

## **AN EXPLORATORY STUDY OF BARRIERS IN CAREER ADVANCEMENT OF WOMEN AS LEADERS IN HIGHER EDUCATIONAL INSTITUTIONS.**

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### **ABSTRACT**

Women predominate the teaching profession both in India and abroad because it has always been viewed as a "suitable" profession for them. Despite the high proportion of women in the sector, they are significantly underrepresented in managerial roles, according to statistics. Therefore, it is still a cause for concern that women are underrepresented in senior managerial roles within educational institutions. A review of studies on gender and leadership reveal that women encounter a number of obstacles when applying for leadership and management roles in the educational sector. The purpose of this study was to explore the glass ceiling barriers faced by women in higher educational institutions. A study of 98 faculty members working in higher education sector in NCR region revealed that gender and psychological constraints were the strongest glass ceiling barriers. The lack of experience in administration and family problems cause them to switch their priorities from career to family and fall behind. Women will hold far more senior positions in organisations if they cultivate a mindset that is more focused on their careers.

**KEYWORDS:** Women leadership; Gender inequity; Glass Ceiling; Underrepresentation

### **INTRODUCTION**

The higher educational system in India is enduring rapid changes. We have one of the world's largest university networks with a total of 43,796 universities. (IBEF Report, 2023 retrieved online on 11 May, 23). There has been a rapid expansion in the markets and occupational opportunities due to globalisation which have created an exciting range of educational and career options. Women have also been beneficiaries of this expansion of educational sector. Despite these positive trends of presence of women in the workplace, they are still struggling to get to higher management.

Conventionally, women have faced various difficulties and obstacles in acceding to positions of leadership in higher educational institutions in India. There is an assorted set of underlying reasons for this discrimination. Most commonly men are assumed to be the best fit for leadership positions within the academe. The unfriendly policies at workplace that directly impact women during their childbearing years, and other hidden, overt, beliefs, norms, stereotypes that create gender prejudice lately known as glass ceiling explains the phenomenon. "Glass ceiling" means an invisible upper limit in corporations and other organizations, above which it is difficult or impossible for women to rise in the ranks. "Glass ceiling" is a metaphor for the hard-to-see informal barriers that keep women and minority racial groups from getting promotions, pay raises, and further opportunities.

It is worth noting that the women participation in higher education sector in India shows an upward trend. But, it's disappointing to see that in reality this trend doesn't continue upwards rather it goes down when it comes to the leadership roles. This dissonance in statistics is only a symptom of a larger underlying indisposition where men are considered more virtuous and deserving than women. As per the All-India Survey on Higher Education Report (2018-19), out of the total 14,16,299 teachers, 57.8 per cent are male and 42.2 per cent are females. At national level, the ratio is 73 females per 100 males. The number of teachers at the university level is around 1.90 lakh, of which 36.65 per cent are females. Amongst the non-teaching staff, the average number of females per 100 males is 49. Hence, it becomes very important to bring this issue in research discussion and identify the factors deterring it.

ANTECEDENTS OF GLASS CEILING

There are various glass ceiling obstacles that prevent women from rising to the top of an organisation. A conceptual model of these barriers and career advancement of females can help us understand the complex interplay of factors that impact women's progress in the workplace. This model can be divided into several key components:

- 1. **Organisational Culture:** The style of life and way of working within an organisation determines its culture. Corporate culture serves as both the interpersonal glue that binds a group of people together and an unofficial control system that aids in coordinating staff efforts. The most common factors that prevent women from advancing in their careers are unfavourable corporate cultures, male predominance in senior roles, norms of the masculine culture, gender discrimination at work, and a lack of supportive environments inside organisations.
- 2. **Family Responsibilities:** In India women are often responsible for providing the majority of the family's child and/or elder care. Family obligations, unwillingness to move, conflicts between job and personal obligations or family obligations, an unsupportive spouse, and a lack of family support are all factors that serve in career interruptions for women. Hence, majority of the women willingly switch to lesser demanding positions to maintain their responsibilities as homemakers.
- 3. **Psychological Constraints:** Various personal constraints that prevent women from advancing in their careers discovered by prior empirical studies were low self-confidence, modest ambition, lack of positive attitudes, a poor view of oneself as a leader, and an inefficient leadership style are some of these.
- 4. **Gender Stereotypes:** Women are stereotyped as being challenge-averse, less ambitious and competitive than men, and that they shouldn't be in positions of leadership. These are all examples of negative attitudes and stereotypes about women.
- 5. **Mentoring:** Mentors are typically senior level personnel with a better level of expertise and knowledge. They are dedicated to helping lower-level employees advance up their respective career ladders by offering support. Lack of qualified senior female managers to serve as mentors exacerbates the glass ceiling barrier.

