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### **The Glass-Ceiling Phenomenon: A Literature Review and Research Agenda**

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## **Abstract**

In a patriarchal society with values that are mostly male-dominated, it is indeed difficult for a woman to secure a deserving platform for herself. Gender issues thus have received much importance in the field of management studies. One such prominent gender issue is the glass-ceiling phenomenon that exists in workplaces. This paper does a review of 98 articles on the glass-ceiling effect and has segregated each article under one of the four baskets - (i) Evidence of the glass-ceiling phenomenon. (ii) Sources of origination of the glass-ceiling, (iii) Consequences of the existence of a glass-ceiling & what happens when it is broken (iv) Ways to shatter the glass ceiling in the workplace. Further to this, several research agendas have been put forward for future researchers. This paper contributes immensely to the existing body of knowledge pertaining to the glass-ceiling issue and will also help future scholars to streamline their research avenues.

**Keywords:** glass-ceiling, gender discrimination, gender inequality, future research.

## **INTRODUCTION**

In a male-dominated society, it has never been easy for a woman to find a place that she truly deserves. Fights for equal rights and opportunities had been fought by women at almost every place across the globe and for every trivial thing. The struggle against injustice and inequality in every phase of life is not new for women. When it comes to a professional career, women are still under-represented in the workforce. Women are held back from moving up the corporate ladder to leadership positions in organizations. This barrier in female employees' career paths was metaphorically explained by invisible glass-ceiling above women in the workplace.

The domain of management studies had been quite active in the discussion related to gender-issues and especially the glass-ceiling effect. What is missing in the literature is the

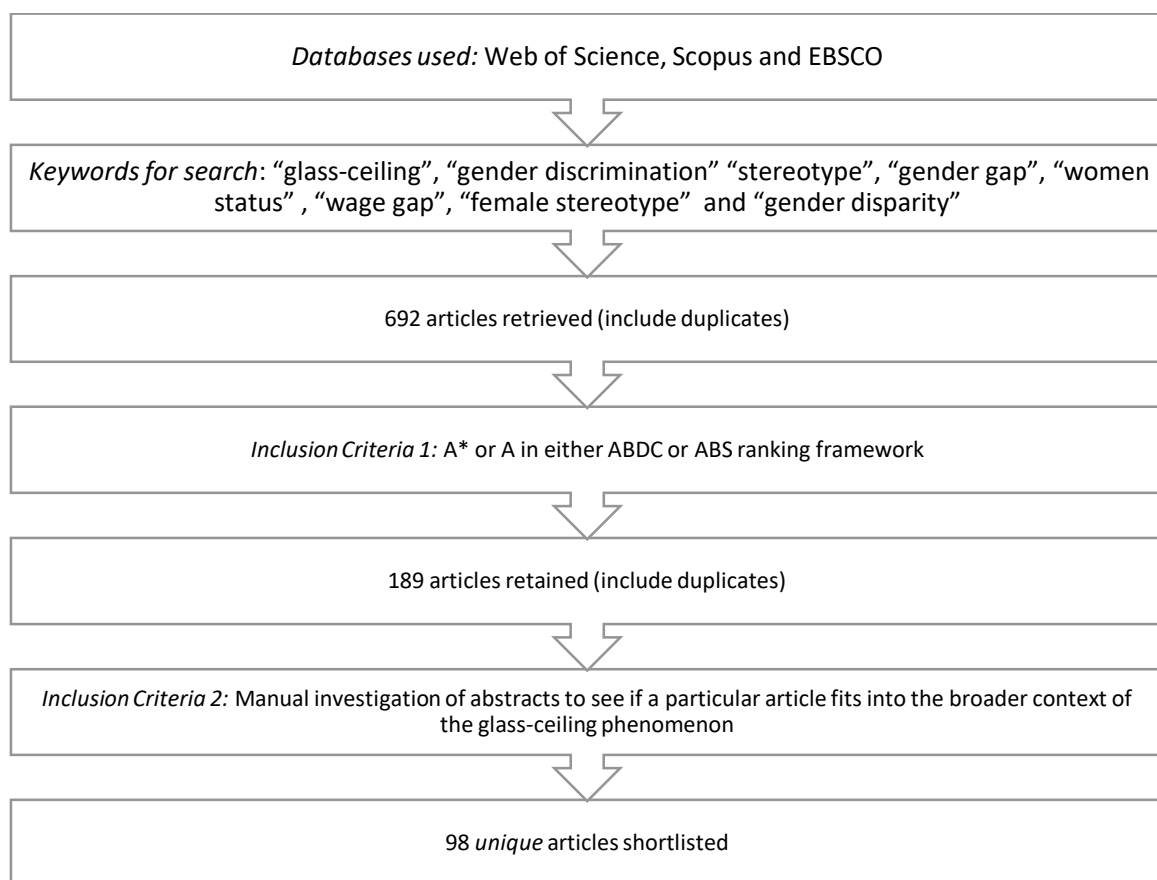
consolidation of all the available knowledge regarding the glass-ceiling phenomenon. This paper intends to address this gap in research by assimilating the fragmented knowledge pertaining to this phenomenon, thereby helping future researchers streamline their research processes and avenues.

This paper had been divided into three major sections – the section on the research process speaks about the stepwise procedure taken to perform the systematic literature review; the results section thereafter attempts to segregate the articles identified into four separate baskets – (i) Evidence of the glass-ceiling phenomenon. (ii) Sources of origination of the glass-ceiling, (iii) Consequences of the existence of a glass-ceiling & what happens when it is broken (iv) Ways to shatter the glass ceiling in the workplace; finally based on these search results and segregation, specific research agendas had been put forward that can help future researchers to streamline their research avenues. This study thereby has immense theoretical implications as it aims to put the fragmented puzzle pieces together in order to comprehend and reflect on the existing literature on one hand and, on the other hand, to help future scholars find novel themes of research in this particular area.

## **RESEARCH PROCESS**

We used three databases – Web of Science, Scopus and EBSCO to select articles to be included in this review. Keywords that were used included "glass-ceiling", "gender discrimination" "stereotype", "gender gap", "women status", "wage gap", "Female stereotype" and "gender disparity". We have not included book chapters, dissertations etc. and kept our search confined to research articles alone. A total of 692 articles were retrieved from the three databases with these keywords in their title, keywords or the abstract section. The inclusion criteria we kept for this review were that the articles should have been published in a journal ranked A\* or A in either ABDC or ABS ranking framework. Employing these inclusion criteria, we were able to reduce the number of articles to 189. We went through the abstract of each of these 189

articles and did a judgemental analysis of whether the particular article fits into the broader context of the glass-ceiling phenomenon that is being discussed in this study. We were able to identify 98 *unique* articles that were exclusively discussing the gender discrimination issues at the workplace – primarily the glass-ceiling phenomenon. There were certain articles for which reading the abstract alone wasn't enough. We had to go through those articles entirely to decide whether to include them in our review process. The stepwise procedure followed to reach the final list of articles for review had been illustrated in Figure 1.

