and deans were found regarding (1) salaries and fringe benefits, (2) cultural and social issues, (3) status, (4) potential barriers to advancement, (5) promotion possibilities, (6) gender discrimination, and (7) structure of the institution.

There was however, a significant difference in variance for the groups regarding (1) salaries and fringe benefits, (2) cultural and social issues, and (3) accomplishments. Due to this difference, the separate variance formula was used.

**Null Hypothesis 7**

The null hypothesis tested here is that there are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors in institutions of higher education Across India and United States of America when their perceptions are compared on the following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

The analysis of data collected for department executive officers by country (India vs United States) is shown in the Table 4.9.

Significant mean differences were found between female department executive officers in India and in their counterparts in the United States of America regarding (1) salaries and fringe benefits, (2) status, (3) promotion possibilities, (4) gender discrimination, (5) structure of the institution, (6) competence, and (7) accomplishments. Therefore the Null hypothesis was rejected.

The mean salaries and fringe benefits for Indian female chairs/heads/directors of departments was 1.56 whereas mean salaries and fringe benefits for female department executive officers in the United States was .86 higher or 2.42.

The mean status for female department executive officers in India was 3.78 whereas mean status for female chairs/head of departments/directors in the United States was .28 higher or 4.06.

The mean promotion possibilities for female department executive officers of departments in India was 2.96 whereas mean promotion possibilities for female department executive officers in the United States was .94 higher or 3.90.
Table 4.9: Areas of discrimination by position (chairs, heads and directors of departments) in India and U.S.A.

<table>
<thead>
<tr>
<th>Areas of Discrimination</th>
<th>CH/HD/DIR Mean (n = 169)</th>
<th>CH/HD/DR Mean (n = 68)</th>
<th>t-val</th>
<th>2 tail prob</th>
<th>CH/HD/DIR Mean (n = 168)</th>
<th>CH/HD/DR Mean (n = 68)</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Fringe</td>
<td>1.56</td>
<td>2.42</td>
<td>-7.13</td>
<td>0.01</td>
<td>1.56</td>
<td>2.42</td>
<td>0.41</td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural &amp; Social Issues</td>
<td>2.97</td>
<td>3.15</td>
<td>-1.64</td>
<td>0.10</td>
<td>2.97</td>
<td>3.15</td>
<td>0.53</td>
</tr>
<tr>
<td>Male Attitudes</td>
<td>3.32</td>
<td>3.21</td>
<td>0.87</td>
<td>0.39</td>
<td>3.32</td>
<td>3.21</td>
<td>0.71</td>
</tr>
<tr>
<td>Status</td>
<td>3.78</td>
<td>4.06</td>
<td>-3.34</td>
<td>0.01</td>
<td>3.78</td>
<td>4.06</td>
<td>0.26</td>
</tr>
<tr>
<td>Potential Barriers: Advancement</td>
<td>3.95</td>
<td>3.83</td>
<td>1.26</td>
<td>0.21</td>
<td>3.95</td>
<td>3.83</td>
<td>0.23</td>
</tr>
<tr>
<td>Promotion</td>
<td>2.96</td>
<td>3.89</td>
<td>-8.33</td>
<td>0.01</td>
<td>2.96</td>
<td>3.89</td>
<td>0.65</td>
</tr>
<tr>
<td>Possibilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender: Discrimination</td>
<td>3.14</td>
<td>3.61</td>
<td>-4.11</td>
<td>0.01</td>
<td>3.14</td>
<td>3.61</td>
<td>0.59</td>
</tr>
<tr>
<td>Structure of the Institution</td>
<td>3.80</td>
<td>4.08</td>
<td>-2.53</td>
<td>0.01</td>
<td>3.80</td>
<td>4.08</td>
<td>0.67</td>
</tr>
<tr>
<td>Competence</td>
<td>3.25</td>
<td>3.66</td>
<td>-3.14</td>
<td>0.01</td>
<td>3.25</td>
<td>3.66</td>
<td>0.81</td>
</tr>
<tr>
<td>Accomplishments</td>
<td>3.26</td>
<td>2.96</td>
<td>2.13</td>
<td>0.03</td>
<td>3.26</td>
<td>2.96</td>
<td>1.10</td>
</tr>
</tbody>
</table>
..as of discrimination by position (chairs, heads and directors of departments) in India and U.S.A.

