

# Glass Ceiling: A study on equal opportunities in workplace

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**Abstract:** *Not decades, centuries of progress in all fields but still if we consider equal or upper part of the earnings, women remain underrepresented which is a phenomenon referred as "glass ceiling". Not only in case of women, members of demographic minority are also gets suppressed for their advancement within the hierarchy in an organization. "Glass ceiling is a metaphor in which glass is described as invisible barriers through which women or demographic minority can see elite positions but cannot reach them which is known as "ceiling". In this paper the issues and challenges faced by the women and ethnic minority for obtaining and securing the most powerful, prestigious, and highest-grossing jobs in the workforce is covered by giving some live findings and suggestions. This paper work is only an exploratory nature which is based on some data collected from different resources like journals, magazines and internet. Several cases can be discussed where women and ethnic minority became successful and gave mutual benefits for the organization because of their family support and proper encouragement by respective organization. If women learns to balance the resources they get like time, ideas, finance and relationships, they can excel in any sector which they wish for. This paper can play an important role and can inspire higher officials and organizations to bring certain changes towards ethnic minority and female working conditions so that they can utilize their capabilities for a better life and overall growth of the society.*

**Index Terms - Glass Ceiling, Minority, Discrimination, Organizational Barrier, Women Empowerment.**

## I. INTRODUCTION

If labor markets are considered, there is significant growth but in case of women as of today they are underrepresented and the privileges to sit in higher positions are not given to them. For the development and to raise the economic levels of the country women empowerment is an important element. For past few decades, female employment can be seen in all kind of sectors and they are actively employed in those areas where only men are supposed to employ. Female labor force are very limited in senior management levels. If facts are to be considered the women will represent equally in every work-force but hardly present in the higher positions which is described as "Glass Ceiling". Means "a barrier so subtle that it is transparent, yet so strong that it prevents women and minorities from moving up in the management hierarchy". (Glass Ceiling: What Keeps Women from Advancing to Higher Ranks?, n.d.)

It is said that Marilyn Loden was the first person to use the term Glass ceiling during a speech in 1978. But according to Wall Street Journal, the word Glass ceiling was first originated in 1978 by Katherine Lawrence and Marianne Schriber at Hewlett-Packard. According to them, the ceiling was described as the "Discriminatory promotion patterns where the written promotional policy is non-discriminatory, but in practice denies promotion to qualified females". They delivered this speech at press meeting held at Women's Institute for Freedom of the Press in an annual conference.

Later in March 1984 this term was used by Gay Bryant who was the former editor of a magazine called "Working Women". In that magazine she published a report on succeeding in Business in the 1980s in which the term Glass ceiling was used. Then in March 1986, the word Glass ceiling was widely cited in the "Wall Street Journal" with the article name "Glass Ceiling: Why Women Can't Seem to Break the Invisible Barrier That Blocks Them from the Top Jobs". This article was written by Timothy D. Schellhardt and Carol Hymowitz in which they said "not something that could be found in any corporate manual or even discussed at a business meeting; it was originally introduced as an invisible, covert, and unspoken phenomenon that existed to keep executive level leadership positions in the hands of Caucasian males". (Glass Ceiling: What Keeps Women from Advancing to Higher Ranks?, n.d.)

Initially this Metaphor was only used for females who faced barriers in their life for carrier growth but later it was quickly extended to the difficulties and obstacles faced by minority men in the advancement of their carrier. To conclude that a Glass ceiling exists, David Cotter et al. described four distinctive characteristics, they are:

- "A gender or racial difference that is not explained by other job-relevant characteristics of the employee."
- "A gender or racial difference that is greater at higher levels of an outcome than at lower levels of an outcome."
- "A gender or racial inequality in the chances of advancement into higher levels, not merely the proportions of each gender or race currently at those higher levels."
- "A gender or racial inequality that increases over the course of a career."

The present paper is carried out to share the knowledge of Glass ceiling and its effect in Indian working sector specially focused on women and minority work force conditions. The main objective of this paper is to collect information and gain knowledge about this topic so that a better understanding can be made for its proper implication and roles. With the help of this paper, it can act as a foundation for the future research work carried out in this area. The present paper is conceptualized and gives the information collected from different sources with some examples and is totally exploratory nature.

## II. LITERATURE REVIEW

**Jyotsna Bhatnagar, Pawan S. Budhwa and Debi S. Saini** did their research work on, "Women in Management in the New Economic Environment: The Case of India". The overall conclusion was that historically in managerial or operative roles, women in India never got a good status or positions in their work place. Balancing dual role that is housewives and organizational managers became a big challenge for them and the treatment they get in workplace was also a major concern, where the women were upheld because of the superiority of men. Because of the stereotype differences women offered less challenging jobs and they were never involved in taking crucial decisions.