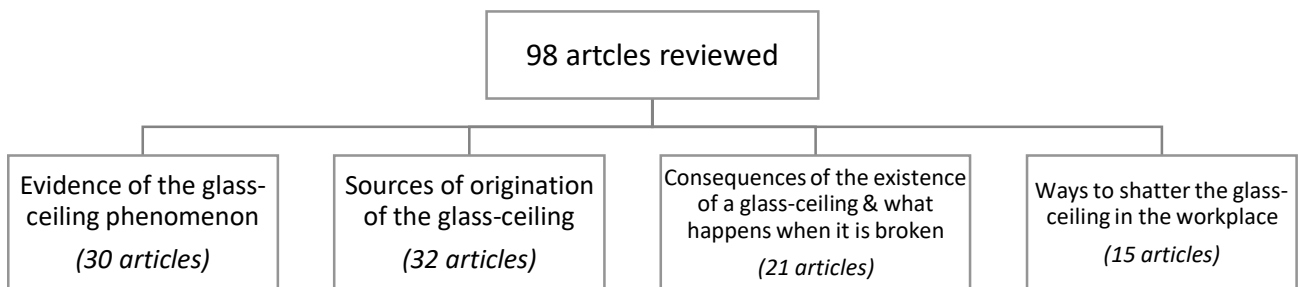


*Figure 1: Stepwise procedure for literature review*

## **RESULTS**

A systematic literature review helps to understand the depth and breadth of research done in a particular area. The finally shortlisted 98 articles were inductively categorized into various

baskets, each of which fit into different grooves of the glass-ceiling phenomenon concept. These are – (i) Evidence of the glass-ceiling phenomenon. (ii) Sources of origination of the glass-ceiling, (iii) Consequences of the existence of a glass ceiling. (iv) Ways to shatter the glass ceiling in the workplace. Figure 2 pictorially shows the number of articles in each basket.



*Figure 2: Segregation of articles*

***Evidence of the glass-ceiling phenomenon:***

Thirty articles spotted evidence of the presence of glass-ceiling above women in the workplace. Evidence of the glass-ceiling can be seen in different countries and different industries. Studies have shown a U-shaped pattern for gender-discrimination in the workplace (Scicchitano, 2014), which indicates the presence of both *sticky-floor* as well as a *glass-ceiling* effect. This disparity is often in terms of pay-gap. But what is interesting is that the gap seems to be broadening towards the top of the corporate ladder (Nordman & Wolff, 2009) that speaks explicitly in favor of the glass-ceiling phenomenon. Evidence of promotion-bias is not uncommon within organizations (Chênevert & Tremblay, 2002). There are, however, evidence that women perform better in certain areas than men (Bukstein & Gandelman, 2019). This indicates certain field-specific characteristics that work in favor of either gender.

The literature search has shown that the problem of the glass-ceiling phenomenon is ubiquitous. If seen across industries, it can be found to be present in the construction industry (Regis, Alberte, Lima, & Freitas, 2019), hospitality industry (Liu, Shen, & Gao, 2020) (Segovia-Pérez, Figueroa-Domecq, Fuentes-Moraleda, & Muñoz-Mazón, 2019) (Sparrowe & Iverson, 1999),

politics (Brown & Diekman, 2013)(B. J. Newman, 2016)(Reynolds, 1999), Information system (Baroudi & Igbaria, 1994), research careers (Bukstein & Gandelman, 2019), accounting (Cohen, Dalton, Holder-Webb, & McMillan, 2020) (Windsor & Auyeung, 2006) and audit (Dambrin & Lambert, 2008) (Månsson, Elg, & Jonnergård, 2013) (Garcia-Blandon, Argilés-Bosch, & Ravenda, 2019) (Nekhili, Gull, Chtioui, & Radhouane, 2020) as well as military services (Baldwin, 1996).

It will be inappropriate to assume that gender discrimination in organizations is an issue faced by women in the emerging economy alone. As can be seen in the literature, the effect seems to be present across the globe irrespective of the economic condition of any nation. Existing studies have shown that the existence of the glass ceiling phenomenon is not specific to any culture or nation but is a problem faced by women worldwide – be it in Uruguay (Bukstein & Gandelman, 2019), Lebanon (Harb & Rouhana, 2020), Italy (Castagnetti & Giorgetti, 2019), Korea (Cho, Lee, & Jung, 2014), Spain (Scicchitano, 2014), Japan (Chiang & Ohtake, 2014), Morocco (Nordman & Wolff, 2009), Israel (Adnan & Miaari, 2018), Canada (Chênevert & Tremblay, 2002), Germany (Hannan, Schomann, & Hans-Peter, 1990), Denmark (Smith, Smith, & Verne, 2011), Sweden (Månsson et al., 2013) (Albrecht, Björklund, & Vroman, 2003), China (Chi & Li, 2008) and even in the U.S. labor market (Le & Miller, 2010).

Table 1 (in Appendix) provides details of all the articles that provide evidence for or against the presence of the glass-ceiling phenomenon in organizations. Although there are studies that had not found evidence of glass-ceiling in certain contexts, the number of such articles is way too less in number than those that have shown that gender-based discrimination in firms is prevalent and statistically significant.

#### ***Sources of origination of the glass-ceiling:***

There are 32 articles which were explaining the potential sources from which the glass-ceiling effect emerges. Surprisingly, most of the gender inequalities had primarily been seen to remain

unexplained in many pieces of research (Khitarishvili, 2019). The main observable characteristics were insufficient in some articles to explain the gender differences in organizations (Sohn, 2015). This unexplained part also accelerates as one moves up the earning distribution curve (Sohn, 2015). What seems fascinating is that even a rise in education only impacts productivity and not the wage cost for women (Kampelmann, Rycx, Saks, & Tojerow, 2018). Thus the gender pay gap that persists even with a rise of education speaks for the glass-ceiling effect faced by women in a situation of educational policy reform that apparently should have been reducing the discrimination.

Some studies highlight that gender inequality exists fundamentally because of gender-specific human capital (Tverdostup & Paas, 2017) requirements of firms and labor-market characteristics (Barnet-Verzat & Wolff, 2008) of any industry. Thus as per these studies, it is the characteristic of the occupation that creates such gender discrimination. On the contrary, few researchers saw that the gender gap is mainly due to differences in observed characteristics rather than the differential characteristics between men and women (Jellal, Nordman, & Wolff, 2008).

Several researchers have also found strong evidence of promotion bias in firms, especially at the upper levels of occupations (Auster & Prasad, 2016). Specific organizations' promotion strategies were found to be radically different for men and women (Sabatier, 2010). A significant driver of such gender-disparity is also a high degree of the perceived magnitude of ideological asymmetry (Auster & Prasad, 2016), a lesser degree of masculine cultural preference (Van Vianen & Fischer, 2002), meta-stereotypical behaviors (Owuamalam & Zagefka, 2013), variations in the relative economic status of women (B. J. Newman, 2016), gender-related effects of self-monitoring (Day, Schleicher, Unckless, & Hiller, 2002) and gender-specific self-conceptions (Cech, 2013). Also, productivity-related characteristics (Ge, Li, & Zhang, 2011) and even motherhood (Dambrin & Lambert, 2008) & childcare (Månsson

et al., 2013) sometimes becomes a significant source of gender differentials and promotion bias at the upper echelon of the corporate ladder. Bosses, who have the decision-making capacity for subordinates, often defer women employees' promotions as they happen to have a preconception that women will suffer from higher work-life conflict due to increased responsibility after promotion (Hoobler, J. M., Wayne, S. J., & Lemmon, 2009). Lack of social support from their male colleagues and paucity of mentoring and networking opportunities also strengthens the glass-ceiling, making it altogether challenging to break (Cohen et al., 2020). When seen in congregational leadership, the nature of the invisible glass-ceiling, unlike in traditional organizations, is purely religious that blocks a woman from ascending to the top of the leadership position, a phenomenon called "stained glass-ceiling" (Adams, 2007). Similarly, in political organizations, the party's ideological nature and the socio-economic development of women in society impact the number of women leaders in the parliament (Reynolds, 1999). Table 2 (in Appendix) provides details of all the articles that provide us with the possible sources from which emerges the glass-ceiling in organizations.

***Consequences of the existence of a glass-ceiling & what happens when it is broken:***

There are 21 articles, as shown in Table 3 (in Appendix), which showed the consequences that women face as a result of having the glass-ceiling above their heads and the consequences faced by those who manage to break the glass ceiling for themselves.