<table>
<thead>
<tr>
<th>H/HD/DIR</th>
<th>CH/HD/DR</th>
<th>Mean</th>
<th>t-val</th>
<th>2 tail prob</th>
<th>Variance</th>
<th>F-val</th>
<th>2 tail prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 169)</td>
<td>(n = 68)</td>
<td>1.56</td>
<td>2.42</td>
<td>-7.13</td>
<td>0.01</td>
<td>.41</td>
<td>.82</td>
</tr>
<tr>
<td>(n = 150)</td>
<td>(n = 60)</td>
<td>2.97</td>
<td>3.15</td>
<td>-1.64</td>
<td>0.10</td>
<td>.53</td>
<td>.40</td>
</tr>
<tr>
<td>(n = 168)</td>
<td>(n = 68)</td>
<td>3.32</td>
<td>3.21</td>
<td>0.87</td>
<td>0.39</td>
<td>.71</td>
<td>.57</td>
</tr>
<tr>
<td>(n = 99)</td>
<td>(n = 56)</td>
<td>3.78</td>
<td>4.06</td>
<td>-3.34</td>
<td>0.01</td>
<td>.26</td>
<td>.22</td>
</tr>
<tr>
<td>(n = 149)</td>
<td>(n = 35)</td>
<td>3.95</td>
<td>3.83</td>
<td>1.26</td>
<td>0.21</td>
<td>.23</td>
<td>.31</td>
</tr>
<tr>
<td>(n = 164)</td>
<td>(n = 66)</td>
<td>2.96</td>
<td>3.89</td>
<td>-8.33</td>
<td>0.01</td>
<td>.65</td>
<td>.45</td>
</tr>
<tr>
<td>(n = 144)</td>
<td>(n = 59)</td>
<td>3.14</td>
<td>3.61</td>
<td>-4.11</td>
<td>0.01</td>
<td>.59</td>
<td>.47</td>
</tr>
<tr>
<td>(n = 170)</td>
<td>(n = 68)</td>
<td>3.80</td>
<td>4.08</td>
<td>-2.53</td>
<td>0.01</td>
<td>.67</td>
<td>.01</td>
</tr>
<tr>
<td>(n = 159)</td>
<td>(n = 64)</td>
<td>3.25</td>
<td>3.66</td>
<td>-3.14</td>
<td>0.01</td>
<td>.81</td>
<td>.70</td>
</tr>
<tr>
<td>(n = 174)</td>
<td>(n = 69)</td>
<td>3.26</td>
<td>2.96</td>
<td>2.13</td>
<td>0.03</td>
<td>1.10</td>
<td>.87</td>
</tr>
</tbody>
</table>
The mean gender discrimination for female department executive officers of departments in India was 3.14 whereas mean gender discrimination for female department executive officers in the United States was .47 higher or 3.61.

The mean structure of the institution for female department executive officers in India was 3.80 whereas mean structure of the institution for female department executive officers in United States was .28 higher or 4.08.

The mean competence for female department executive officers in India was 3.25 whereas mean competence for female department executive officers for United States was .41 higher or 3.66.

The mean accomplishments for female department executive officers in India was 3.26 whereas female department executive officers for United States was .31 lower or 2.96.

No significant mean difference was found between female department executive officers in India and female department executive officers in United States regarding (1) cultural social issues, (2) male attitudes, and (3) potential barriers to advancement.

However, significant difference in variance for the groups regarding salaries and fringe benefits. Therefore a separate variance formula was used.

Null Hypothesis 8

The null hypothesis here is that there are no significant differences regarding discrimination between those female administrators categorized as deans in institutions of higher education Across India and United States of America when their perceptions
are compared on the following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

The analysis of the data supplied by the deans from both the countries (India vs United States) is shown in the table 4.10.

Significant mean differences were found between female deans in India and female deans in the United States regarding (1) salaries and fringe benefits, (2) male attitudes, and (3) accomplishments. Therefore, the null hypothesis was rejected.

The mean salaries and fringe benefits for female deans in India was 1.71 whereas mean salaries and fringe benefits for deans in the United States was .93 higher or 2.64.

The mean value regarding female perception of male attitudes towards them for females in India was 3.72 whereas mean value regarding female perception of male attitudes towards female deans in United States was .69 lower or 3.03.

The mean accomplishments for female deans in India was 3.89 whereas mean
Table 4.10: Areas of discrimination by position (deans) India vs United States

<table>
<thead>
<tr>
<th>Areas of Discrimination</th>
<th>Mean (n = 27)</th>
<th>t-val</th>
<th>2 tail prob</th>
<th>Variance (n = 27)</th>
<th>F-val (n = 48)</th>
<th>2 tail prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Fringe Benefits</td>
<td>1.71</td>
<td>2.26</td>
<td>-2.68</td>
<td>0.01</td>
<td>.93</td>
<td>.64</td>
</tr>
<tr>
<td>Cultural &amp; Social Issues</td>
<td>3.12</td>
<td>3.06</td>
<td>0.41</td>
<td>0.68</td>
<td>.22</td>
<td>.38</td>
</tr>
<tr>
<td>Male Attitudes</td>
<td>3.72</td>
<td>3.03</td>
<td>3.62</td>
<td>0.01</td>
<td>.47</td>
<td>.66</td>
</tr>
<tr>
<td>Status</td>
<td>3.82</td>
<td>4.03</td>
<td>-1.66</td>
<td>0.10</td>
<td>.24</td>
<td>.21</td>
</tr>
<tr>
<td>Potential Barriers Advancement</td>
<td>3.89</td>
<td>3.87</td>
<td>0.12</td>
<td>0.90</td>
<td>.16</td>
<td>.39</td>
</tr>
<tr>
<td>Promotion Possibilities</td>
<td>3.16</td>
<td>3.48</td>
<td>-1.71</td>
<td>0.09</td>
<td>.77</td>
<td>.50</td>
</tr>
<tr>
<td>Gender Discrimination</td>
<td>3.35</td>
<td>3.21</td>
<td>0.64</td>
<td>0.53</td>
<td>.39</td>
<td>.78</td>
</tr>
<tr>
<td>Structure of the Institution</td>
<td>4.05</td>
<td>4.08</td>
<td>-0.15</td>
<td>0.88</td>
<td>.57</td>
<td>.68</td>
</tr>
<tr>
<td>Competence</td>
<td>3.68</td>
<td>3.36</td>
<td>1.45</td>
<td>0.15</td>
<td>.60</td>
<td>.77</td>
</tr>
<tr>
<td>Accomplishments</td>
<td>3.89</td>
<td>2.71</td>
<td>5.63</td>
<td>0.01</td>
<td>3.05</td>
<td>.89</td>
</tr>
</tbody>
</table>
Table 4.10: Areas of discrimination by position (deans) India vs United States