In the book "Women in Asian Management", **Vimolwan Yukongdi and John Benson** have showed some factors on women growth. They showed the slow growth of the women due to society and individual factors. They mentioned in the book that due to cultural and traditions in India especially for women and extra care of parents through their daughters their aims were not fulfilled in achieving leadership and executive positions. Which finally leads to the shortage of self-motivation, independence and confidence.

**Edirisinghe, CL** did their work on "The Paradox of Glass Ceiling Effect: A Study on the Individual Barrier and Organizational Barrier among Female Executives in the Selected Large Apparel Industry, Sri Lanka". There were two objectives, is to study about whether the female executives face for the glass ceiling effect and to investigate the behavior of the individual barrier and the organizational barrier. So according to their objectives they found positive correlation between the glass ceiling and individual barrier with moderately strong correlation. 36.2% of variance is shown on glass ceiling effect by an individual barrier. If organizational barrier and glass ceiling is considered the results were moderately strong with positive correlation and have a variance of 40.3% of glass ceiling effect by an organizational barrier.

Systematic Review of Glass Ceiling Effect in Academia: The Case of Turkey reviewed by **İlknur Öztürk\*- Anjelika Hüseyinzade Şimşe**. They revealed that there is very less knowledge about glass ceiling effect in academia in Turkey, though academia is widely accepted in for the better representation of women. Their study shows that the duties of women in family and business life is strongly correlated with the glass ceiling effect. A very few women contribute in the scientific work force as compared to men which is again a similar problem in most of the countries. The women has to go through lower wages in academics and universities as compared with men even though the lectures and consultations were equal for both men and women. This shows that the rise of women in hierarchy is related to glass ceiling effect.

"Women in Management" by **Sanghamitra Buddhapriya** in her study she revealed that women are highly underrepresented in the senior management positions. She says that, In India since decades the women have entered in management sector but it will be a surprise to know that there is no systematic data sponsored by the government about the number of women working in management sector. Only in some of the public sectors these records and data are kept which shows that how the women is grossly underrepresented.

**Thomas Hunt and Philips** described the gender inequality between men and women is always embedded in the leadership roles. Also during the selection process the men are selected more as compared to the women which is again an unfounded bias. Therefore women are not considered in the expertise condition as everyone think that they lack of skills and they are not worthy for the leadership roles.

**Cooper and Davidson** highlighted on the issue of leadership and the followers. The men are seen as the leaders in all sectors and women are categorized to be the followers. The organization which have male dominated leaders in the working environment have more success rate but the women are never given any chance. Cooper and Davidson found that the women who are in managerial positions experience greater strain as compared to the male counterparts. Due to this extra pressure, the society discriminates the women to believe that they should be in the minority status as they lack in self-confidence. There is no proper opportunities, no mentors for the female workers so that they can advance in the working area and they are presented as stereotypical female workers.

**Lyness and Thompson's** studies exposes that the achievements gained by women is due to luck or effort rather than skill or ability, so this type of stereotype has the potential to reduce the awards which they receive in the organizations.

## III. HISTORY OF GLASS CEILING IN INDIA

India is one of the greatest country in which unity exists in the diversity. India has total 28 states and 8 union territories with different religions, languages, customs, culture etc. but the status of the women almost in all states are similar. If we consider some of the examples of glass ceiling in Indian history we can say that glass ceiling existed in India since many decades. There are lot of pictures which shows the greatness of women in which some of them broke the glass who are shown below with their achievements.

**Ahilyabai Holkar: Queen of Malwa / Indore (1725 - 1795):** Ahilyabai Holkar was the wife of Malwa king Khanderao Holkar. After the death of Khanderao Holkar, She became the queen of Malwa. Under her reign the capital of the kingdom was Maheshwar a small town in Madhya Pradesh. She reigned for 30 years and ruled with utmost pride and compassion. During her reign the kingdom prospered and reached to greater heights. She is also called as the "absolute ideal ruler" and "philosopher queen". She also personally led armies into the battle by breaking the law that the armies should be led by kings only. Indore's domestic airport and university are named after her as a tribute. (51 of the Greatest Women in India's History, SEP 30, 2020)

**Anandi Gopal Joshi: First Female Doctor (1865 - 1887):** Anandi Gopal Joshi was the first female doctor in India and also the first Indian women to achieve a medical degree in the United States of America. But she lost her life at a very young age of just 21. Her condition was continuously deteriorating when she was in the second year of studies. Still she managed to complete her studies and came back to India. After reaching India she was diagnosed with tuberculosis which later caused her death. She became the inspiration for many young women in India who wanted to do something and achieve their goals rather than just devote their life to household chores. (51 of the Greatest Women in India's History, SEP 30, 2020)

