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Participation of Women in the Higher Educational Sector of India

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Abstract

This study aimed to explore the relationship between demographic profiles and the concept of the glass ceiling for women in the higher education sector in India. To achieve this, the snowball sampling method was used to gather data from 98 faculty members from various educational institutions in the NCR region. The data were collected through online survey tools and analyzed using SPSS. The study explores the multifaceted challenges confronting women in the workplace, highlighting issues such as underrepresentation, traditional gender roles, pay disparities and limited advancement opportunities. The results showed significant variations based on respondents' demographic profiles like gender, age, education level and work experience. Factors like unequal compensation, cultural expectations and biased assessments based on job titles impede women's career progress. The authors recommend implementing blind review processes for promotion and rewards, focusing solely on qualifications and skills to ensure gender-neutral advancement opportunities and further suggests that promoting awareness of workforce diversity and equal employment opportunities in higher educational institutions and society at large can be an effective strategy to reduce the glass ceiling effect experienced by women in the workplace.

Keywords: Gender Discrimination, Perception, Women's Career Advancement, Higher Educational Institutions

JEL Classification: M51, I23, I16, J15

Introduction

Higher education has always been instrumental in supporting a country's economic development and bringing social change. There is ample evidence that women are motivated to choose teaching as a career (Banker and Banker, 2017). In a recent study conducted by UNESCO, it was found that women are overrepresented in primary and secondary-level teaching jobs across the globe and are underrepresented in leadership roles. (UNESCO IESALC, 2021). A similar study conducted by Rosenfeld and Jones almost three and a half decades ago revealed the same scenario (Rosenfeld and Jones, 1987). It implies that even after so many decades of progress and economic development the world is falling short of attaining gender equality. There has been a long debate over the issue of women's career advancement toward senior positions. Numerous reports, research, and studies have attempted to bring out the significance of gender diversity and gender inclusion in senior leadership roles in the organization. However, the academic sector has been largely overlooked.

Looking at the vast scope of the Higher education sector in India which comprises 1,081 universities, 43,796 colleges, and 11,296 stand-alone institutions (UGC data, 2023), the sector has a great potential of opening up of leadership roles over the coming year.

In the higher education sector in India, women have always been visible in entry-level positions and men outnumber women in senior-level positions. This is disappointing, especially considering that more women are now earning research-centric degrees (Airini et al., 2011). Earlier, due to a lesser number of female doctorates, the absence of women academicians in senior positions was not felt but, as more women accomplished Ph.D. and research-centric degrees, the under representation of females in senior managerial positions is, in any case disappointing.

Statistically, 66.22 percent of women are stagnant in middle-level leadership positions (Banker and Banker, 2017; Ghara, 2016); only 6.67 percent of women were in senior leadership positions, namely Vice Chancellor, Director, and Dean in India (Banker and Banker, 2017). As per the University Grants Commission (UGC) 2015 report, only 13 of the country's 725 recognized universities had female vice-chancellors which is merely 0.024 percent of the total which includes six women-only universities, where the post of Vice-chancellor can be held only by a woman as

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per ordinance. There are only 4 female directors across 73 Institutes of National Importance i.e., 5.4 percent of women leaders. Jamia Milia Islamia got its first female Vice-Chancellor in 2019 since the creation of the university in 1920. Delhi University was founded in 1922 but has yet to see a female Vice-Chancellor. Ambedkar University, Delhi has recently appointed a woman as its first female Vice-Chancellor (Tobenkin, 2022). Hence, the representation of women in leadership in the Indian higher education sector is heavily skewed. To empower women, having higher women representation should be there. As diversity and inclusion become deeply embedded in the workplace, it is imperative to consider the variables and intermediating factors that determine the rise of women leaders. According to Bierema, there are obstacles to the professional advancement of women and minorities known as the "Glass Ceiling," (Bierema, 2005). The women face these obstacles because they are perceived to be too compassionate to handle the decision-making roles (Basu, 2008). Various studies have tried to bring out the issue and factors creating the glass ceiling in senior positions in the academic sector in India. Still, perceptions of the "glass ceiling" about women are rarely examined and brought up in this sector.

For this reason, the purpose of this study is to broaden the scope of the literature on the idea that there is a glass ceiling phenomenon affecting women in the educational sector. In this sense, the disparity in how the glass ceiling is seen at work has been examined using demographic classification. Thus, the present study analyzes the perception of the glass ceiling in higher educational institutions concerning women faculty and also studies the difference in perception of the Glass Ceiling in the workplace regarding demographic categorization.