<table>
<thead>
<tr>
<th>Categorization</th>
<th>DEANS (n = 27)</th>
<th>DEANS (n = 48)</th>
<th>t-val</th>
<th>2 tail prob</th>
<th>DEANS (n = 27)</th>
<th>DEANS (n = 48)</th>
<th>Variance</th>
<th>F-val</th>
<th>2 tail prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>crime</td>
<td>1.71</td>
<td>2.26</td>
<td>-2.68</td>
<td>0.01</td>
<td>.93</td>
<td>.64</td>
<td>.93</td>
<td>1.46</td>
<td>0.25</td>
</tr>
<tr>
<td>Social</td>
<td>(n = 24)</td>
<td>(n = 49)</td>
<td>.312</td>
<td>0.41</td>
<td>0.68</td>
<td>.22</td>
<td>.38</td>
<td>1.71</td>
<td>0.16</td>
</tr>
<tr>
<td>des</td>
<td>(n = 25)</td>
<td>(n = 49)</td>
<td>3.72</td>
<td>3.03</td>
<td>3.62</td>
<td>0.47</td>
<td>.66</td>
<td>1.41</td>
<td>0.36</td>
</tr>
<tr>
<td>(n = 21)</td>
<td>(n = 36)</td>
<td>(n = 24)</td>
<td>3.82</td>
<td>4.03</td>
<td>-1.66</td>
<td>.24</td>
<td>.21</td>
<td>1.11</td>
<td>0.76</td>
</tr>
<tr>
<td>(n = 25)</td>
<td>(n = 20)</td>
<td>(n = 25)</td>
<td>3.89</td>
<td>3.87</td>
<td>0.12</td>
<td>0.16</td>
<td>0.39</td>
<td>2.46</td>
<td>0.04</td>
</tr>
<tr>
<td>(n = 25)</td>
<td>(n = 49)</td>
<td>(n = 20)</td>
<td>3.16</td>
<td>3.48</td>
<td>-1.71</td>
<td>0.09</td>
<td>.77</td>
<td>.50</td>
<td>1.55</td>
</tr>
<tr>
<td>(n = 20)</td>
<td>(n = 46)</td>
<td>(n = 25)</td>
<td>3.35</td>
<td>3.21</td>
<td>0.64</td>
<td>0.53</td>
<td>.39</td>
<td>.78</td>
<td>2.00</td>
</tr>
<tr>
<td>(n = 26)</td>
<td>(n = 50)</td>
<td>(n = 20)</td>
<td>4.05</td>
<td>4.08</td>
<td>-0.15</td>
<td>0.88</td>
<td>.57</td>
<td>.68</td>
<td>1.19</td>
</tr>
<tr>
<td>(n = 21)</td>
<td>(n = 50)</td>
<td>(n = 26)</td>
<td>3.68</td>
<td>3.36</td>
<td>1.45</td>
<td>0.15</td>
<td>.60</td>
<td>.77</td>
<td>1.28</td>
</tr>
<tr>
<td>(n = 27)</td>
<td>(n = 50)</td>
<td>(n = 27)</td>
<td>3.89</td>
<td>2.71</td>
<td>5.63</td>
<td>0.01</td>
<td>3.05</td>
<td>.89</td>
<td>1.60</td>
</tr>
</tbody>
</table>


accomplishments for deans in United States was 1.18 lower or 2.71.

No significant mean difference was found between female deans in India and female deans in United States of America regarding (1) cultural and social issues, (3) potential barriers to advancement, (4) gender discrimination, (5) structure of the institution, and (6) competence.

However, significant difference in variance for the groups regarding promotion possibilities was found. Therefore a separate variance formula was used.
CHAPTER 5. SUMMARY AND CONCLUSIONS

The purpose of this chapter is to summarize the results of the study, draw conclusions based upon the findings and present recommendations.

Restatement of the Problem

Problem of the study is to investigate the discrimination variables which distinguish female department chairs, heads, directors and deans in colleges and universities within Higher Educational Institutions in India and the United States of America.

Summary of the Findings of the Study

Table 5.1 presents pertinent categories with the largest frequencies and their respective percentages for India and the United States derived from the data collected.

As revealed by the Table (4.9) of frequencies, female administrators included in this study from India and United States of America have different demographic characteristics in some respects. For example, in India more females were found holding position of head of departments. The position of chair was not frequently found in the higher education institutions in India. Position of directors were mostly found in Medical Colleges or other technical higher education institutions. In some
colleges the title of ‘teacher in-charge’ was used for head of the departments. This
distinction was not pointed out in the books from where the names and addresses of
female administrators were obtained.

Data collected from the United States of America revealed a larger frequency of
those female administrators who held the position of chairs.

Fewer women included in the sample of this study held the position of deans in
India.

Largest number of female administrators included in this study were married, had
earned Ph.D. degrees, were 50 or over in age, had spent 1 to 3 years in their present
position, had spent 25 to 27 years in the profession and worked in co-education small
size colleges and universities.

In India, the largest number of females included in this sample worked in depart-
ment of Languages, whereas in United States, the largest number of female adminis-
trators worked in the department of Education.