**Rudrama Devi: Monarch Ruler of Kakatiya Dynasty (12th Century):** Rudrama Devi is one of the most powerful rulers in India of Kakatiya dynasty. She is one of the women who ruled as a monarchs in India and she promoted herself as a male ruler. Our history remembers her as the ruler with exceptional qualities where no one can reach her personality. (51 of the Greatest Women in India's History, SEP 30, 2020)

**Asima Chatterjee: Scientist (1917 - 2006):** Asima Chatterjee was the first female scientist in India and she also completed Ph.D. in organic chemistry. She dedicated her life in developing anti-malarial and anti-epileptic drugs. On the topic of medicinal properties of plants, she wrote many research papers which were very useful for the further research work. She was also honoured by the Google on her 100<sup>th</sup> birthday with a doodle on the year 2017. (51 of the Greatest Women in India's History, SEP 30, 2020)

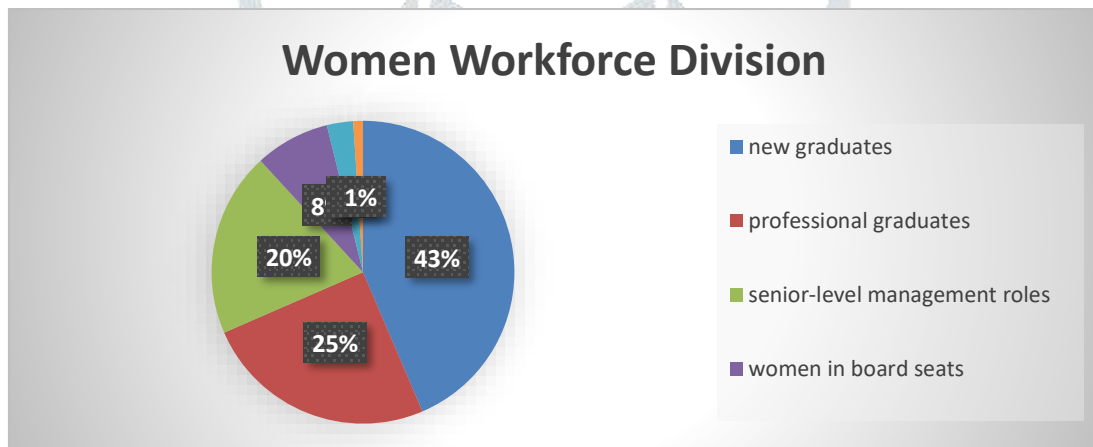
**Captain Prem Mathur: Commercial Pilot (1910 - 1992):** Captain Prem Mathur was the first female commercial pilot in India. Because of being a female eight times she got rejected by private airlines. However she finally got job in Deccan Airways. She was also the winner of National Air Race and was the first British-Indian woman to get pilot license. In 19<sup>th</sup> century the women were not allowed to get out of their home and fulfill their dreams. The patriarchal system of our society didn't help, but in that situation there were some women like Prem Mathur who put a great example for making a positive change. (51 of the Greatest Women in India's History, SEP 30, 2020)

If present status of the women is considered, then complication may arise because some women in India are in the list containing top political leaders and CEOs of MNCs. On the other hand there are still no facilities for the women to continue education. Equal rights are given for both men and women in India but there are few cases where men achieve more than women under same parameters. These hidden parameters become the hurdles between the middle and top management for the women. In corporate world, the percentage of women and men 60% and 40% or may be 70% and 30% but when it grow to the higher level like CEO and board of directors it become approximately 85% male and 15% female or may be less than this. (C., 2016)

#### IV. WOMEN CIVIL ENGINEERS IN INDIA

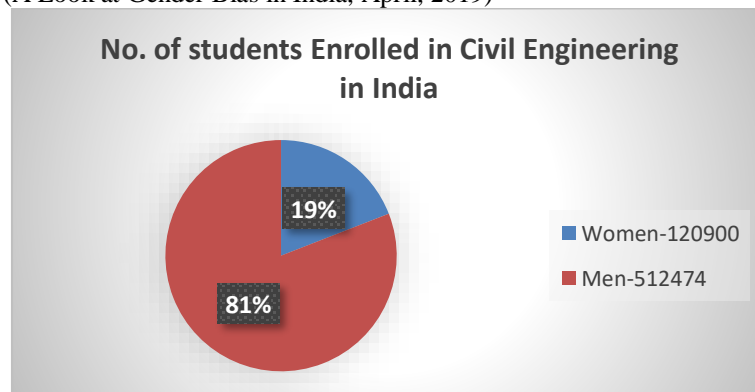
Civil engineering is one of the broadest and oldest branches of engineering, which is mainly comprised of creation, design, maintenance of infrastructure using environmental resources etc. Civil Engineering is about fabricating a society which is sustainable enough to live by providing human needs like clean water, treatment of waste, power, and proper infrastructure like road, rail, harbors and airports. Pursuing a career in civil engineering can be exiting and diverse, with so many options like risk management, surveying to geology designing mining etc. Women can also play an important role in this career for the improvement of the quality of life. (Parikh, 1992)