Data Sources and Methodology

Sampling procedure

The study is based on an exploratory research design, both primary and secondary data have been used. Secondary data in the form of published reports, newsletters, magazines and journals, and primary data was collected from a sample of 98 faculty members from the higher education institutions in the NCR Region (Delhi, Gurugram, Noida, and Faridabad) in India using a snowball sampling method. Respondents with varying demographic profiles who worked at various universities were included in the sample. For this reason, the sample may be said to be representative of the population

The data was collected from faculty members from the higher education institutions in the NCR Region in year 2021-22. A well-structured questionnaire was developed for conducting the study. The questions regarding the demographic profile of respondents and various facets of the Glass ceiling were included based on the literature review. Responses were recorded on a scale of 1 to 5 with 1 denoting 'Strong Agreement' and 5 implying 'Strong Disagreement'. Thus, the lower mean score implied that respondents favored that particular statement while a higher mean score meant that respondents were not in agreement with the statement. Alpha values were used to check the validity and reliability of the scale (Table 1). The value of alpha was above 0.6 for all the items on the scale. Therefore, the scale is considered to be a high reliability and acceptability. Further, every participant was aware of the study's objective, which was to guarantee data accuracy and remove any anonymous uncertainties or concerns over confidentiality and intelligibility.

The mean score of Glass Ceiling i.e. average of all statements was calculated. Further, t-test and one-way ANOVA was used to check whether there was any significant difference in the mean scores of Glass Ceiling based on demographic variables like gender, age, education, work experience of the respondent and type of institution they work in. The following tables reveal the mean scores along with the significant F and p values for all the statements.

DECISION RULE: If the significance value is less than 0.05 it means that there is a significant difference between the various categories of a variable concerning that particular statement.

Results and Discussion

The demographic profile of the respondents is shown in Table 2 below. Of the 98 sampled respondents, 51 per cent were male faculty members and 49 percent were female. Nearly 46 per cent of respondents were found in less than 35 years age group and 44 percent were in the age group 35 to 55 years; which is generally assumed to be the age of career growth and advancement. Almost 39 per cent of sampled respondents were married while 32 percent were unmarried and 28.5 percent were separated or divorced. Fifty-two percent and 45 percent of faculty members had to look after dependent children and parents respectively. It was observed that 37 percent and 21 percent of respondents had completed doctoral and post-doctoral degrees, respectively and most respondents (58.1 percent) had more than ten years of work experience.

The sample comprises of 40.8 percent respondents working in government or government-aided institutions; 28.5 percent with private universities; 22.4 percent with private institutions affiliated with government universities and 8.1 percent working with deemed to be universities. Out of all the respondents, 7.1 percent were in top leadership positions like Vice Chancellor, Pro Vice-Chancellor, or Principal; 18.3 percent were Dean, Director, or Head of Department; 21.4 percent were Professors followed by 15.3 percent Associate and 37.7 percent were Assistant Professors.

Gender and Perception of Glass Ceiling

All the respondents were asked to express their opinions

Table1. Reliability estimates of statements

Statements		Alpha value
I.	Women who are denied administrative positions were equally or more competent	0.61
II.	Women usually reach high teaching positions and then get stuck there.	0.65
III.	Women make better teachers, is an example of a gender stereotype	0..71
IV.	There is a salary differential for men and women for performing the same jobs.	0.62
V.	Women face a lot of hardships to get promoted from lower positions to top administrative	0.78
VI.	The percentage of women promoted to top management is lower than men in top management	0.82
VII.	Women are usually over-represented in low-level teaching jobs.	0.73
VIII.	Women are usually denied the highest positions due to the limited leadership opportunities/ lack of planning	0.78
IX.	Cultural expectations can affect women's roles in society.	0.67
X.	A woman must perform better than a man to be promoted	0.83
XI.	Women are placed in positions beyond their level of competence because of affirmative action	0.67
XII.	People should be rewarded based on their performance, regardless of gender	0.60