Table 5.1: Largest frequencies and their % for India and the United States

<table>
<thead>
<tr>
<th>Variable/Category</th>
<th>Freq.</th>
<th>%</th>
<th>Freq.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INDIA</td>
<td></td>
<td>U.S.A.</td>
<td></td>
</tr>
<tr>
<td>Depart Head</td>
<td>152</td>
<td>73.8%</td>
<td>45</td>
<td>37.5%</td>
</tr>
<tr>
<td>Dean</td>
<td>27</td>
<td>13.1%</td>
<td>50</td>
<td>41.7%</td>
</tr>
<tr>
<td>Married</td>
<td>143</td>
<td>69.4%</td>
<td>61</td>
<td>50.8%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>100</td>
<td>48.5%</td>
<td>84</td>
<td>70.0%</td>
</tr>
<tr>
<td>50 or over age</td>
<td>71</td>
<td>34.5%</td>
<td>69</td>
<td>57.5%</td>
</tr>
<tr>
<td>25 to 27 yrs in prof</td>
<td>29</td>
<td>14.1%</td>
<td>15</td>
<td>12.5%</td>
</tr>
<tr>
<td>1 to 3 yrs in pre. pos.</td>
<td>65</td>
<td>31.6%</td>
<td>26</td>
<td>21.7%</td>
</tr>
<tr>
<td>Co-educ. small inst.</td>
<td>98</td>
<td>47.6%</td>
<td>48</td>
<td>40.0%</td>
</tr>
<tr>
<td>Rs. 48,000 to 59,999</td>
<td>53</td>
<td>25.7%</td>
<td>45</td>
<td>37.5%</td>
</tr>
<tr>
<td>English/Hindi</td>
<td>39</td>
<td>18.9%</td>
<td>23</td>
<td>19.2%</td>
</tr>
</tbody>
</table>
Findings of Relationships Between Various Categories

Restatement of Null Hypothesis 1

It was hypothesized that there was no significant relationship between various categories represented in the demographic information collected from female administrators in India and the United States of America.

Table 5.2 presents some of the characteristics of female administrators in India and the United States as findings of the analysis of relationship between various categories and country revealed.

Table 5.2: Characteristics of female administrators

<table>
<thead>
<tr>
<th>Female administrators are significantly more likely to:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDIA</strong></td>
<td><strong>U.S.A.</strong></td>
</tr>
<tr>
<td>1. Be Department Executive Officers</td>
<td>1. Be Deans</td>
</tr>
<tr>
<td>2. Earn Masters or 'other' deg.</td>
<td>2. Earn Ph.D. or Ed.D.</td>
</tr>
<tr>
<td>4. Be married</td>
<td>4. Be Divorcee or Widow</td>
</tr>
<tr>
<td>5. Be 35 years or less in age</td>
<td>5. Be 50 or over in age.</td>
</tr>
<tr>
<td>7. Work less than 31 years</td>
<td>7. Work 31 or more years</td>
</tr>
</tbody>
</table>

The analysis of relationship between various categories included in demographic information and their relation with the country of origin of the female administrators revealed that female administrators in India were significantly more likely to hold positions of department executive officers rather than as deans of a college.

The findings of relationships among various categories and country also revealed that in India, females were more likely to occupy the position of head of the department with only Masters degree or degrees included under 'other' (Post Doc., M.D.,
or M.Phil.). They are more likely to work in the departments of History, Humanities, Behavioral Science, Geography, Economics, Sociology, Political Science, Languages, Philosophy, and Anthropology. They were more likely to be married and are younger than their counterparts in the United States of America when they get to the administrative positions (35 years old or younger). They were more likely to work in all men's or all women's college or university and are more likely to have spent less than 31 years in the profession.

A review of the findings of relationship between various categories and the female administrators in the United States, showed that the female administrators were more likely to occupy the position of deans as compared to India. They were more likely to have earned a Ph.D. or Ed.D. degrees, work in departments of Education, Home Economics, Nursing and Psychology. They were more likely to be 50 years old or older, more likely to work in co-educational institutions and were more likely to spend more than 31 years in the profession.

The finding that female administrators in India were more likely to work as department executive officers rather than deans as compared to the United States can be attributed to some extent to the larger number of department executive officers (175) included in the sample from India and very small number of deans (27). Whereas in the sample selected from the United State, there were 50 females holding the position of deans and 69 female holding the position of department executive officers. Further, the finding that female administrators are 35 years or less in age should be considered in the light of (1) the position they hold, i.e., department executive officers as compared to female deans in the United States who are 50 years old or
over. The position of dean is a senior one, and therefore requires more experience and consequently older women are found in this position. (2) Moreover, in India the position of chairs/heads of a departments and deans are of a rotating nature shared by each faculty according to seniority for the duration of 1 to 3 years. (3) In India, the position of director is found only in medical colleges and other technical institutions and that the position of a director in these institutions is not a revolving one. This means that once an individual is appointed as director he/she holds this office until the next promotion or retirement. (4) Retirement age in India is also different from the United States. In India retirement age for faculty as well as administrative officers is sixty. (5) Promotion and salary increases in India are bestowed upon individuals according to experience and position. After spending a certain number of years in a position one is automatically eligible for promotion and salary increase.

The findings of the study indicated that female administrators in India worked in a variety of departments as compared to their counterparts in the United States. Female administrators in India were more likely to work in the departments of Languages, History, Geography, Political Science, Economics, Anthropology, Philosophy, Sociology, etc., as compared to the female administrators in the United States who were more likely to work in departments of Education, Nursing, Home Economics and Psychology. This finding can be attributed, in part, to the sample included in this study. India had a larger sample size; therefore it is possible that female administrators from different departments got included in the sample.

Table 5.3 displays some of the other significant relationships between female administrators occupying the positions of chairs, heads, directors of departments and
deans as well as various other categories.