In India, women make up 42 percent of new graduates, but only 24 percent of entry-level professionals. Of these, about 19 percent reach senior-level management roles. Women hold only 7.7 percent of board seats and just 2.7 percent of board chairs. In the construction, the number drops further as only 1-2 percent reach top-level management positions. (Choudhari, February, 2019)



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Some of the metrics were collected based on the condition of women in civil engineering side. In 1980s, less than 2 percent of engineering degrees were obtained by women, but since then, Growth has been seen in the number of engineering degree pursued by women. In the annual report of Ministry of Human Resource Development released in 2018 shows that over 31 percent of engineering and technology degrees were awarded to women. Though the degrees are increasing but the number of employed women all over India is decreasing. According to the article published in The Economist, The employment rate of women in India is fallen to 26%. Due to the societal expectations the women are kept out of the workforce. There are only 12.7 percent of women who are working as engineers. If men and women are compared based on number of students Enrolled in Civil Engineering in India then it is about 4:1 ratio. If unemployment rate of women is considered then about 40 percent of them are not allowed to work or achieve their dreams. (A Look at Gender Bias in India, April, 2019)



(Ministry of Human Resource Development, 2016)



## V. THE PATTERN OF GENDER BIAS IN THE WORKPLACE

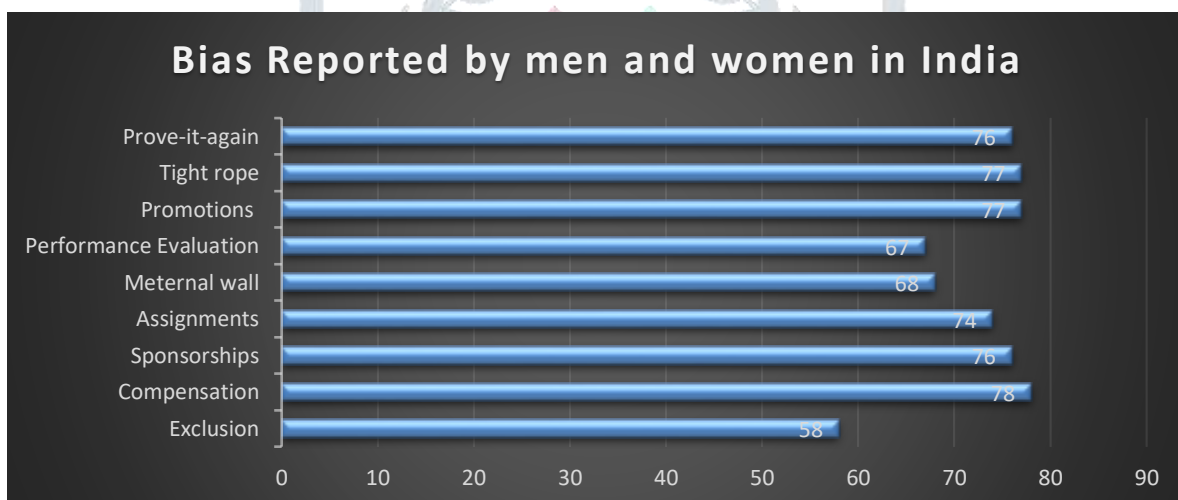
A survey was performed SWE Magazine to ask engineers in India about their personal experiences in their careers and compare the responses of men and women engineers. The survey contained questions about promotions, including pay, workplace processes and performance evaluations, to see if female engineers believe that gender bias has an impact on these decisions and, in turn, their career advancement opportunities within their organizations. They reached to almost 700 engineers and got responses. The survey was done on ratio of 60 women to 40 men. The survey was composed of questions and measurement was based on Likert scale (strongly disagree to strongly agree). The survey was categorized based on four bias patterns:

**Prove-It-Again:** Have to prove ourselves again and again despite of level of expertise and past achievements. A high level of Prove-It-Again bias was reported by both men and women engineers in India, with 76 percent reporting experiencing this bias in their workplace. (Team, April 16, 2019)