LITERATURE REVIEW

The review of available literature points to various factors that help or obstruct the opportunities for career progression of women in higher educational institutions. The most common constraints identified by various studies include the glass ceiling, gender discrimination, organisational culture, work life imbalances, old boys network, stereotypes, poor support and personal characteristics (April & Sikatali, 2019; Cohen et.al. 2018). A major finding from different studies conducted on barriers and constraints that affect women in educational leadership pointed on family responsibilities as a major roadblock in career progression of working women. This finding is backed up by numerous authors viz. Shakeshaft, 1987; Adler, Laney, and Packer,1993, who discovered that the majority of the literature on educational management and other theories of management and organization ignored women by either assuming a gender-free position or making the assumption that men are more deserving than women. Coleman (2002) in his study also supported the same belief that men have natural traits to become leaders as compared to women.

A number of studies have reported different types of glass ceiling factors that act as barriers to women's progression to higher positions in organizations. These factors are summarized below

Available Studies	Identified Variables
(Bain & Cummings, 2000; Cooper, 2001; Eyring & Stead, 1998; Lemons, 2003; Li & Wearing, 2001; Linehan & Scullion, 2001; Mathur-Helm, 2006; Mattis, 2004; Mirza & Jabeen, 2011; Tlaiss & Kauser, 2010; Walker & Aritz, 2015)	Lack of Networking Access
(Bell, McLaughlin, & Sequeira, 2002; Eyring & Stead, 1998) (Adamson, 2012; Afza & Newaz, 2008)	Sexism at workplace Exclusion of females from administrative assignments

- (Cooper, 2001; Eyring & Stead, 1998; Hancock & Hums, 2016; Mirza & Jabeen, 2011; Ragins, Townsend, & Mattis, 1998; Tlaiss & Kauser, 2010; Walker & Aritz, 2015) Culture of Organization
- (Cooper, 2001; Eyring & Stead, 1998; Li & Wearing, 2001; Linehan & Scullion, 2001; Mathur-Helm, 2006; Mattis, 2004; Shoaib, Khan, & Khan, 2010; Tabak, 1997; Walker & Aritz, 2015) Work-life balance/ family friendly policies
- (Cooper, 2001; Eyring & Stead, 1998; Shoaib, Khan, & Khan, 2010; Tlaiss & Kauser, 2010) Recruitment Practices
- (Cooper, 2001; Hancock & Hums, 2016; Lemons, 2003; Mathur-Helm, 2006; Mirza & Jabeen, 2011; Oakley, 2000; Shoaib, Khan, & Khan, 2010; Weyer, 2007; Yusoff, Kassim, & Seenivasa, 2011) Perceptions, Beliefs and Stereotypes
- (Bucklew et al., 2012; Cooper, 2001; Oakley, 2000; Rhoads & Gu, 2012; Sanders, et al., 2008). Old boy network
- (Eyring & Stead, 1998; Oakley, 2000; Ragins, Townsend, & Mattis, 1998) Behavioural double binds
- (Kay & Brockman, 2000; Oakley, 2000; Tandrayen-Ragoobur & Pydayya, 2015; Walker & Aritz, 2015; Yusoff, Kassim, & Seenivasa, 2011; Mathur-Helm, 2006; Mattis, 2004)) Flexibility in working
- (Kay & Brockman, 2000; Oakley, 2000; Tandrayen-Ragoobur & Pydayya, 2015; Walker & Aritz, 2015; Yusoff, Kassim, & Seenivasa, 2011) Pay Differentials on basis of gender
- (Lemons, 2003; Mathur-Helm, 2006; Cooper, 2001; Eyring & Stead, 1998; Hancock & Hums, 2016; Linehan & Scullion, 2001; Mathur-Helm, 2006; Mattis, 2004; Tlaiss & Kauser, 2010; Yusoff, Kassim, & Seenivasa, 2011) Absence of Mentors/Role Models
- (Linehan & Scullion, 2001; Mirza & Jabeen, 2011; Tabak, 1997) Personal Factors/Personality Traits
- (Mattis, 2004) Unsupportive supervisors/colleagues and subordinates of opposite gender
- (Mirza & Jabeen, 2011; Tabak, 1997) Societal barriers