Table 5.3: Characteristics of female administrators

<table>
<thead>
<tr>
<th>DEANS</th>
<th>CHAIRS/HEADS/DIRECTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Earn Ph.D. or Ed.D. degree</td>
<td>1. Earn 'Other' degrees</td>
</tr>
<tr>
<td>2. Work in dept. included in Home Ec.</td>
<td>2. Work in dept included in Science</td>
</tr>
<tr>
<td>3. Be 50 years or older in age</td>
<td>3. Be less than 35 years old</td>
</tr>
<tr>
<td>5. Spend more than 21 yrs in prof.</td>
<td>5. Spend 1 to 21 yrs in prof.</td>
</tr>
</tbody>
</table>

Findings of the relationship between position and various categories revealed that deans were more likely to have earned a Ph.D. or Ed.D. degree, were more likely to work in departments of Home Economics, Nursing, Education and Psychology, are 50 years or older in age, were more likely to work in co-educational institutions and were more likely to spend more than 21 years in the profession. As compared to females holding the position of Deans, females in the position of department executive officers were more likely to have earned ‘other’ degrees, were more likely to work in departments of Computer Science, Mathematics, Microbiology, Gynecology, Biochemistry, Botany, Physics, Zoology, and Medicine, were less than 35 years of age, worked in all women’s colleges or universities and had spent 1 to 21 years in the profession.

In addition to these significant characteristics, female chairs, heads or directors were significantly more likely to work in all men’s or women’s college or university with 1 to 21 years in the profession, and earned master’s degree. They were also significantly more likely to have earned an annual salary of Rs. 48,000 ($3,000) to Rs. 71,999 ($4499.9375) if they worked in an all men’s or all women’s college or university.
in India. Female deans in the United States of America were significantly more likely to have earned an annual salary of $50,000 to $60,000 or more in the United States.

Table 5.4 present the summary of the findings analyzed in response to hypothesis 2 to hypothesis 8.

Restatement of Hypothesis 2

All female administrators collectively (American and Indian) will not perceive discrimination favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their Higher Education Institution.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Based on the analysis of the data reported in Table 4.2 it was concluded that there was adequate evidence to reject the null hypothesis concerning three areas of discrimination. Female administrators in both the countries (department executive
Table 5.4: Discrimination perceived by female administrators as the findings of hypothesis two to eight indicate (represented by areas of discrimination)

<table>
<thead>
<tr>
<th>Areas of Dis.</th>
<th>COMBINED</th>
<th>U.S.A</th>
<th>INDIA</th>
<th>U.S.A</th>
<th>INDIA</th>
<th>CHAIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Fringe Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural &amp; Social Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Potential Barriers Advancement</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion Possibilities</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Gender Discrimination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Structure of the Institution</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomplishments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>**</td>
</tr>
</tbody>
</table>

**Significant at .01 Alpha level.
*Significant at .05 Alpha level.
Discrimination perceived by female administrators as the findings of hypothesis two to eight indicate (represented by areas of discrimination)

<table>
<thead>
<tr>
<th><strong>MBINED</strong></th>
<th><strong>U.S.A</strong></th>
<th><strong>INDIA</strong></th>
<th><strong>U.S.A</strong></th>
<th><strong>INDIA</strong></th>
<th><strong>CHAIR</strong></th>
<th><strong>DEANS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

* p level.
** p level.
officers and the deans) perceived discrimination regarding (1) Status, (2) Potential barriers to advancement, and (3) Structure of the institution.

Restatement of Null Hypothesis 3

American female administrators will not perceive discrimination (see area below) favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.

5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Based on the analysis of data reported in Table 4.3 it was concluded that there was adequate evidence to reject the null hypothesis concerning four areas of discrimination. Female administrators (department executive officers and the deans) in United States of America perceived discrimination regarding (1) Status, (2) Potential barriers to advancement, (3) Promotion possibilities, and (4) Structure of the
institution.

Restatement of Null Hypothesis 4

Indian female administrators will not perceive discrimination (see areas below) favoring their male counterparts (score less than or equal to 3.5 on discrimination scale) to occur within their higher education institutions.

Areas of discrimination to be studied included:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Based on the analysis of the data reported in Table 4.4, it was concluded that there was adequate evidence to reject the null hypothesis concerning three areas of discrimination. Female administrators (department executive officers and deans) in India perceived discrimination regarding (1) Status, (2) Potential barriers to advancement, and (3) Structure of the institution.
Restatement of Null Hypothesis 5

There are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors and deans in institutions of higher education in United States of America when their perceptions are compared on following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Based on the analysis of the data reported in Table 4.5 it was concluded that there was adequate evidence to reject the null hypothesis concerning two areas of discrimination. The analysis of department executive officers vs deans in United States revealed that female department executive officers perceived discrimination to a greater extent as compared to female deans regarding (1) Promotion possibilities, and (2) gender related discrimination.
Restatement of Null Hypothesis 6

There are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors and deans in institutions of higher education in India when their perceptions are compared on the following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Based on the analysis of the data reported in Table 4.6, it was concluded that there was adequate evidence to reject the null hypothesis concerning three areas of discrimination. The findings of the analysis of department executive officers vs deans in India revealed that female deans in India perceived discrimination regarding (1) Male attitude, (2) Competence, and (3) Accomplishments to a greater extent as compared to department executive officers.
Restatement of Null Hypothesis 7

There are no significant differences regarding discrimination between those categorized as chairs/head of departments/directors in institutions of higher education across India and United States of America when their perceptions are compared on the following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Based on the analysis of the data reported in Table 4.7, it was concluded that there was adequate evidence to reject the null hypothesis concerning seven areas of discrimination. The analysis of department executive officers for India vs United States revealed that female department executive officers in United States perceived discrimination regarding (1) Salary and fringe benefits, (2) Status, (3) Promotion possibilities, (4) Gender discrimination, (5) Structure of the institution, (6) Competence, and (7) Accomplishments to a greater extent as compared to their counterpart in India.
Female department executive officers in India perceived discrimination regarding accomplishments to greater extent as compared to their counterparts in United States.