As a consequence of promotion bias within firms, women are given fewer promotions than their male counterparts in the upper occupational levels and mostly women leaders are internally promoted and there is less hiring of top female management in firms (Lyness & Judiesch, 1999). Women perceive lower returns to their job-experience, job-tenure and education (Xiu & Gunderson, 2014). Research has shown that women's job satisfaction even starts decreasing at higher-level management positions (Lup, 2018). It is alarming to note that most male colleagues are oblivious that their female colleagues face discrimination. There are



two possible consequences of this – either the male employees engage themselves in benevolent sexism (Oliver, Krause, Busenbark, & Kalm, 2018) after becoming aware of the existence of gender discrimination, or they continue with their egocentric bias (Hernandez, 2018). Neither of these actions reduces gender inequality; instead, such behaviors only legitimize the discrimination further.

However, the issue of gender bias does not end at once when a woman successfully moves beyond this glass-ceiling. Such women leaders often land up in precarious leadership positions when the firm faces a crisis (Morgenroth, Kirby, Ryan, & Sudkämper, 2020) or the firm is showing a weak performance (Cook & Glass, 2014) - a phenomenon termed as the *glass-cliff effect*. But again, not always situations are so gloomy. Research has also proved that women outperform men when promoted to a leadership position in an organization. A firm's efficiency has been seen to increase in companies (Garcia-Blandon et al., 2019), and such organizations led by women executives tend to become more ethical (Luo, Peng, & Zhang, 2020).

Also, it often seems that women who had been able to break this invisible glass-ceiling create a cascading effect that can make life easier for their predecessors in the firm (Dowd, Liddle, & Blyler, 2005). However, there are contrasting cases also. Previous research has seen that women leaders who engage in such diversity-valuing activities are negatively rewarded with worse performance ratings (Hekman, Johnson, Foo, & Yang, 2017). Such a penalty discourages women leaders from bringing a change they wish to create in the organization. However, diverse decision-makers surely increase the *possibility* of women being promoted to a leadership position (Cook & Glass, 2014b). But it has been found that there is not only a hindrance for women while moving up, but even after reaching a point within a particular hierarchy, women are discriminated against continuously from being a part of teams taking critical decisions. In contrast to the glass-ceiling effect, this effect is termed the *glass-house effect* (Maclaran, Stevens, & Catterall, 1997). Even at the topmost position in the corporate

hierarchy, women are seen to be less appointed as directors even though they manage to get to the board, despite having equal or more experience and necessary qualifications than their male colleagues (Field, Souther, & Yore, 2020). This makes it very clear that the battle for equal rights and opportunity will not end easily for women.

Interestingly, the glass-ceiling phenomenon that is undoubtedly detrimental to women's professional lives is advantageous to their male colleagues. This entire issue creates a *glass-escalator* for men moving up the corporate hierarchy (Maume, 1990). However, if a firm succeeds in breaking this glass-ceiling effect for women employees, other problems like sexual harassment and sexism are expected to decrease simultaneously (Bell, McLaughlin, & Sequeira, 2002). It will also decrease the perceived gender-inequality in firms while increasing women's job satisfaction at top-management positions (Semykina & Linz, 2013).

#### ***Ways to shatter the glass-ceiling in the workplace:***

A primary way of reducing such gender discrimination is to make transparent firm policies regarding accurate and realistic performance feedback (Powell & Butterfield, 1994). An increase in institutional status also plays an essential role in reducing gender inequality (Blevins, Sauerwald, Hoobler, & Robertson, 2019). A woman's career expectation and work-family balance influence her career advancement and commitment towards the organization (Liu et al., 2020). More family-friendly policies (Smith et al., 2011) (Datta Gupta, Smith, & Verner, 2008) and work-life human resource practices (Dreher, 2003) in an organization are thus negatively correlated with the gender gap in a firm's upper tier. There is no way one can disagree that career interruptions are more prominent in a woman's professional life. Research has even explored how a male partner's working hours negatively impact women's promotion probabilities (Baerts, Deschacht, & Guerry, 2011). It is alarming when research shows that most male colleagues are oblivious that their female colleagues face discrimination. More than institutional and social support, well-drafted national and international policies should be

implemented if the motive is to reduce the gender-gap in firms (Windsor & Auyeung, 2006). Again, policies like Equal Employment Opportunities (M. A. Newman, 1996) and gender-quotas (Bertrand, Black, Jensen, & Lleras-Muney, 2019) are less likely to achieve the purpose of reducing gender-bias as the discrimination that is although prominent throughout the wage distribution, faces the problem of “swimming upstream,” i.e., the differentials are amplified at the higher-earning levels. Such policies, at times, legitimizes the gender-discrimination (Brown & Diekmann, 2013). Thus, a segmented equity or block equity can only mitigate this gender-gap. Table 4 (in Appendix) details the 15 articles that explicitly speak about breaking the glass ceiling.

## **REFLECTIONS AND AVENUES FOR FUTURE RESEARCH**

### ***Reflections on the literature review***

The review of the literature made it clear that the issue of gender inequality is present across nations and industries. Segregating the articles related to the glass-ceiling effect into different baskets (antecedents, consequences, ways to shatter the barrier and primary evidence) allow us to analyze the field better in a holistic sense and put forward several avenues of future research that are either not addressed or scarcely addressed by the prevailing literature. The following figure highlights the major factors pertaining to each pillar as has been unearthed from the literature review.