## OBJECTIVE OF THE STUDY

Over the past few years, women's participation in the labour has increased significantly. However, it is generally acknowledged that women have fewer prospects for career growth than males do. The concept of a glass ceiling is clearly linked to the causes of this bias. Some of the objectives of the study are:

1. To identify which factors which are responsible for creating glass ceiling effect.
2. To find out how glass ceiling effect the career advancement of women employees
3. To analyse the relative influence of these glass ceiling factors in career advancement of women in Higher educational sector of India.

## RESEARCH METHODS

The main objective of this research was to explore the barriers which restrain women from reaching senior leadership positions in Higher Educational Institutions in India. Both Primary and Secondary data was used to investigate the existence of the glass ceiling phenomenon and the potential factors that contribute to its presence. The Primary data was collected from faculty members and senior leaders working in different universities and

affiliated colleges in NCR region. The participants were recruited using the convenience sampling and snowball sampling because the snowball sampling technique as recommended by (Esterberg, 2002) is appropriate to find the populations of people who engage in stigmatized behaviour. A total of 98 respondents participated in the study. Respondents with varying demographic profiles who worked at various universities were included in the sample. For this reason, sample may be said to be a representative of the population. Quantitative data was obtained through the distribution of questionnaires (online google form) to the selected participants and the primary information was also gathered through semi-structured in-depth interviews where the questions were formulated about the issues to be discussed, but the presentation of these questions was flexible in each individual interview. As (Smith et al., 2009) states that semi-structured, one-on-one, in-depth interviews prove to be the most successful in soliciting thoughts and feelings from participants.

The main instruments used for the study was open-ended and close-ended questionnaire. The closed ended-items were in the form of Likert type with a range of between 5 (strongly agree) to 1 (strongly disagree). Various glass ceiling factors (organisational, cultural, societal, psychological, family & stereotypes etc) were included in the questionnaire in the form of statements. The questionnaires were sent in mail as google form attachment and, in few cases, it was personally administered by the researchers. The reliability and validity of the factors of glass ceiling was conformed through alpha values (Table1). The collected data were tabulated on the computer and the final analysis was performed with SPSS.

**Table 1 Reliability estimates of factors of glass ceiling**

<b>Factors</b>	<b>Alpha Values</b>
Family	.80
Gender	.72
Age	.60
Ethnic background	.62
Religion	.60
Work life balance	.78
Psychological constraints	.89
Persons of opposite gender	.79
Persons of same gender in senior administration	.69
Non-competitive Salary	.83
Lack of family friendly workplace policies	.77
Attitudinal and organizational prejudices	.87
Expression of sexism in the workplace	.67
Absence of sponsors, mentors and role-models	.70
Lack of administrative experience	.76
Lack of leadership training programs	.80
Capabilities to network	.71

## RESULTS AND DISCUSSION

The descriptive analysis of responses of faculty working in higher educational institutes was done in order to explore the phenomenon of glass ceiling but it was not aimed to draw conclusions on causality. As rightly mentioned by Leedy, Ormron, Welman and various other authors in their respective research studies that descriptive statistics attempts to understand a specific situation at a specific point in time (Leedy & Ormrod, 2005; Welman et al., 2005). The Table 2 below highlights the demographic profile of the respondents, out of a total of 98 sampled respondents 51 per cent were males and 49 per cent were female faculty members. Nearly 68 per cent respondents were in the age group of 30-60 years and 37 per cent had completed doctoral and post-doctoral degrees respectively. It was observed that 53 per cent respondents were holding leadership position with more than 5 years of experience in administration.