**Restatement of Null Hypothesis 8**

There are no significant differences regarding discrimination between those female administrators categorized as deans in institutions of higher education across India and United States of America when their perceptions are compared on the following areas:

1. Salaries and Fringe Benefits.
2. Cultural and Social Issues.
3. Male Attitudes.
5. Potential Barrier to Advancement.
6. Promotion Possibilities.
10. Accomplishments.

Based on the analysis of data reported in Table 4.8, it was concluded that there was adequate evidence to reject the null hypothesis concerning two areas of discrimination. The analysis of Deans for India vs United States revealed that female deans in India perceived discrimination to a greater extent as compared to their counterparts in the United States regarding (1) Male attitudes, and (2) Accomplishments.
Whereas female deans in United States perceived discrimination regarding salaries and fringe benefits to a greater extent as compared to their counterpart in India.

Conclusion

1. Results of the study indicated that female administrators collectively (India and U.S.A.) perceived discrimination regarding (1) status, (2) potential barriers to advancement, and (3) structure of the institution.

2. Female administrators in U.S.A. perceived discrimination regarding (1) status, (2) potential barriers to advancement, (3) promotion possibilities, and (4) structure of the institution.

3. Female administrators in India perceived discrimination regarding (1) status, (2) potential barriers to advancement, and (3) structure of the institution.

4. Female deans vs department executive officers working in U.S.A. perceived discrimination regarding (1) promotion possibilities, and (2) gender discrimination.

5. Female deans vs department executive officers working in India perceived discrimination regarding (1) male attitude, (2) competence, and (3) accomplishment.

6. Female department executive officers for India vs U.S.A. perceived discrimination regarding (1) salary and fringe benefits, (2) status, (3) promotion possibilities, (4) gender discrimination, (5) structure of the institution, (6) competence, and (7) accomplishment.
7. Female deans for India vs U.S.A. perceived discrimination regarding (1) salary and fringe benefits, (2) male attitudes, and (3) accomplishments.

Recommendations

Studies on women as administrators remain unexplored, especially those in India. Some studies on women in managerial positions in industries and government do exist which were used to draw some understanding of female administrators in the higher education institutions in India. Little is actually known about female's behavior, perception and responsibilities in position of academic administration in India.

Replication of this study in other countries in the Indian subcontinent (i.e., Pakistan, Bangladesh, Sri Lanka) would probably produce similar results.

A comparative study of female administrators in different regions of India could yield useful results. For example as indicated by some of the respondents of this study from India, a lot of differences exist in the socialization process of females in the South as compared with the North. Replication of this study to compare different regions would present some interesting findings.

There is a need to analyze the structure within which higher education leadership arises and operates. Research on ways in which the structure of the institutions of higher education influences the development of women in their role as students, faculty and administrators is required.

Women need to see more role models to encourage them to pursue administrative careers. More studies of women's experiences at various times and places in history should be done extensively.
Replication of this study on ethnic minority women in the United States would probably produce interesting results.
BIBLIOGRAPHY


173


MATHUR, Y.B. (1973). *Women’s Education in India (1813-1966)*. School of Correspondence Courses and Continuing Education University of Delhi, India: Asia Publishing House.


Dear Madam:

Miss Rajni Bhatnagar is a Ph.D. student at Iowa State University. She is writing her dissertation on Discrimination faced by female administrators (Department Executive Officers and Deans) in Higher Education Institutions in India and in the United States of America. It is a comparative study. The data for this study will be gathered from the responses to the enclosed questionnaire. The subjects of this study are female administrators. The subjects of this study are female administrators in colleges or universities in India or in the United States.

Your name was randomly selected with the help of computer from the list of female administrators in all higher educational institutions in the United States of America. Three hundred questionnaires are being mailed to female administrators in various colleges and universities all over India and 200 in the United States of America. Each questionnaire will be coded with a number known only to the researcher to facilitate follow-up procedures. Your responses and viewpoints will be kept confidential and will not be revealed in the findings. Only group data analysis will be reported.

A stamp is already affixed at the back of the questionnaire booklet with the printed return address. Simply respond to the statements, staple the booklet on
both sides indicated and mail.

Your cooperation will be very much appreciated. Please respond and mail this questionnaire by August 15.

Thanking You.

Sincerely

____________________

Major Professor
Dr. William D. Wolansky
(Coordinator & Prof. Intl. Education)

____________________

Rajni Bhatnagar
APPENDIX B. INSTRUMENT USED FOR THE STUDY

Summer 1989

A Note to Respondents

This questionnaire is designed to compare discrimination faced by women administrators (Head of the Departments, Chair persons, and Deans) in educational institutions in India and in the U.S.A. Ten areas of discrimination are identified from existing literature on the subject. This study will attempt to investigate whether the status of females in administrative positions in both of these countries is any different? If so, in what aspect is it different? What kind of barriers do women face in both of these countries when they aspire for administrative positions?

It is felt that women in administrative positions are the best source for this study and also best role models for the future female aspirants to administrative positions. Your name was randomly selected with the help of computer.

Each questionnaire is coded with a number known only to the researcher to facilitate follow-up procedures. Your questionnaire will remain strictly confidential and after the data is recorded for statistical analyses, the questionnaire will be destroyed. Your name will not be associated with the summarized data.