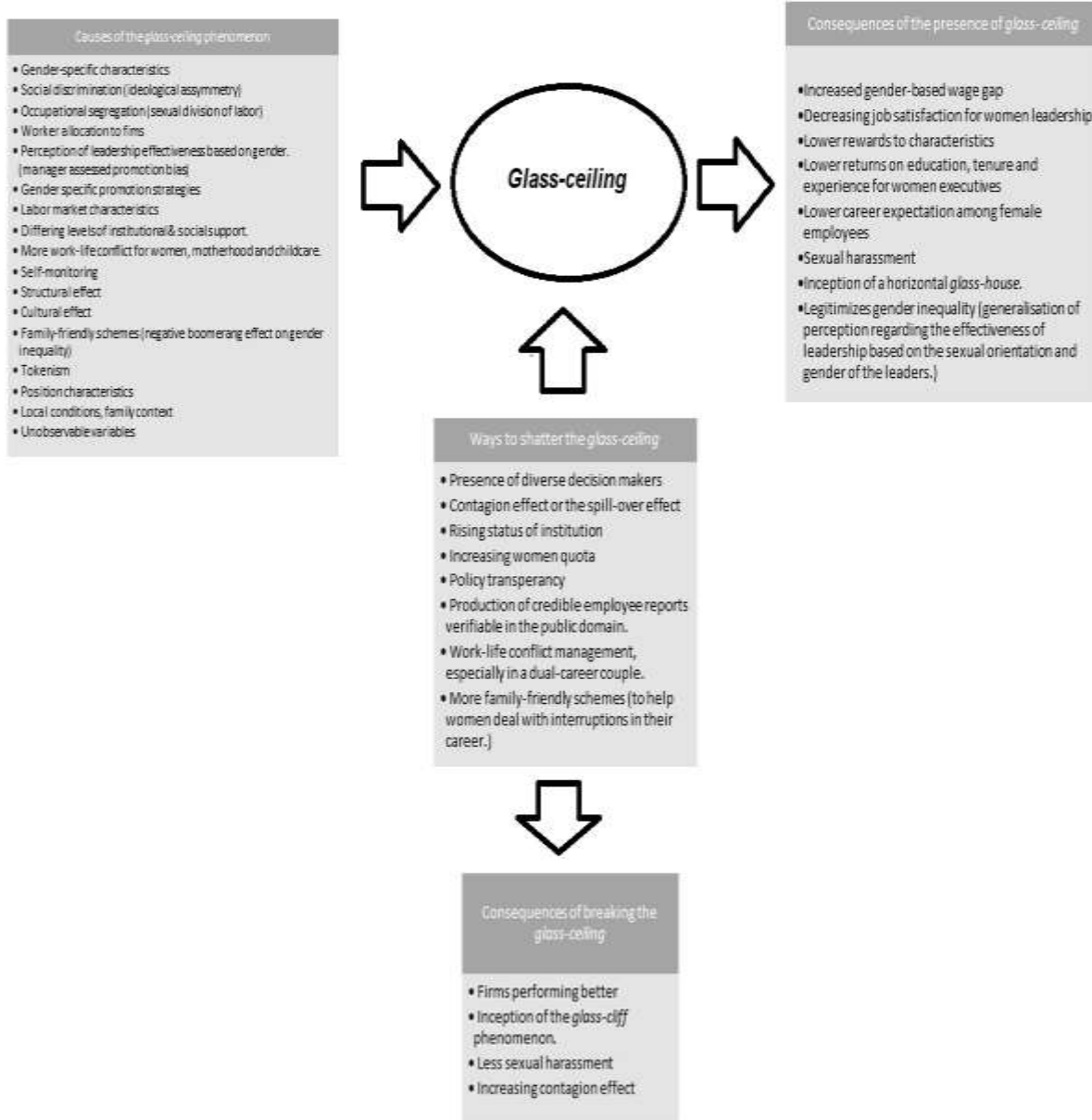


Figure 3: Reflections on the literature review

### ***Avenues for future research***

Allocating the articles in different boxes will help researchers have a clarified and holistic view of the effect. A meta-analysis can be performed by scholars using this framework of antecedent and consequences of gender discrimination. We intend to take this up in our future researches. Also, as seen in this literature review, research had been heavily focused on cross-sectional research design. As the glass-ceiling phenomenon had been said to be “swimming upstream”

and it is evident from most articles that the problem becomes more pronounced over the life-course, future research must take up longitudinal research designs (Maume, 2004). A longitudinal study will help scholars capture reality better and will make the mesh of the theory finer.

While the evils of gender bias have been found in several parts of the world and also in several sectors, certain literature highlights that the glass-ceiling phenomenon had been found to be weak in core sectors (Cho et al., 2014) and more in public sectors (Castagnetti & Giorgetti, 2019). This allows for a call for more future research to investigate if gender stereotype is more in certain sectors than in others. Also, an interesting thing to explore will be how strong male or female-dominated values determine gender discrimination in these sectors. There are articles which had shown the masculine cultural preferences (Van Vianen & Fischer, 2002), meta-stereotyping (Owuamalam & Zagefka, 2013), and ideological asymmetry (Auster & Prasad, 2016) can become a significant hindrance factor for ambitious women who tries to move up the ladder. Future research can build on this existing body of literature. Again, while some articles show a strong contagion effect (Flabbi, Piras, & Abrahams, 2017) (De Cabo, Gimeno, & Escot, 2011) whereby the likelihood of more women being at leadership positions increases with the number of female leaders who have been able to reach there, surprisingly there are studies where the contagion effect was found to be less (Geys & Sørensen, 2019) which indeed is a matter of concern. This lack of spillover effect partly points towards a famous saying that “a woman is another woman’s worst enemy”; future research can also focus on the term *patriarchal bargaining* (Kandiyoti, 1988) and if it can be another potential cause of the existence of the glass-ceiling above women in the workplace.

Research has been done on inter-country comparisons of gender bias (Baxter & Wright, 2000). However, further research can also be done to understand how more substantial gender discrimination is in less-developed countries compared to the more developed countries. This

will help the countries with more gender stereotype problems understand how much they lag behind and what exactly can be done on a national level to deal with this problem.

The glass-ceiling phenomenon, although had been seen to be distinctively a gender issue (Cotter, Hermsen, Ovadia, & Vanneman, 2001), ethnic minorities also face similar problems in the workplace. With the *Black Lives Matter* movement gaining popularity, the discrimination based on race and ethnicity should be given increased importance in management research. Another area that requires substantive focus from future researchers is the discrimination faced by the LGBT community. We found only two articles to be discussing the biases and inequalities faced by people belonging to this community (Aksoy, Carpenter, Frank, & Huffman, 2019) (Bridges & Mann, 2019). More research is required to bring up their problems. This calls for extensive future researches in this area.

Some research has shown that glass-ceiling is felt by highly educated women rather than less-educated women (De La Rica, Dolado, & Llorens, 2008). On the other hand, research has shown that increased education for women only increases productivity but has less impact on the wage cost (Kampelmann et al., 2018). This brings us to an important research question: whether the decreasing gender-gap in education increases the gender gap in the professional world. As the glass-ceiling effect seems to be more pronounced at the upper echelon of the corporate world, this question is entirely legitimate. It can help scholars in understanding where the actual problem emerges from.

On the other hand, family-friendly policies are essential for women, as it is evident that they face more career interruptions than their male colleagues. Such schemes seem to help women deal with the increasing work-family conflict as they move up the corporate ladder. But, what can be seen in the literature is undeniably alarming. Such family-friendly schemes of firms while they help women deal with work-life conflict, it at the same time legitimizes the presence of gender-bias in the organization (Smith et al., 2011) and in turn there comes up a “system

based glass-ceiling” (Datta Gupta et al., 2008) which becomes even more difficult for women to breakthrough. The relative importance of each policy on the firms’ gender-gap thus needs to be investigated by future researchers.

The reason why women-centric policies seem to promote gender-bias can be majorly attributed to the fact that the workplace, since its inception, had been heavily male-dominated. The consequence of this is that several male employees are simply unaware of the gender discrimination faced by their female colleagues daily (Hernandez, 2018). And once they become aware of the existence of such bias, they choose either to carry on with their egocentric bias (Hernandez, 2018) or indulge in benevolent sexism (Oliver et al., 2018), either of which instead of decreasing the inequality issue, adds fuel to the fire. There has been very little research done on the required trade-off between these two activities that can impact the glass-ceiling effect. Future research can explore this area, especially from the perspective of the male employees in an organization.

Lastly, a fascinating research area will be to understand if the entire concept of the glass-ceiling phenomenon had been used for the advantage of women. This is because research has shown that there lies the importance of language for how individual frame and perceive inequality (Bruckmüller, Reese, & Martiny, 2017). It is needless to mention that the *subjects* are women and the *referents* are men in workplaces for all the articles in this literature review. This has probably forced researchers to investigate if women are *more disadvantaged* than men, which can provoke varying social judgments. Future research can also explore the entire phenomenon using the lens of prospect theory.

## **CONCLUSION**

The term *glass-ceiling* is applied to barriers faced by women in their career that keeps them from rising the corporate ladder - the barrier that is unseen and at the same time is difficult to break. It intends to hold back ambitious women despite them being qualified and experienced

enough. While the invisible glass-ceiling highlights the bias that can be based on gender, race or ethnicity, in this article we have specifically focused on the discrimination faced by women in the workplace.

This article had assimilated the existing knowledge pertaining to the *glass-ceiling* phenomenon. We aim to provide this area and the researchers with streamlined agendas for future research. While it is evident that gender-issues had been assessed heavily and deeply in literature, there remain areas that have been less-visited or are not at all visited by researchers. In this paper, we have attempted to provide light in those directions.

One limitation of the study is that although we have attempted to put the different articles in separate baskets, it was difficult many times. This is because there are many articles that are eligible to go into more than one basket. Yet, in order to keep our review simplified, we have put them into the one area where the results of those articles have majorly focused on.

This paper has heavily contributed to the existing body of knowledge pertaining to the glass-ceiling phenomenon and has provided several research agendas for research scholars. This will enrich the researches that will be conducted by them in the future. Also, this paper has firm practical implications. With the integration of literature and thereby segregating articles into different baskets, a holistic view has been put forward on the tables of managers who can now make critical decisions for their workforce. Such decisions may reduce the gender inequality issue in organizations. Hopefully, our article will assist society as a whole to take a small step in that direction; towards a world where the concept of *glass-ceiling* will become obsolete and irrelevant.