Table 2. Demographic profile of respondents

S.No.	Particulars	Variable Class
I.	Age (Years)	• Less than 35 (45.9 percent) • 35-55 years (43.8 percent) • Above 55 years (10.2 percent)
II.	Gender	• Male (51 per cent) • Female (49 per cent)
III.	Marital Status	• Unmarried (32.6 percent) • Married (38.7 percent) • Separated/Divorced (28.5 per cent)
IV.	Dependent Children (No.)	• Yes (52 per cent) • None (48 per cent)
V.	Dependent Parents (No.)	• Yes (44.9 percent) • None (55.1 percent)
VI.	Educational Qualification	• Masters (42.8 percent) • Doctoral (36.7 percent) • Post-Doctoral (20.4 per cent)
VII.	Type of Educational Institution	• Government/Aided (40.8 percent) • Private University (28.5 percent) • Private Institution affiliated to Govt. University (22.4 percent) • Deemed to be University (8.1 percent)
VIII.	Work Experience (Years)	• 1-5 years (14.2 percent) • 6-10 years (27.5 percent) • Above 10 years (58.1 percent)
IX.	Current Designation	• Assistant Professor (37.7 per cent) • Associate Professor (15.3 per cent) • Professor (21.4 per cent) • Dean/Department Head/Director (18.3 percent) • VC/Pro VC/Principal (7.1 percent)

on the statements that confirmed the presence of the Glass Ceiling. After that, these statements were subjected to t-test based on independent variable gender to check the significant difference in the mean scores (Table 3). Out of twelve statements, six statements were found to be significantly different based on gender. Women respondents affirmed that they faced a barrier to reaching the top, they were over-represented at lower positions and had to face gender biases. Both male and female respondents agreed on statements that women, despite having similar capabilities and qualifications must perform better than men to get promoted. Responses indicated that cultural expectations do affect the role of females in society. Women respondents asserted that they had to face a lot of hardships to get into higher administration; they are overrepresented at lower teaching jobs, and it is generally assumed that women make better teachers than administrators. Male respondents, on the other hand, had differing opinions on these issues. The study conducted by Batool, Sajid and Raza in 2012 more than a decade before also highlighted that the perception of the glass ceiling differed based on gender of the respondent. (Batool et.al.2012)

Age and Perception of Glass Ceiling

One-way ANOVA results shown in Table 4 below are based on independent variable age revealed respondents' perceptions were significantly different amongst different age groups: Women are usually over-represented in low-level teaching jobs. They reach high teaching positions and then get stuck there. Women face a lot of hardships to get promoted into top administration. They are perceived to be better teachers and are expected to perform better than a man to get a promotion. The percentage of women promoted to top management is lower than men in top management in the higher education sector. Equally competent women were

Table 3. Effect of gender on various statements

Particulars		t stat	df	Significance		Mean Diff.
				One-sided p value	Two-sided p value	
I.	Women who are denied administrative positions were equally or more competent	0.22	94.61	0.41	0.83	0.06
II.	Women usually reach high teaching positions and then get stuck there.	-1.39	95.68	0.08	0.17	-0.41
III.	Women make better teachers, is an example of a gender stereotype	-1.11	95.86	0.14	0.27	-0.32
IV.	There is a salary differential for men and women for performing the same jobs.	0.60	95.73	0.27	0.55	0.17
V.	Women face a lot of hardships to get promoted from lower positions to top administrative	-0.38	95.21	0.35	0.71	-0.10
VI.	The percentage of women promoted to top management is lower than men in top management	-0.51	94.84	0.30	0.61	-0.14
VII.	Women are usually over-represented in low-level teaching jobs.	**-0.49**	**94.88**	**0.31**	**0.62**	-0.15
VIII.	Women are usually denied the highest positions due to the limited leadership opportunities/ lack of planning	0.42	95.68	0.28	0.56	0.21
IX.	Cultural expectations can affect women's roles in society.	**0.16**	**93.37**	**0.44**	**0.87**	0.04
X.	A woman must perform better than a man to be promoted	-0.14	94.88	0.28	0.69	-0.13
XI.	Women are placed in positions beyond their level of competence because of affirmative action	0.56	95.88	0.23	0.51	0.19
XII.	People should be rewarded based on their performance, regardless of gender	0.33	94.60	0.45	0.88	0.07