On the domestic front it was noticed that 38.7 per cent sampled faculty members were married and average family size was more than 3. Almost 47 per cent respondents had two or more children. The statistics reveal

that 44.9 per cent had elderly people in the family and more than 58 per cent respondents have domestic servants to help them with routine chores.

**Table 2 Demographic profile of respondents**

<b>Socio- demographic Parameters</b>	<b>Rate of recurrence</b>	<b>Percentage</b>
<b>Age (in years)</b>		
20-30	12	12.3
31-40	17	17.4
41-50	36	36.7
51-60	33	33.6
<b>Gender</b>		
Male	40	41
Female	58	59
<b>Education</b>		
Post Graduate	27	27.5
Doctorate	36	36.7
Post Doctoral	35	35.7
<b>Years of Experience in Higher Education Administration (in years)</b>		
Less than 5 years	14	14.2
5-10 years	27	27.5
More than 10 years	57	58.1
<b>Holding Leadership Position</b>		
Yes	46	46.9
No	52	53.1
<b>Marital Status</b>		
Unmarried	32	32.6
Married	38	38.7
Separated/Divorced	28	28.6
<b>Family Size (No. of members)</b>		
1-2	10	10.2
3-5	58	59.2
More than 5	30	30.6
<b>Number of Children</b>		
No children	10	10.2
1	31	31.6
2-4	46	46.9
More than 4	11	11.2
<b>Elderly People</b>		
Yes	44	44.9
No	54	55.1
<b>Domestic help/servant</b>		
Yes	57	58.2
No	41	41.8

## **BARRIERS OF GLASS CEILING**

The research study tries to explore the barriers that deters the promotion of women to leadership positions in their respective organizations. The main objective was to comprehend if the glass ceiling was created by

organisational, socio-cultural or individual characteristics. Furthermore, it was intended to analyse the relative influence of these glass ceiling factors in career advancement of women. The main instruments used for the study was close-ended questionnaire consisting of 17 major items in the form of Likert type. The results were categorised into disagree, agree and neutral to make it convenient for analysis.

The Psychological boundaries that women frame against themselves in their minds emerged as the major hinderance in career advancement and reaching at leadership position as shown in Table 3 below that almost 43 per cent respondents expressed agreement over this variable in the study. The other factors in order of majority responses were lack of administrative experience (40.8 per cent); capabilities to network (40.8 per cent); Sexism at workplace (38.8 per cent); Family responsibilities (38.7 per cent); Attitudinal and organisational prejudices (37.7 per cent); Persons of same gender in senior administration (37.7 per cent) and Non-competitive salary (36.7 per cent). Furthermore, these factors were followed by Absence of sponsors, mentors and role-models; Lack of family friendly workplace policies & leadership training programs advocated by 34.7 per cent respondents respectively.

**Table 3 Barriers of Glass Ceiling**

		<b>Disagree</b>	<b>%</b>	<b>Agree</b>	<b>%</b>	<b>Neutral</b>	<b>%</b>
1.	Family	28	28.6	38	38.7	32	32.6
2.	Gender	28	28.6	38	38.8	38	32.6
3.	Age	29	29.6	25	25.5	44	44.8
4.	Ethnic background	35	35.7	25	25.5	38	38.8
5.	Religion	33	33.6	27	27.5	38	38.8
6.	Work life balance	35	35.7	33	33.7	30	30.6
7.	Psychological constraints	29	29.6	42	42.8	27	27.5
8.	Persons of opposite gender	31	31.6	33	33.7	34	34.7
9.	Persons of same gender in senior admn	35	35.7	37	37.7	26	26.5
10.	Noncompetitive Salary	30	30.6	36	36.7	32	32.6
11.	Lack of family friendly workplace policies	33	33.7	34	34.7	31	31.6
12.	Attitudinal and organizational prejudices	27	27.5	37	37.7	34	34.7
13.	Expression of sexism in the workplace	32	32.6	38	38.8	28	28.6
14.	Absence of sponsors, mentors and role-models	31	31.6	34	34.7	33	33.7
15.	Lack of administrative experience	25	25.5	40	40.8	33	33.7
16.	Lack of leadership training programs	34	34.7	34	34.7	30	30.6
17.	Capabilities to network	26	26.5	40	40.8	32	32.6