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## APPENDIX

**Table 1: Evidence of the glass-ceiling phenomenon:**

Title	Year	Source title	Author(s)	Major Findings
<i>Glass ceiling in a stratified labor market: Evidence from Korea</i>	2014	<i>Journal of the Japanese and International Economies</i>	(Cho et al., 2014)	<i>The Glass-ceiling effect is found to be weak in the core sector. There is unexplained gender discrimination in the peripheral sector, which increases as the wage quantile moves up from the lower to higher levels.</i>
<i>Glass ceilings in research: Evidence from a national program in Uruguay</i>	2019	<i>Research Policy</i>	(Bukstein & Gandelman, 2019)	<i>In Uruguay, female researchers were found to have a lower probability than their male colleagues for getting accepted into the national research support program. Concrete evidence of glass-ceiling was found in health science, humanities and natural science rather than in social science, engineering and agricultural sciences.</i>
<i>Voting patterns and the gender wage gap</i>	2018	<i>Journal of Economic Behavior and Organization</i>	(Adnan & Miaari, 2018)	<i>The gender gap remained one of the areas of concern even when the gap had reduced considerably in educational attainment in Israel.</i>
<i>Gay glass ceilings: Sexual orientation and workplace authority in the U.K.</i>	2019	<i>Journal of Economic Behavior and Organization</i>	(Aksoy et al., 2019)	<i>Evidence of glass-ceiling for the LGBT community. Presence of social stratification in the workplace associated with sexual orientation.</i>
<i>Earnings and gender wage gap in Lebanon: the role of the human and social capital</i>	2020	<i>Applied Economics</i>	(Harb & Rouhana, 2020)	<i>Evidence of quicksand and glass-ceiling effect for female workers within the Lebanese working population.</i>
<i>Understanding the gender wage-gap differential between the public and private sectors in Italy: A quantile approach</i>	2019	<i>Economic Modelling</i>	(Castagnetti & Giorgetti, 2019)	<i>Evidence of the gender-based wage gap in the public sector as well as the private sector in Italy. However, the presence of the glass-ceiling effect is evident only in the public sector.</i>
<i>The gender wage gap among Spanish managers</i>	2014	<i>International Journal of Manpower</i>	(Scicchitano, 2014)	<i>Evidence of the gender-based wage gap within the Spanish workforce. There is a U-shaped pattern that speaks for the presence of both the sticky floor and the glass ceiling effect.</i>
<i>Performance-pay and the gender wage gap in Japan</i>	2014	<i>Journal of the Japanese and International Economies</i>	(Chiang & Ohtake, 2014)	<i>The gender wage gap had been observed among the white-collar workers receiving performance pay in Japan. Also, there is evidence of promotion bias at the top of the distribution for workers receiving non-performance pay.</i>
<i>Rent sharing as a driver of the glass ceiling effect</i>	2013	<i>Economics Letters</i>	(Matano & Naticchioni, 2013)	<i>Explains how rent-sharing is related to glass-ceiling in Italy.</i>
<i>Glass ceiling and double disadvantage effects: Women in the U.S. labour market</i>	2010	<i>Applied Economics</i>	(Le & Miller, 2010)	<i>Evidence of gender discrimination in the U.S. Labor market. Women have been found to have lower rates of pay across the entire wage scale. However, there seems to be minimal evidence of the glass-ceiling effect.</i>
<i>Is there a glass ceiling in Morocco? Evidence from matched worker - Firm data</i>	2009	<i>Journal of African Economies</i>	(Nordman & Wolff, 2009)	<i>Evidence of the glass-ceiling effect in terms of age gap had been found in Morocco. The gender wage gap had been found to be widening at the top of the corporate ladder.</i>



<i>Glass ceiling or sticky floor? Examining the gender earnings differential across the earnings distribution in urban China, 1987-2004</i>	2008	<i>Journal of Comparative Economics</i>	(Chi & Li, 2008)	<i>Presence of gender earning differential in the Chinese urban labor market. Evidence of the sticky floor effect was profound in the data.</i>
<i>Ceilings or floors? Gender wage gaps by education in Spain</i>	2008	<i>Journal of Population Economics</i>	(De La Rica et al., 2008)	<i>The gender-based pay gap in Spain increases as one moves up the wage distribution but is only the case for highly educated workers. The gap interestingly decreases for less-educated workers in the workforce.</i>
<i>Cracks in the glass ceiling? An empirical study of gender differences in income in the hospitality industry</i>	1999	<i>Journal of Hospitality and Tourism Research</i>	(Sparrowe & Iverson, 1999)	<i>Evidence of gender-based disparity in the hospitality industry in the U.S. even after controlling for the effects of human capital, workforce participation, and occupational crowding among employees.</i>
<i>Is there a glass ceiling in Sweden?</i>	2003	<i>JOURNAL OF LABOR ECONOMICS</i>	(Albrecht et al., 2003)	<i>Existence of gender discrimination throughout the wage distribution, but the gap accelerates at the upper tail. Gender bias exists even after controlling for age, education, occupation, sector and industry.</i>
<i>Sexual Orientation, Legal Partnerships and Wages in Britain</i>	2019	<i>Work, Employment and Society</i>	(Bridges & Mann, 2019)	<i>Evidence of glass-ceiling effect for the LGBT community in Britain.</i>
<i>The glass ceiling effect</i>	2001	<i>SOCIAL FORCES</i>	(Cotter et al., 2001)	<i>Evidence that the glass-ceiling phenomenon is distinctively a problem of gender discrimination.</i>
<i>Glass-Ceiling Effect or Cohort Effect? A Longitudinal Study of the Gender Earnings Gap for Engineers, 1982 to 1989</i>	1998	<i>American Sociological Review</i>	(Morgan, 1998)	<i>Penalties like earning differential within women engineers are due to cohort effects rather than the glass-ceiling effect. Multi-cohort longitudinal designs are to be used for investigation rather than a cross-sectional research design.</i>
<i>Unveiling the Hidden Glass Ceiling: An Analysis of the Cohort Effect Claim</i>	2000	<i>American Sociological Review</i>	(Alessio & Andrzejewski, 2000)	<i>The article is a critical review of Morgan (1998). It shows why the article by Morgan (1998) had interpretations that were biased and were based on methodological flaws. Morgan (1998) said that there is no glass-ceiling effect and the cohort effect exists. This article mentions that there is a hidden glass-ceiling above women represented in the dataset.</i>
<i>Is the glass ceiling a unique form of inequality? Evidence from a random-effects model of managerial attainment</i>	2004	<i>Work and Occupations</i>	(Maume, 2004)	<i>The glass ceiling phenomenon manifests itself more in longitudinal studies as the gender-based inequality increases over the life course and can be best captured by longitudinal research design.</i>
<i>Cracks in the glass ceiling: gender and promotion in the economics profession</i>	1999	<i>American Economic Review</i>	(Mcdowell, Singell, & Ziliak, 1999)	<i>Gender differences during promotion were evaluated, which indicated that the prospects of promotions for women are inferior compared with the promotion prospects of their male colleagues in the economics profession.</i>
<i>Coping with Powerlessness: The Relationship of Gender and Job Dependency to Empowerment-Strategy Usage.</i>	Dec86	<i>Administrative Science Quarterly</i>	(Mainiero, 1986)	<i>Women tend to cope better with powerlessness as they tend to use greater acquiescence strategy in job dependency scenarios. Relative job dependency had more effect than gender on the use of the strategy.</i>