Table 4. Effect of age on various statements

Particulars		Age (in years)			F stat	P value
		< 35	35-55	>55		
I.	Women who are denied administrative positions were equally or more competent	3.18	2.50	2.71	13.11	.000
II.	Women usually reach high teaching positions and then get stuck there.	2.67	2.86	2.00	6.43	.000
III.	Women make better teachers, is an example of a gender stereotype	2.48	3.05	3.59	15.13	.000
IV.	There is a salary differential for men and women for performing the same jobs.	2.59	2.35	2.27	2.04	0.107
V.	Women face a lot of hardships to get promoted from lower positions to top administrative	2.22	3.22	3.5	4.11	.006
VI.	The percentage of women promoted to top management is lower than men in top management	3.01	3.55	3.34	7.23	.000
VII.	Women are usually over-represented in low-level teaching jobs.	2.53	2.40	1.98	4.113	.006
VIII.	Women are usually denied the highest positions due to the limited leadership opportunities/ lack of planning	2.50	2.44	2.00	3.79	0.10
IX.	Cultural expectations can affect women's roles in society.	2.98	2.50	2.31	3.39	0.16
X.	A woman must perform better than a man to be promoted	2.53	2.43	2.05	3.75	0.11
XI.	Women are placed in positions beyond their level of competence because of affirmative action	1.77	1.89	2.23	3.20	0.20
XII.	People should be rewarded based on their performance, regardless of gender	2.58	2.46	2.32	1.50	0.213

Table 5. Effect of education on various statements

Particulars		Masters	Doctoral	Post-Doctoral	F stat	P value
I.	Women who are denied administrative positions were equally or more competent	1.69	3.11	3.25	11.20	.000
II.	Women usually reach high teaching positions and then get stuck there.	1.889	2.58	2.61	2.799	.000
III.	Women make better teachers, is an example of a gender stereotype	2.42	3.13	3.33	4.786	.009
IV.	There is a salary differential for men and women for performing the same jobs.	3.54	2.88	2.75	15.77	.000
V.	Women face a lot of hardships to get promoted from lower positions to top administrative	2.11	2.03	2.50	9.062	.000
VI.	The percentage of women promoted to top management is lower than men in top management	3.0	2.40	2.39	4.482	.012
VII.	Women are usually over-represented in low-level teaching jobs.	2.60	2.88	2.38	9.00	.000
VIII.	Women are usually denied the highest positions due to the limited leadership opportunities/ lack of planning	3.05	2.65	2.4	5.86	.003
IX.	Cultural expectations can affect women's roles in society.	2.98	2.50	2.31	3.39	0.16
X.	A woman must perform better than a man to be promoted	3.19	2.77	2.74	1.421	.245
XI.	Women are placed in positions beyond their level of competence because of affirmative action	2.09	2.32	2.49	1.585	.219
XII.	People should be rewarded based on their performance, regardless of gender	1.80	1.98	2.05	1.511	.210

denied administrative positions due to limited leadership opportunities and lack of planning. Even cultural expectations play a negative women's role in women's career advancement. The opinions expressed by respondents were supported by the previous study conducted by Sharma and Kaushik, 2011.

Education and Perception of Glass Ceiling

Based on the independent variable of education, a one-way ANOVA was used to examine the different Glass Ceiling assertions. Table 5 depicts that eight out of twelve statements were found to differ considerably. To be more precise, the respondent believes that: Women face a lot of hardships to get promoted because of the prevalent stereotypes that they are more suited to teaching jobs rather than running the institution. Competent women are also over-represented in low-level teaching jobs. The percentage of women promoted to top management is lower than men in top management in the higher education sector because of the limited leadership opportunities and lack of planning. Channar, 2011 in his research work explored those females with lower qualification face discrimination more than the ones with better degrees, in congruence with the results of the present study.

Work Experience and Perception of Glass Ceiling

It is revealed from Table 6 that the respondents' perceptions were significantly diverse based on their work experience. Nine out of twelve i.e., 75 percent assertions about the glass ceiling differed as the working years of sampled respondents increased in the higher educational sector. There was a salary differential for men and women for performing the same jobs. Women were over-represented in the lower hierarchy and faced a lot of difficulty due to cultural expectations, gender roles; and stereotypes to get promotions irrespective of their qualifications and competence. The study conducted by Shandana (2010) identified similar behavior's that can play their role in creating glass ceiling.