Overall, the trend demonstrates a combination of hurdles that women encounter to attain educational leadership position. The finding supports research by various authors such as Bain & Cumming (2000); Linehan & Scullion (2001); Bell, Mc Laughlin & Sequeira (2002); Adamson (2012); Afza & Newaz, (2008) and Shakeshaft (1987) who showed that the fact that family responsibilities, lack of administrative experience and networking access are a significant barrier for females seeking administration positions.

### **GLASS CEILING AND CAREER ADVANCEMENT OF WOMEN**

In higher educational sector of India women's experiences vary based on their intersectionality of factors such as race, ethnicity, sexual orientation, and disability. These intersecting identities can compound or mitigate the impact of glass ceiling barriers. Conceptually, Career advancement of women is dependent on these Glass ceiling barriers (organisational culture, family responsibilities, psychological constraints, gender stereotypes & mentoring).

Women Career Advancement (WCA)= Function (Organisational Culture (OC), Family (FR), Psychological Constraints (PC), Gender Stereotypes (GS) & Mentoring (M)).

$$WCA = f(OC, FR, PC, GS, M)$$

where WCA= dependent variable(Y) & OC, FR, PC, GS, M are independent variables (X)

This conceptual model highlights the multifaceted nature of glass ceiling barriers and career advancement for females. It serves as a framework for analysing and addressing these issues comprehensively, considering the interplay of individual, organizational, societal, and external factors, as well as the importance of intersectionality and ongoing adaptation.

### HYPOTHESIS TESTING

Based on the literature analysis, this study took into account the following different hypotheses regarding the three elements that influence women's career development: psychological factors, organisational factors, and social factors.

H1: Psychological factors do not considerably affect the career development of women

H2: Organisational factors do not considerably affect the career growth of women

H3: Social factors do not considerably affect women's job advancement.

### ANALYSIS AND FINDINGS

One of the objectives of the study is to find out which glass ceiling barrier creates more hindrance in the career advancement, so portions of regression is done. Linear Regression of the factors using the above hypothesis gave the following results (Table 4).

All the factors were found to be significant, as the correlation coefficient of all the factors was more than 75 per cent. The psychological constraints were found to considerably affect the career advancement of female employees in higher education sector. All the hypotheses were rejected as it can be seen from the result that there exists a significant correlation amongst all the factors (Psychological, Organizational and Social) on women career advancement.

**Table 4: Result Summary**

Independent Variable (X)	Dependent Variable (Y)	Correlation Coefficient
Psychological Factors	Career Advancement	77.77 %
Organisational Factors	Career Advancement	75.36 %
Social Factors	Career Advancement	76.14 %
Glass Ceiling Factors	Career Advancement	88.34 %

Psychological factors were highly correlated to the career advancement as the correlation coefficient was found to be by 77.77 percent. The next factor which was having significant impact is the social factors by having a correlation coefficient of 76.14 percent and then the organisational factors had a correlation coefficient of 75.36 per cent.

Amongst the psychological factors and the career advancement, it was observed that, willingness, self-perception, gender and family work balance were the ones which were having a considerable impact on aspiring female leaders. In case of the organizational factors which include organizational policy, culture and the perception of the management, training and development, the significant one was lack of training in leadership programmes. In case of social factors, which are societal belief and stereotypes. It was seen that both had a significant effect in the advancement of the career.