<i>Sex and Sector Differences in the Dynamics of Wage Growth in the Federal Republic of Germany.</i>	Oct90	<i>American Sociological Review</i>	(Hannan et al., 1990)	<i>Education had been found to positively impact the wage growth irrespective of the gender of an employee. However, while the relationship is statistically significant for men, it is not for the women workforce. Wage growth had been found to be rapid initially but declines sharply for a woman along with her career graph over time.</i>
<i>An Examination of Gender Effects on Career Success of Information Systems Employees.</i>	Winter94/95	<i>Journal of Management Information Systems</i>	(Baroudi & Igbaria, 1994)	<i>Females in the occupation of Information Systems (I.S.) are found to be employed at a level lower than their male colleagues. They have less earnings and are more willing to quit their jobs.</i>
<i>Factors determining the career success of doctorate holders: evidence from the Spanish case.</i>	Dec2014	<i>Studies in Higher Education</i>	(Canal-Domínguez & Wall, 2014)	<i>Ph.D. holders had been recognized as people who have a more complex conception of job satisfaction. Women Ph.D. holders had been found to be more successful in humanities and social sciences, whereas men Ph.D. holders are more successful in science. Thus, it seems that the area-specific characteristics, rather than the glass-ceiling effect, explains this phenomenon.</i>
<i>Sex Segregation and Glass Ceilings: A Comparative Statics Model of Women's Career Opportunities in the Federal Government over a Quarter Century.</i>	Nov97	<i>American Journal of Sociology</i>	(Yamagata, Yeh, Stewman, & Dodge, 1997)	<i>Evidence found regarding gender differential when seen within one's occupational internal labor market (ILM). However, the glass-ceiling effect was negligible when pathways that include changing ILM are considered.</i>
<i>The promotion record of the United States army: glass ceilings in the officer corps</i>	1996	<i>Public Administration Review</i>	(Baldwin, 1996)	<i>Evidence of glass-ceiling effect in the U.S. Army where women are under-represented in the middle officer ranks and are promoted at lower rates than their male colleagues.</i>
<i>Managerial career success in Canadian organizations: is gender a determinant?</i>	Sep2002	<i>International Journal of Human Resource Management</i>	(Chênevert & Tremblay, 2002)	<i>The effect of gender on the speed, as well as the number of promotions among Canadian managers, had been studied. The results showed that career success is predicted by different variables for men and women.</i>
<i>The persistent glass ceiling: Gendered inequalities in the earnings of lawyers.</i>	Jun95	<i>British Journal of Sociology</i>	(Kay & Hagan, 1995)	<i>Evidence of gender discrimination had been found among law professionals. Men were found to receive higher income rewards than women for the human capital that they had acquired. The earning differential also was seen to be increasing as one moves up the mobility ladder.</i>
<i>The Glass Ceiling Hypothesis: A Comparative Study of the United States, Sweden, and Australia</i>	2000	<i>Gender and Society</i>	(Baxter & Wright, 2000)	<i>Evidence of weak glass-ceiling effect was found in Australia and Sweden, whereas no systematic glass-ceiling phenomenon in the United States was found.</i>

**Table 2: Sources of origination of the glass-ceiling**

<i>Title</i>	<i>Year</i>	<i>Source title</i>	<i>Author(s)</i>	<i>Major Findings</i>
<i>Second-order statistical discrimination</i>	2013	<i>Journal of Public Economics</i>	(Klumpp & Su, 2013)	<i>Human capital distribution showing less variation among female employees become self-fulfilling, thus legitimizing the glass-ceiling phenomenon.</i>

<i>Gender bias and explanation models for the phenomenon of women's discriminations in research careers</i>	2013	<i>Scientometrics</i>	(Kretschmer & Kretschmer, 2013)	<i>Persistence of myths found to explain gender discrimination in research careers. It explains the existence of unseen barriers for women.</i>
<i>Stained glass makes the ceiling visible: Organizational opposition to women in congregational leadership</i>	2007	<i>Gender and Society</i>	(Adams, 2007)	<i>Lower representation of women in the top leadership positions of a religious organization can be attributed to the religious nature of such firms leading to an effect termed as "stained glass ceiling".</i>
<i>GENDER PAY GAPS IN THE FORMER SOVIET UNION: A REVIEW OF THE EVIDENCE</i>	2019	<i>Journal of Economic Surveys</i>	(Khitarišvili, 2019)	<i>Gender pay gaps at higher occupational levels remain unexplained and are caused mostly by unobserved gender differences.</i>
<i>Does education raise productivity and wages equally? The moderating role of age and gender</i>	2018	<i>IZA Journal of Labor Economics</i>	(Kampelmann et al., 2018)	<i>The rise in women's education does not necessarily reduce the gender wage gap. It increases productivity but has less impact on wage costs.</i>
<i>Gender-specific human capital: identification and quantifying its wage effects</i>	2017	<i>International Journal of Manpower</i>	(Tverdostup & Paas, 2017)	<i>The existence of a glass-ceiling phenomenon can be said to exist due to gender-specific human capital profiles.</i>
<i>Why Do Women Still Not Make It to the Top? Dominant Organizational Ideologies and Biases by Promotion Committees Limit Opportunities to Destination Positions</i>	2016	<i>Sex Roles</i>	(Auster & Prasad, 2016)	<i>There exists a promotion bias for women at the upper occupational levels in a corporate ladder. Most of these biases are due to the perceived degree of ideological asymmetry.</i>
<i>What drives the gender wage gap? A look at the role of firm and job-title heterogeneity</i>	2016	<i>Oxford Economic Papers</i>	(Cardoso, Guimarães, & Portugal, 2016)	<i>Gender discrimination exists due to worker allocation to firms rather than occupational segregations.</i>
<i>The Gender Gap in Earnings Among Teachers: The Case of Iowa in 1915</i>	2015	<i>Feminist Economics</i>	(Sohn, 2015)	<i>The gender gap in earnings is unexplained by major observable characteristics and the unexplained parts increase as one moves up the corporate ladder.</i>
<i>Gender earnings gaps in Hong Kong: Empirical evidence from across the earnings distribution in 2006</i>	2011	<i>China Economic Review</i>	(Ge et al., 2011)	<i>Gender differentials at higher levels of earnings are explained majorly by productivity-related characteristics. Occupational segregation favors male workers at higher levels in a firm.</i>
<i>Do female researchers face a glass ceiling in France? A hazard model of promotions</i>	2010	<i>Applied Economics</i>	(Sabatier, 2010)	<i>Factors boosting promotion differs according to gender and there exists evidence of differential promotional strategies for male and female employees.</i>
<i>Evidence on the glass ceiling effect in France using matched worker-firm data</i>	2008	<i>Applied Economics</i>	(Jellal et al., 2008)	<i>Gender discrimination at the higher occupational level is due to differential returns of observed characteristics for men and women rather than gender-specific capability differences.</i>
<i>Gender wage gap and the glass ceiling effect: A firm-level investigation</i>	2008	<i>International Journal of Manpower</i>	(Barnet-Verzat & Wolff, 2008)	<i>Gender differences in an organization exist due to labor market characteristics rather than differences in rewards of individual characteristics.</i>
<i>Career progression in a fortune 500 company: examination of the glass ceiling</i>	1996	<i>IEEE Transactions on Engineering Management</i>	(Tokunaga & Graham, 1996)	<i>Gender differences in promotions are explained by work-related variables like the tenure of an individual in the organization.</i>