Type of Institution and Perception of the Glass Ceiling

As indicated in Table 7 below, a one-way ANOVA was

Table 6. Effect of experience on various statements

Particulars		Experience (in years)			F stat	P value
		1-5	6-10	>10		
I.	Women who are denied administrative positions were equally or more competent	3.1	3.4	3.1	12.587	.000
II.	Women usually reach high teaching positions and then get stuck there.	2.55	2.83	3.16	7.089	.000
III.	Women make better teachers, is an example of a gender stereotype	2.08	2.55	2.18	4.59	.003
IV.	There is a salary differential for men and women for performing the same jobs.	2.84	2.72	2.11	8.314	.000
V.	Women face a lot of hardships to get promoted from lower positions to top administrative	3.70	3.53	2.88	11.48	.000
VI.	The percentage of women promoted to top management is lower than men in top management	2.84	2.51	2.90	6.014	.001
VII.	Women are usually over-represented in low-level teaching jobs.	3.30	3.19	2. 91	6.17	.000
VIII.	Women are usually denied the highest positions due to the limited leadership opportunities/ lack of planning	3.05	2.65	2.4	5.86	.003
IX.	Cultural expectations can affect women's roles in society.	2.16	1.77	2.05	6.108	.000
X.	A woman must perform better than a man to be promoted	2.29	2.48	2.76	4.480	.003
XI.	Women are placed in positions beyond their level of competence because of affirmative action	2.46	2.41	2.32	.462	.709
XII.	People should be rewarded based on their performance, regardless of gender	2.35	2.43	2.36	.332	.011

performed using the type of institution as the independent variable to investigate the impact of institution type on the glass ceiling. Based on the type of institution, two statements were found to be significantly different from one another. Respondents from private institutions emphasized that, in comparison to their male counterparts, female employees sometimes receive lower pay for doing the same job. With a few notable exceptions, all respondents felt that women are not frequently promoted to high positions in government institutions and colleges.

The study indicates that gender discrimination was prevalent in higher education institutions in the NCR region. The analysis demonstrated how cultural, organizational, and demographic variables obstruct women's development into the top levels of administration and how gendered presumptions (stereotypes) affect women's career advancement.

Conclusion and Policy Implications

The study explores the multifaceted challenges confronting women in the workplace, highlighting issues such as underrepresentation, traditional gender roles, pay disparities and limited advancement opportunities. It emphasizes that cultural and social factors often underestimate women's capabilities, hindering their professional success. The perception of the glass ceiling varies among individuals based on demographic factors like gender, age, education level and work experience. Additionally, the research finds that women who decline administrative roles are equally qualified as men. Factors like unequal compensation, cultural expectations and biased assessments based on job titles impede women's career progress. Ultimately, these obstacles prevent women from realizing their full potential and making significant contributions to their organizations and society. The study stresses the importance of rejecting essentialist views that exclude women from leadership roles in higher education. It advocates for creating inclusive environments and conducting research to reform institutional structures and ideologies. It recommends implementing blind review processes for promotion and rewards, focusing solely on qualifications and

Table 7: Effect of type of institution on various statement

Particulars		Govt and aided	Private	Deemed	F stat	p-value
I.	Women who are denied administrative positions were equally or more competent	3.21	3.77	3.06	0.43	0.89
II.	Women usually reach high teaching positions and then get stuck there.	2.27	2.67	2.01	0.116	0.894
III.	Women make better teachers, is an example of a gender stereotype	2.00	1.87	2.23	0.066	0.500
IV.	There is a salary differential for men and women for performing the same jobs.	4.72	4.59	3.11	52.4	0.000
V.	Women face a lot of hardships to get promoted from lower positions to top administrative	2.64	1.81	2.10	5.28	0.008
VI.	The percentage of women promoted to top management is lower than men in top management	2.79	2.22	2.63	0.546	0.589
VII.	Women are usually over-represented in low-level teaching jobs.	2.33	2.47	2.13	0.565	0.533
VIII.	Women are usually denied the highest positions due to the limited leadership opportunities/ lack of planning	1.76	2.28	2.19	0.801	0.498
IX.	Cultural expectations can affect women's roles in society.	2.69	2.75	3.35	1.46	0.267
X.	A woman must perform better than a man to be promoted	1.89	2.28	2.08	0.801	0.450
XI.	Women are placed in positions beyond their level of competence because of affirmative action	3.26	2.35	2.89	2.97	0.051
XII.	People should be rewarded based on their performance, regardless of gender	3.09	2.78	2.65	2.58	0.078

skills to ensure gender-neutral advancement opportunities. Lastly, the study underscores the need for equal and fair career advancement opportunities for women, challenging discriminatory perceptions, and fostering environments where all the individuals can thrive regardless of gender.

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