**Tightrope:** Which describes about masculinity which keeps women away from physical work. Those who experience this bias walk a tightrope between being seen as too feminine to be competent and too masculine to be likable. When the survey was conducted about 45% of women accepted versus 30% of men. Also, women was asked whether it is inappropriate to argue at work about the things related to work and the results were, 45% of women accepted compared with 28% of men. This shows that women feel less comfortable to express their emotions in the workplace, and men are not giving attention of this constraint. (Team, April 16, 2019)

**Maternal Wall:** It concerns about the giving birth to young ones. Women are held against the workforce as they are placed between the walls for only giving birth. There is an attitude in their workplace that mothers should work less because they should take care for children and about 40% of both men and women engineers agreed about this situation. Also, another conditions arises that only fathers should have to work more once they bear children and about 27% of women and men engineers had voted in its favor. These expectations gave rise to the traditional gender roles where fathers expected to work longer hours to support the family and mothers should be at home to look after children. (Team, April 16, 2019)

**Tug of War:** Sometimes a situation occurs where there will be a competition involves among women in organizations. For those in male-dominated professions, this bias can manifest itself as a fight for the “woman’s spot.” When women are judgmental of one another, this kind of bias occurs or compete against one another for a achieving “woman’s slot” in the office. It’s shocking that only 42% of women engineers were agreed that their female colleagues generally support one another. (Team, April 16, 2019)



(A Look at Gender Bias in India, April, 2019)

## VI. PRACTICAL SOLUTION FOR GLASS CEILING EFFECT IN ENGINEERING FIELD

Let’s take a look on the points on what can be done to inspire women to take engineering and be involved in employment prospects and to reach higher positions.

- A special trainers and teachers should be placed in primary school and also in all organizations so that they can get proper awareness and to address gender issues, their challenges, stereotypes. Those trainers can look into the issues and encourage the women and other backward people to get proper training, internships, and apprenticeships to both men and women. (Why India Needs Women to Work, July 5, 2018) (UNESCO)
- Separate sanitation facilities, Safe school facilities and also child care facilities which can be effective for women so that they can spare time to participate in trainings. Also strict rules against sexual harassment to create an environment where gender equality and mutual respect can be maintained. Also, role plays foster communication, teamwork and respect and interactive learning methods can offer opportunities for both women and men to play different roles, as “leaders” as well as “followers”.
- The women who are already successful can act as role models to others and show them the possible way to break into the gender biased barriers. Provide invaluable insights into how women can overcome prejudice. If a proper network of female engineers is created then they can mentor younger colleagues and other upcoming fresher to achieve their goals.
- Efforts should be made to encourage women to participate in training, employment and education and overcome the male-dominated occupations. Proper designs to overcome the range of existing barriers like training fees, timing, facilities etc. and to respond flexibly to different needs.

- Gender specific policies should be included identifying indicators and setting specific targets, for example, equal participation of women and men in the management of skills development systems and institutions; equal participation of men and women in training programs; lowering gender segregation.
- Qualified women can be found, and recognizing their expertise and achievements will accelerate progress towards a fairer representation and add new perspectives in solving technological problems. Progress in professional associations and scientific research programs can be assessed by monitoring the proportion of women elected to positions on the important committees, governing body, receiving awards and prizes, invited as keynote speakers, panellists on specialty topics and plenary sessions. (UNESCO)
- Faculties of engineering should provide quality counselling to ensure that program and course choices are a good fit with the student's interests and abilities. Parents, Teachers, and counsellors' support are very important in encouraging young women and people to examine the perceptions and to raise girls' interest in engineering areas. Involve families and community in raising awareness and information about potential careers of women, for example by opening training centres.

## VII. CONCLUSION

Women are always underrepresented specially in almost all fields especially civil engineering field. But still some of the women are managing to be successful in their careers. Because of more physical work the women underrepresented that they cannot work in field areas and they are not hired in such kind of jobs. So they should also be given equal opportunities in all branches of the profession and civil engineering in particular which provides a real chance to 'make a difference' and improve life in local communities. The opportunities in civil engineering is more unlike past openings for women should also be more as they have much more patience and also have creative minds which can be readily used.

To help the female to grow and climb the top ladder of the organization, special Mentorship and sponsorship programs should be conducted, networking forums with successful women leaders should be conducted, and support groups for the female employees should be made, programs to enable smooth on boarding of women who have taken career breaks. On the other hand, the sense of familial duty and support helps women get back on track after a break. Thus, the ceiling is breachable only with increased awareness and empowerment of the leaders of tomorrow.

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