<i>Mothering or auditing? the case of two Big Four in France</i>	2008	<i>Accounting, Auditing and Accountability Journal</i>	(Dambrin & Lambert, 2008)	<i>Recruitment at the lower level is quite gender-balanced. Evidence of the relationship between glass-ceiling and motherhood.</i>
<i>DOES DIVERSITY-VALUING BEHAVIOR RESULT IN DIMINISHED PERFORMANCE RATINGS FOR NON-WHITE AND FEMALE LEADERS?</i>	2017	<i>ACADEMY OF MANAGEMENT JOURNAL</i>	(Hekman et al., 2017)	<i>Ethnic minorities and female leaders are penalized for exhibiting diversity-valuing behaviors. This is a result of negative sex stereotypes placed on such leaders.</i>
<i>The Self-Expressive Edge of Occupational Sex Segregation</i>	2013	<i>AMERICAN JOURNAL OF SOCIOLOGY</i>	(Cech, 2013)	<i>Cultural ideals of self-expression convert gender-stereotyping self-conceptions into self-expressive career choices and reinforce sex-based occupational segregation.</i>
<i>BOSSSES' PERCEPTIONS OF FAMILY-WORK CONFLICT AND WOMEN'S PROMOTABILITY: GLASS CEILING EFFECTS</i>	2009	<i>ACADEMY OF MANAGEMENT JOURNAL</i>	(Hoobler, J. M., Wayne, S. J., & Lemmon, 2009)	<i>Bosses perceive that women face work-family conflict more than their male colleagues and thus are less competent for the organizations and the jobs.</i>
<i>Women in the legislatures and executives of the world: Knocking at the highest glass ceiling</i>	1999	<i>World Politics</i>	(Reynolds, 1999)	<i>The article investigates women's access to political representation. The results indicate that local women's socio-economic development in society impacts the number of women in parliament. Electoral systems that are women-centric and the state's dominant religion that acts as a proxy for culture statistically determine the number of women in political office.</i>
<i>Self-monitoring personality at work: A meta-analytic investigation of construct validity</i>	2002	<i>JOURNAL OF APPLIED PSYCHOLOGY</i>	(Day et al., 2002)	<i>Sex-related effects for self-monitoring partially explain gender disparities in the workplace.</i>
<i>An Analysis of Glass Ceiling Perceptions in the Accounting Profession</i>	2020	<i>JOURNAL OF BUSINESS ETHICS</i>	(Cohen et al., 2020)	<i>Structural factors, demographic factors, and cultural factors explain the existence of the glass-ceiling above women in organizations.</i>
<i>Gender-based career differences among young auditors in Sweden</i>	2013	<i>INTERNATIONAL JOURNAL OF MANPOWER</i>	(Månsson et al., 2013)	<i>Women associated with childcare are less likely to be promoted to the top position of a corporate ladder.</i>
<i>Illuminating the glass ceiling: The role of organizational culture preferences</i>	2002	<i>JOURNAL OF OCCUPATIONAL AND ORGANIZATIONAL PSYCHOLOGY</i>	(Van Vianen & Fischer, 2002)	<i>Less masculine cultural preferences by women become a hindrance in their path of career progression. Women found to be less ambitious than men and also ambitious women facing more significant work-home conflict explains the gender disparity in firms.</i>
<i>Bridging the Gender Gap: Identifying What Is Holding Self-employed Women Back in Ghana, Rwanda, Tanzania, and the Republic of Congo</i>	2016	<i>WORLD BANK ECONOMIC REVIEW</i>	(Nix, Gamberoni, & Heath, 2016)	<i>Local conditions influence gender discrimination and there can exist no one singular model of earnings gap w.r.t gender.</i>
<i>A Reconsideration of Self- and Organization-Referent Attitudes as "causes" of the Glass Ceiling Effect.</i>	Sept92	<i>Group &amp; Organization Management</i>	(Snyder, Verderber, Langmeyer, & Myers, 1992)	<i>Position characteristics explain the attitude towards gender in an organization.</i>
<i>We'll never get past the glass ceiling! Meta-stereotyping, world-views and perceived relative group-worth</i>	2013	<i>British Journal of Psychology</i>	(Owuamalam & Zagefka, 2013)	<i>Meta stereotypes on views of group members explain gender discrimination in organizations.</i>

<i>Demographic category membership and leadership in small groups: A social identity analysis</i>	2006	<i>The Leadership Quarterly</i>	(Hogg et al., 2006)	<i>Attitude towards gender, group salience, expressive group norms and leader gender interact significantly and effectively explain perception towards leader effectiveness.</i>
<i>Incorporating a gender approach in the hospitality industry: Female executives' perceptions</i>	January 2019	<i>International Journal of Hospitality Management</i>	(Segovia-Pérez et al., 2019)	<i>Industries like the hospitality sector that have predominant male values impact the career of women in those industries.</i>
<i>Breaking the Glass Ceiling: Local Gender-Based Earnings Inequality and Women's Belief in the American Dream</i>	2016	<i>American Journal of Political Science</i>	(B. J. Newman, 2016)	<i>Variation in the economic status of women across local areas influences the ideological outlook of other women.</i>
<i>Selling women short: a research note on gender differences in compensation on Wall Street *</i>	2003	<i>Social Forces</i>	(Roth, 2003)	<i>Institutional norms and market forces determine gender differences across professions.</i>
<i>GENDER DIFFERENCES IN NEGOTIATION OUTCOME: A META-ANALYSIS.</i>	Autumn 1999	<i>Personnel Psychology</i>	(Stuhlmacher & Walters, 1999)	<i>Gender-based earning differentials in negotiation positions are expected due to differences in behaviors, contextual factors and perceptions between men and women.</i>
<i>Effects of Gender and Other Factors on Rank of Law Professors in Colleges of Business: Evidence of a Glass Ceiling</i>	1993	<i>Journal of Business Ethics</i>	(Fisher, Motowidlo, & Werner, 1993)	<i>The gender pay gap exists due to the number of years spent by professors in the academe. This can be explained by women joining the profession recently due to increased opportunity.</i>

**Table 3: Consequences of the existence of a glass-ceiling & what happens when it is broken**

<i>Title</i>	<i>Year</i>	<i>Source title</i>	<i>Author(s)</i>	<i>Major Findings</i>
<i>The who, when, and why of the glass cliff phenomenon: A meta-analysis of appointments to precarious leadership positions</i>	2020	<i>Psychological Bulletin</i>	(Morgenroth et al., 2020)	<i>Women who have been able to break through the stereotypical barrier of glass-ceiling are often found in precarious leadership positions; a phenomenon called the glass-cliff effect.</i>
<i>Above the glass ceiling: When are women and racial/ethnic minorities promoted to CEO?</i>	2014	<i>Strategic Management Journal</i>	(Cook & Glass, 2014a)	<i>Women and minorities were seen to be promoted to leadership positions in organizations that are performing weakly.</i>
<i>Women in construction: shortcomings, difficulties, and good practices</i>	2019	<i>Engineering, Construction and Architectural Management</i>	(Regis et al., 2019)	<i>Women feel themselves to be warriors as they are employed in the construction sector, predominantly thought to have masculine values.</i>
<i>Something to Celebrate (or not): The Differing Impact of Promotion to Manager on the Job Satisfaction of Women and Men</i>	2018	<i>Work, Employment and Society</i>	(Lup, 2018)	<i>As a result of the presence of the glass ceiling, women promoted to management positions tend to have lower job satisfaction than men. Following promotion, women experienced decreased job satisfaction than their male colleagues.</i>
<i>Glass ceiling or sticky floor? Quantile regression decomposition of the gender pay gap in China</i>	2014	<i>International Journal of Manpower</i>	(Xiu & Gunderson, 2014)	<i>Towards the top of the wage distribution, the gender-based wage gap reflects the lower returns to education, experience and job tenure experienced by women. Also, there seems to be a lower likelihood of women to be in a leadership position.</i>