In case of Glass ceiling barriers, the correlation coefficient was 88.34 per cent. The significant factors were self-belief, family responsibilities, lack of administrative experience, attitudinal and organisational prejudices, lack of mentors and role models, perception of the management, belief and stereotypes.

## RELATIVE IMPORTANCE OF GLASS CEILING FACTORS

While conducting a research on behavioural issues that involve beliefs, stereotypes and perceptions the exploratory method is a good fit as it investigates the research questions and indicates the opinion and perception of respondents but may not point at conclusive solutions to existing problems (Terre Blanche, Durrheim, & Painter, 2006).

After a thorough analysis of the literature, the obstacles that prevent women from advancing to higher positions were compiled. The list includes obstacles resulting from a variety of factors, such as societal obstacles, organisational obstacles, familial obstacles, obstacles brought on by women's own attitudes, etc. In order to learn more about respondents' perceptions of the relative significance of the hurdles experienced by women in light of their experiences, the barriers were rated on a five-point Likert scale, where 5 indicates very significant, 4 indicates important, 3 indicates somewhat important, 2 indicates minor importance and 1 indicates no importance. The relative relevance index of barriers was then calculated using these values, which were then entered into SPSS to get average values. The Somiah, Osei-Poku, and Aidoo (2015) study as well as Muhwezi, Acai, and Otim's (2014) research study were used as the sources for the relative index approach.

With the use of a relative relevance index, the results demonstrate the relative significance of obstacles faced by women during the course of their professional development in light of respondents' experiences. Table 5 outlines the relative significance of barriers of Glass Ceiling to women's job advancement. The strongest glass ceiling barrier pointed out by majority of the respondents was gender followed by lack of administrative experience. Psychological constraints; attitudinal and organizational prejudices; sexism and capabilities of females to network emerged as the third important constraints. Non-competitive salary and persons of opposite gender were ranked as fourth and fifth important barriers in career advancement of women. Absence of sponsors, mentors and role-models; Lack of leadership training programs and family friendly workplace policies were also perceived as important barriers.

The analysis was aided by the use of Statistic Package for Social Science (SPSS) where the scores assigned to each factor by the respondents were entered and consequently the responses from the 98 questionnaires were subjected to statistical analysis for further insight. The contribution of each of the factors was examined and the ranking of the barriers in terms of their criticality to progress/promotion as perceived by the respondents was done by use of Relative Importance Index (RII) which was computed using the following equation and the results of the analysis are presented in Table 5

$$RII = \frac{\sum W_i}{A * N}$$

Where: ( $0 \leq RII \leq 1$ ) i.e. the closer the value of RII to 0 the lesser is the influence/contribution of the factor in question. Alternatively, the closer value of RII to 1 signifies higher influence/contribution.

W – is the weight given to each factor by the respondents and ranges from 1 to 5, (where “1” is “strongly disagree” and “5” is “strongly agree”);

A – is the highest weight (i.e. 5 in this case) and;

N – is the total number of respondents.

**Table 5 Relative importance of Glass ceiling factors**

	Mean	Relative Importance
Family	2.03	0.410
Gender	2.12	0.428
Age	1.96	0.396
Ethnic background	1.97	0.398
Religion	1.92	0.388
Work life balance	1.95	0.394
Psychological constraints	2.06	0.416
Persons of opposite gender	2.03	0.410



Persons of same gender in senior administration	1.88	0.379
Non-competitive Salary	2.05	0.414
Lack of family friendly workplace policies	2.01	0.406
Attitudinal and organizational prejudices	2.06	0.416
Expression of sexism in the workplace	2.06	0.416
Absence of sponsors, mentors and role-models	2.02	0.408
Lack of administrative experience	2.07	0.418
Lack of leadership training programs	2.02	0.408
Capabilities to network	2.06	0.416

The results show that gender being the major barrier, the psychological and emotional constraints that women face leads them to lose opportunities to gain administrative experience and hence they drop the race to become leaders. On the other hand, they are not behind men solely due to glass ceiling barriers only, other social and family factors also count for underrepresentation of the women in senior management in higher educational institutions.