The information received through your cooperation will be published as Ph.D.
dissertation. Your prompt attention will be appreciated. Thank you for your cooperation in this important effort.
Part I.

Please answer the following questions:

1. What administrative position do you presently hold?

   ____________ Chairperson __ Dept. Head __
   Director ____ Dean ____.

2. Please list the department or college of which you are in-charge.

   ________________________________

3. Current marital status:  
   a. ____ Single    b. ____ Married
   c. ____ Divorced  d. ____ Widow

4. Your highest degree:

   ________________________________

5. Total number of years spent in the profession.

   ________________________________

6. Number of years (including this year) you have spent in your present position.

   ________________________________

   a. ____ less than 29    b. ____ 30 to 35

7. Your age:  
   c. ____ 36 to 40    d. ____ 41 to 45
   e. ____ 46 to 50    f. ____ 50 and over

8. Your salary is:

   a. ____ Less than $34,999    b. ____ $35,000 to $39,999
   c. ____ $40,000 to $44,999   d. ____ $45,000 to $49,999
   e. ____ $50,000 to $54,999   f. ____ $55,000 to $59,999
   g. ____ $60,000 or above

9. Please check one designation that best describes your institution:

   a. ____ an all women's college or university.
   b. ____ an all men's college or university.
   c. ____ a co-educational small size college/university (10,000 or less students).
   d. ____ a co-educational medium size college/university (10,001 to 15,000 students).
   e. ____ a co-educational large size college/university (15,001 students or more).
Part II.
Please express your perception about the current status of affairs or conditions in your country (i.e., do you think this is really happening/not happening generally ............)

Please respond to the statements using the following response modes:

1 = ‘Strongly Disagree’  2 = ‘Disagree’
3 = ‘Neutral/undecided’  4 = ‘Agree’
5 = ‘Strongly Agree’

* Some of the items have more than one part, Please respond to all the parts.

Salaries and Fringe Benefits

For both male and female administrators, there is equity in

10. ___ salaries received ............. 1 2 3 4 5
11. ___ fringe benefits received ............. 1 2 3 4 5
12. ___ retirement provisions ............. 1 2 3 4 5
13. ___ group life insurance ............. 1 2 3 4 5
14. ___ disability benefits ............. 1 2 3 4 5
15. ___ sick leave ............. 1 2 3 4 5

Cultural/Social Issues

Some women do not aspire to administrative positions because ............

16. ___ they are aware that they might not be accepted as superior by men & therefore consider it not worth their efforts to change their life style ............. 1 2 3 4 5
17. ___ they are aware that double standards are applied in their selection procedures ............. 1 2 3 4 5
18. ___ of the fear of losing femininity... 1 2 3 4 5
19. ___ of the fear of being regarded as social deviants ............. 1 2 3 4 5
20. ___ they themselves accept and believe in the legitimacy of their inferior status ............. 1 2 3 4 5
21. ____ of lack of encouragement at home or at work to aspire for up-word mobility ......... 1 2 3 4 5

22. ____ of lack of role models (if women are not present in high positions, the absence of such a model would suggest that those positions are only for men) 1 2 3 4 5

23. ____ lack of confidence because of the kind of socialization they receive, beginning with their childhood ......... 1 2 3 4 5

24. ____ lack of equal opportunity to receive formal preparation for administrative positions ......... 1 2 3 4 5

25. they do not want promotions or job changes that add to their load (time demanding) ......... 1 2 3 4 5

26. Women are more critical, than men, or those women who aspire for an administra tive positions ......... 1 2 3 4 5

27. Women are reluctant to call attention to mistakes of men because of the socialization process ......... 1 2 13 4 5

28. Working women are expected to be as committed to their job as men and at the same time give priority to their family ......... 1 2 3 4 5

29. Working women are expected to devote much energy to their work and their spouses are expected to carry the family responsibilities ......... 1 2 3 4 5

30. The wife is seen as an extension of the husband, thus expected to have her life shaped by the demands of his employment 1 2 3 4 5
31. Society rewards the male who is stereotypically masculine and takes a leadership position, but it regards the female who tries to be successful and independent in a man’s world as ‘deviant’ 1 2 3 4 5

Male Attitudes

Most men seem to think that ___

32. ____ women can’t be superior to men ... 1 2 3 4 5
33. ____ a woman’s place is at home ....... 1 1 3 4 5
34. ____ women bosses are not be taken seriously 1 2 3 4 5
35. ____ women make terrible bosses ....... 1 2 3 4 5

36. Women often experience the situation where job specifications & requirements for a given position change when women apply for that particular position ....... 1 2 3 4 5

37. If a woman fails to measure up to the expectations of a position, this will be regarded as a proof that women in general are not capable of handling such a position .......... 1 2 3 4 5

38. If a woman succeeds she is seen as an exceptional person .......... 1 2 3 4 5

Status

39. The Higher women advance in administrative positions the fewer are the opportunities to observe role models (women in similar or superior positions) .......... 1 2 3 4 5

40. Women in top administrative positions are likely to feel isolated ....... 1 2 3 4 5
If you circled "5" (I strongly agree) or "4" (I agree) please continue, otherwise skip to item no. 45

Women in top administrative positions feel isolated because 

41. ___ of their small number in the administrative positions ... 

42. ___ their male counterparts prefer to be surrounded by other male colleagues ............. 

43. ___ other women in lower positions might not interact freely with them ... 

44. Feelings of isolation may also lead to persistent awareness of not 'fitting in' ............. 

45. As the administrative positions get higher, there are fewer and fewer married female administrators in such high level administrative positions ... 