## CONCLUSION

Women are capable; however, they still do not hold senior executive positions in organisations. When we calculate the male to female ratio in top management, this inequality is apparent. The study's goal was to examine the barriers that prevent women from advancing to managerial positions. The present study found presence of glass ceiling barriers in Higher educational institutions. Women are underrepresented in senior management for a variety of reasons, including societal attitudes, family concerns, and women's own decisions. However, these barriers can be overcome by following situation specific tailored strategies according to problem and women's own abilities. The study met all of its goals by identifying the hurdles that contribute to the "glass ceiling" and investigating its prevalence in higher education sector. Majority of the respondents identified various barriers they faced during their careers. But, the magnitude of its existence and the extent is much less than originally perceived. This phenomenon is controllable and can be shattered with positive attitude of women and creating more awareness in the organizations. It is crucial to look for policies and initiatives that will empower women and give them the tools they need to meet these problems. Successful systems that have addressed this issue successfully can be studied for important lessons, and current programmes should be assessed against them in order to provide a baseline for future development. Aspiring female leaders must establish a strong network with powerful women around them for inspiration and personal development, and leadership training programmes for women should integrate contextual components from their own unique environment.

## REFERENCES

- Adamson, H. C. (2012). **A quantitative study of glass ceiling barriers to promotion of women in medium-sized business**. United States: ProQuest LLC.
- Adler, S., Laney, J., Packer, M. (1993). **Managing Women: Feminism and Power in Educational Management**. Buckingham, England: Open University Press.
- Afza, S. R., & Newaz, M. K. (2008). Factors determining the presence of glass ceiling and influencing women career advancement in Bangladesh. **BRAC University Journal**, 5 (1), pp.85 - 92.
- All India Survey on Higher Education (2018-19). **Report by Ministry of Human Resource Development**, Govt. of India.
- April, K., & Sikatali, N. (2019). Personal and interpersonal assertiveness of female leaders in skilled technical roles. **Effective Executive**, 22(4), pp.33–58.
- Bain, O., & Cummings, W. (2000). Academe's glass ceiling: Societal, professional-organizational, and institutional barriers to the career advancement of academic women. **Comparative Education Review**, 44(4), pp.493-514.

Bell, M. P., McLaughlin, M. E., & Sequeira, J. M. (2002). Discrimination, harassment, and the glass ceiling: Women executives as change agents. **Journal of Business Ethics**, 37(1), pp.65-76.

Brower, R. L., Schwartz, R. A., & Bertrand Jones, T. (2019). 'Is it because I'm a woman?' Gender-based attributional ambiguity in higher education administration. **Gender and Education**, 31(1), pp.117-135.

Cohen, J.R., Dalton, D.W., Holder-Webb, L.L., & McMillan, J.J. (2018). An analysis of glass ceiling perceptions in the accounting profession. **Journal of Business Ethics**, 164, 17–38. <https://doi.org/10.1007/s10551-018-4054-4>

Coleman M (2002). Women as head teachers: Striking the balance. *School Leadership and Management*, 21(2): 6-35. Cooper, J. J. (2001). Women middle managers' perception of the glass ceiling. **Women in Management Review**, 16(1), pp.30-41.

Esterberg, K. (2002) **Qualitative Methods in Social Research**. McGraw Hill, Boston.

Eyring, A., & Stead, B. A. (1998). Shattering the glass ceiling: Some successful corporate practices. **Journal of Business Ethics**, 17(3), pp.245-251.

Hancock, M. G., & Hums, M. A. (2016). A "leaky pipeline": Factors affecting the career development of senior level female administrators in NCAA Division I athletic departments. **Sport Management Review**, 19(2), pp.198-210.

IBEF. (2023, April 23). **Indian Economy**. IBEF India brand equity foundation. Retrieved from <https://www.ibef.org/news/ecb-approvals-to-go-up-to-us-40-bn-in-fy19>.

Kay, F. M., & Brockman, J. (2000). Barriers to gender equality in the Canadian legal establishment. **Feminist Legal Studies**, 8(2), pp.169-198.

Lemons, M. A. (2003). Contextual and cognitive determinants of procedural justice perceptions in promotion barriers for women. **Sex Roles**, 49(5-6), pp.247-264.

Linehan, M., & Scullion, H. (2001). European female expatriate careers: Critical success factors. **Journal of European Industrial Training**, 25(8), pp.392-418.

Leedy, P., & Ormrod, J. (2005). **Practical Research: Planning and design**. Pearson, NJ: Pearson Education.

Mathur-Helm, B. (2006). Women and the glass ceiling in South African banks: an illusion or reality? **Women in Management Review**, 21(4), 311-326.

Mattis, M. C. (2004). Women entrepreneurs: out from under the glass ceiling. **Women in Management Review**, 19(3), pp.154-163.

Mirza, A. M. B., & Jabeen, N. (2011). Gender Stereotypes and Women in Management The Case of Banking Sector of Pakistan. **South Asian Studies** (1026-678X), 26(2).

Muhwezi, L., Acai, J., & Otim, G. (2014). An assessment of the factors causing delays on building construction projects in Uganda. **International Journal of Construction Engineering and Management**, 3(1), pp.13-23.

Naff, K. C. (1994). Through the glass ceiling: Prospects for the advancement of women in the federal civil service. **Public Administration Review**, 54 (6), pp.507-514.

Oakley, J. G. (2000). Gender-based barriers to senior management positions: Understanding the scarcity of female CEOs. **Journal of Business Ethics**, 27(4), pp.321-334.

Ragins, B. R., Townsend, B., & Mattis, M. (1998). Gender gap in the executive suite: CEOs and female executives report on breaking the glass ceiling. **Academy of Management Perspectives**, 12(1), pp.28-42.

Shakeshaft C (1987). **Women in Educational Administration**. Newbury Park: Sage.

Shoaib, S., Khan, R. S., & Khan, S. A. (2010). The glass ceiling effect: A Pakistani perspective. **Business Review**, 5(1), pp.79-90.

- Smith, J.A., Flowers, P. & Larkin, M. (2009). **Interpretative Phenomenological Analysis: Theory, Method and Research**. London: Sage.
- Somiah, M., Osei-Poku, G., & Aidoo, I. (2015). Relative importance analysis of factors influencing unauthorized siting of residential buildings in the Sekondi-Takoradi Metropolis of Ghana. **Journal of Building Construction and Planning Research**, 3(03), pp.117.
- Tandrayen-Ragoobur, V., & Pydayya, R. (2015). Glass ceiling and sticky floors: Hurdles for Mauritian working women. Equality, Diversity and Inclusion: **An International Journal**, 34(5), pp.452-466.
- Tabak, F. (1997). Women's upward mobility in manufacturing organizations in Istanbul: A glass ceiling initiative? **Sex Roles**, 36(1), 93-102. <https://doi.org/10.1007/bf02766240>
- Terre Blanche, M., Durrheim, K., & Painter, D. (2006). **Research in Practice: Applied Methods for The Social Sciences**. Cape Town: University of Cape Town Press.
- Tlaiss, H., & Kauser, S. (2010). Perceived organizational barriers to women's career advancement in Lebanon. Gender in Management: **An International Journal**, 25(6), pp.462-496.
- Walker, R. C., & Aritz, J. (2015). Women doing leadership: Leadership styles and organizational culture. **International Journal of Business Communication**, 52(4), pp.452-478.
- Welman, C., Kruger, F., & Mitchell, B. (2005). **Research Methodology** (3rd edn.). Cape Town: Oxford University Press.
- Weyer, B. (2007). Twenty years later: explaining the persistence of the glass ceiling for women leaders. **Women in Management Review**, 22(6), pp. 482-496.
- Yusoff, I. Y., Kassim, Z. A., & Seenivasa, N. (2011). Perceived barriers for women. 2011 **IEEE** Symposium on Business, Engineering and Industrial Applications (ISBEIA). <https://doi.org/10.1109/isbeia.2011.6088838>