46. Women, because of their very small number in administrative positions, do not have access to a parallel organizational structure comparable to 'old boy network' ............. 

47. Women administrators, who are new in their positions, are more apt to be treated as tokens or representatives of their class .............
Potential Barriers to Advancement

48. Working women have constraints on physical mobility (not being able to stay out late, not being able to travel to conferences & field trips as often or as freely as men etc.) ...... 1 2 3 4 5

* If you circled “5” (I strongly agree) or “4” (I agree) please continue, otherwise skip to item no. 55.

Women have restrictions on physical mobility because of

49. ______ family responsibility ...... 1 2 3 4 5
50. ______ social pressures ...... 1 2 3 4 5
51. ______ safety reasons ...... 1 2 3 4 5
52. ______ their superiors not providing them equal opportunities to be mobile. 1 2 3 4 5

53. Women also have restrictions on physical mobility in not being able to move to places where there are better job opportunities because of their husbands’ place of employment ...... 1 2 3 4 5

54. Restrictions regarding physical mobility hinder the professional advancement of women & provide an added advantage to men ...... 1 2 3 4 5

Promotion Possibilities

55. Women spend more years in lower administrative positions than men ...... 1 2 3 4 5
56. Men have a strong support base in the 'old boy network'; hence administrative candidates must have visibility & contacts with 'the old boy network' to be included with those promoted ... 1 2 3 4 5

57. The higher the women advance in administrative positions the fewer are the chances of promotion ...... 1 2 3 4 5

58. Women are generally older than their male counterparts when they reach top administrative positions ...... 1 2 3 4 5

59. Policies regarding equity of access to promotions are generally not enforced ... 1 2 3 4 5

60. The existence of the so called "old boy network" prevents women from obtaining top administrative positions ...... 1 2 3 4 5

**Nature of Gender Discrimination**

Chief Administrators assert that women administrators are paid less because ____

61. ____ men are involved to a greater extent in research & administrative task than women ...........

62. ____ their salaries are considered supplementary to their husband's income ...........

Women are often rejected for administrative positions on the pretext that ...

63. ____ qualified women are simply not available ...........

64. ____ they lack experience in administration ...........

65. ____ they are too emotional to make sound decisions ...........
66. ___ administrative jobs are stressful and women can’t handle stress to the same extent as men .......... 1 2 3 4 5
67. ___ they lack commitment to career because of their family responsibilities 1 2 3 4 5
68. ___ family responsibilities will interfere with professional activities, consequently resulting in a lower quality of work .......... 1 2 3 4 5
69. ___ if they marry they will probably relocate with their mobile husbands ... 1 2 3 4 5
70. ___ if they have children, while they are employed, they might resign or ask for sick leave .......... 1 2 3 4 5
71. ___ a man’s special characteristics are required for the new position ... 1 2 3 4 5
72. Men tend to advance faster with less experience simply because they are men ... 1 2 3 4 5

The higher women advance in administrative positions the greater are the ___ barriers to their success ....... 1 2 3 4 5
74. ___ chances of less qualified men being selected for the position ....... 1 2 3 4 5
75. ___ number of unadvertised positions and missing job descriptions making it more difficult for women to be aware of such job openings or job requirements. 1 2 3 4 5
76. When unemployment increases, exclusion of women becomes a selection tool ... 1 2 3 4 5
77. Women are not viewed by society as decision makers ............. 1 2 3 4 5
78. If a woman leaves a meeting early or requests a change in meeting time, colleagues assume that she must attend to children or a household matter ...

79. When a man leaves a meeting early or requests a change in meeting time, assumption is that he has some important matter to attend to, & that his request is thus more justified ......

80. When a man takes on a family responsibility, especially if he is widowed, or divorced, he is more often praised for doing so, and there are far more accommodations to his needs than to women with the same responsibilities

Structure/hierarchy of Institution

81. Women are most likely to be selected for administrative position in what is called "Humanities or Social Sciences" (i.e. Arts, Home Economics, Nursing, Liberal Arts, Education etc.)......

82. Fewer women are usually selected for administrative positions in fields like Engineering and Natural Sciences ...

83. More women administrators are found in all women's colleges & universities than in co-educational institutions ...

Competence

Women in administrative position ____

84. ____ are often ignored during important discussions .............
85. ___ are excluded from an informal system of collegial relationships (i.e. meeting at tennis court or country clubs etc.) information sharing and decision making ........ 1 2 3 4 5
86. ___ are given more responsibility than authority ............ 1 2 3 4 5
87. ___ have difficulty establishing early credibility ............... 1 2 3 4 5
88. ___ have to work twice as hard as their male counterparts in order to succeed. 1 2 3 4 5
89. ___ find it difficult to receive recognition ................. 1 2 3 4 5
90. ___ have to make a special effort and be assertive to be taken seriously by their male colleagues ............ 1 2 3 4 5

91. Any administrative position a woman holds is downgraded the moment she has proved she can handle it ............. 1 2 3 4 5
92. Women face greater difficulty in getting their decisions accepted ............ 1 2 3 4 5

Accomplishments

93. When a female co-authors an article with a male, it is believe that most of the published research is the work of the man ............ 1 2 3 4 5
94. When spouses collaborate or are in the same field it is presumed that husband is the primary contributor and lead scholar ............ 1 2 3 4 5
95. Even where work is not collaborative there is an assumption that the husband did the work credited to the wife ... 1 2 3 4 5

96. If you have any comment, suggestion or an opinion that you'd like to share please use the space provided below.


Thank you for your cooperation

Note: Please staple this booklet and mail.