<i>Job Satisfaction and Perceived Gender Equality in Advanced Promotion Opportunities: An Empirical Investigation</i>	2013	<i>Kyklos</i>	(Semykina & Linz, 2013)	<i>Perceiving a lack of “glass ceiling” in a workplace increases the positive link between job satisfaction and the perceived chance that a female employee will hold a senior position at a firm.</i>
<i>Gender gaps across the earnings distribution for full-time employees in Britain: Allowing for sample selection</i>	2011	<i>Labour Economics</i>	(Chzhen & Mumford, 2011)	<i>A substantially large gender earnings gap has been found to exist in Britain. The effect of this earnings gap is that women receive lower rewards for their characteristics as compared to their male counterparts. A strong glass-ceiling effect was seen in the dataset.</i>
<i>Disentangling Discrimination on Spanish Boards of Directors</i>	2011	<i>Corporate Governance: An International Review</i>	(De Cabo et al., 2011)	<i>There seems to be a contagion effect among the Spanish managers implying a positive relationship between the likelihood of new women members on board and the number of women already on board. The study also talks about the existence of a false misconception regarding women leaders’ skills and risk attitude. The contagion effect often leads to the underestimation of the skills posed by female managers.</i>
<i>Discrimination, harassment, and the glass ceiling: Women executives as change agents</i>	2002	<i>Journal of Business Ethics</i>	(Bell et al., 2002)	<i>The article shows that measures are taken to reduce the glass-ceiling effect in a firm also reduces other problems like sexual harassment.</i>
<i>Is there a gender effect on the quality of audit services?</i>	2019	<i>Journal of Business Research</i>	(Garcia-Blandon et al., 2019)	<i>The study indicates that the audit quality had increased in Spanish listed companies when women had been in the leadership position.</i>
<i>B.S. in the boardroom: Benevolent sexism and board chair orientations</i>	2018	<i>Strategic Management Journal</i>	(Oliver et al., 2018)	<i>Evidence of benevolent sexism explains the conditions that women leaders encounter after breaking the glass ceiling.</i>
<i>The impact of women above the political glass ceiling: Evidence from a Norwegian executive gender quota reform</i>	2019	<i>Electoral Studies</i>	(Geys & Sørensen, 2019)	<i>In Norway, the contagion effect was found to be less. The spillover of women representation in the boardroom was weak despite the legislative reforms in the public policies regarding the increased representation of women in leadership positions.</i>
<i>Managerial Gender Diversity and Firm Performance: An Integration of Different Theoretical Perspectives</i>	2016	<i>GROUP &amp; ORGANIZATION MANAGEMENT</i>	(Schwab, Werbel, Hofmann, & Henriques, 2016)	<i>The article shows how a shallow and too high level of managerial gender diversity (MGD) impede the attainment that one could achieve in terms of firm performance at a moderate level of MGD.</i>
<i>Differential effects of female and male candidates on system justification: Can cracks in the glass ceiling foster complacency?</i>	2013	<i>EUROPEAN JOURNAL OF SOCIAL PSYCHOLOGY</i>	(Brown & Diekmann, 2013)	<i>This article shows that in a context where women are generally under-represented, the increase of women leaders’ presence can legitimize the presence of gender inequality.</i>
<i>Glass Ceilings and Glass Escalators: Occupational Segregation and Race and Sex Differences in Managerial Promotions</i>	1999	<i>Work and Occupations</i>	(MAUME, 1999)	<i>The study shows the presence of a “glass-escalator” for men who get the advantage of the presence of the invisible glass-ceiling above women in the workplace.</i>

<i>Gender Discrimination Still Exists - Now What?</i>	2018	<i>MIT Sloan Management Review</i>	(Hernandez, 2018)	<i>The study shows that women directors face distinct barriers in the boardroom when there are fewer women present. The article also indicates a lack of awareness among male colleagues regarding gender discrimination in the firm.</i>
<i>Gender-diverse boards and audit fees: What difference does gender quota legislation make?</i>	2020	<i>Journal of Business Finance and Accounting</i>	(Nekhili et al., 2020)	<i>This article investigates the effect of board gender diversity on audit fees in French firms. The findings of this paper suggest that by breaking the glass ceiling, the effectiveness of the quota policy will not be in appointing more insider female directors, but the audit fees will be lowered in case there are more female independent and audit committee members.</i>
<i>Are Women More Likely to Be Hired or Promoted into Management Positions?</i>	February 1999	<i>Journal of Vocational Behavior</i>	(Lyness & Judiesch, 1999)	<i>Relative to males, women receive fewer promotions at higher occupational levels. The likelihood of women being hired in top management is lower than the number of women being internally promoted.</i>
<i>The "glasshouse effect": women in marketing management</i>	1997	<i>Marketing Intelligence &amp; Planning</i>	(Maclaran et al., 1997)	<i>A horizontal barrier is termed as a "glasshouse effect" over and above the vertical barrier explained by the glass-ceiling phenomenon.</i>
<i>At the table but can not break through the glass ceiling: Board leadership positions elude diverse directors</i>	2020	<i>Journal of Financial Economics</i>	(Field et al., 2020)	<i>Even though there is increased diverse representation in board leadership, diverse (female and minority) directors are significantly less in leadership positions despite being more qualified than non-diverse directors.</i>
<i>The impact of CFO gender on corporate fraud: Evidence from China.</i>	Oct2020	<i>Pacific-Basin Finance Journal</i>	(Luo et al., 2020)	<i>The article shows that female leaders are less likely to be unethical in Chinese listed firms and commit less risky fraudulent activities than their male counterparts. More women leaders at the top of the corporate ladder alleviate the "glass-ceiling" for other women.</i>

**Table 4: Ways to shatter the glass-ceiling in the workplace**

Title	Year	Source title	Author(s)	Major Findings
Gender differences in pay levels: An examination of the compensation of university presidents	2019	Organization Science	(Blevins et al., 2019)	The article explicitly shows how institutional forces help in understanding the gender pay gap in the workplace. The gender pay gap reduces as the status of the university rises and disappears within higher status universities.

Breaking the Glass Ceiling: Local Gender-Based Earnings Inequality and Women's Belief in the American Dream	2016	American Journal of Political Science	(B. J. Newman, 2016)	The study conducted in the American context finds strong evidence regarding local women's relative earnings that varies with individual women's belief in the "American Dream" which exhibits confrontation with or shattering the invisible "glass ceiling".
Women's career advancement in hotels: the mediating role of organizational commitment	2020	International Journal of Contemporary Hospitality Management	(Liu et al., 2020)	Their organizational commitment and career advancement positively impact women's career expectations and work-family balance. There was seen to be a mediating effect of organizational commitment in the relationship. The study helps in understanding the ways to break the invisible barrier above women in the workplace.
The gender wage gap across the wage distribution in Japan: Within- and between-establishment effects	2018	Labour Economics	(Hara, 2018)	The study shows that any attempt to reduce the gender wage gap within the Japanese workforce will require a shift towards occupations that can reward flexibility and need to resolve gender job segregation.
Female corporate leadership in Latin America and the Caribbean region: Representation and firm-level outcomes	2017	International Journal of Manpower	(Flabbi et al., 2017)	A strong contagion effect had been seen prevailing in Latin America and the Caribbean (LAC). With more women as board members, there is a chance for more women to be appointed as executives in LAC.
Women and Top Leadership Positions: Towards an Institutional Analysis	2014	Gender, Work and Organization	(Cook & Glass, 2014b)	Diversity within decision-makers had been found to significantly increase the likelihood of women being promoted to top leadership positions.
The gender pay gap in top corporate jobs in Denmark: Glass ceilings, sticky floors or both?	2011	International Journal of Manpower	(Smith et al., 2011)	While family-friendly schemes in any organization help women in their career path, thus helping them deal with the different biological and physiological needs, it also seems to have a negative boomerang effect on the compensation and career of women.
The effect of gender and dependent children on professional accountants' career progression	2006	Critical Perspectives on Accounting	(Windsor & Auyeung, 2006)	This study indicates that more formal policies are required rather than differing institutional and social support to deal with the issue of gender discrimination in firms.
Breaking the glass ceiling: The effects of sex ratios and work-life programs on female leadership at the top	2003	HUMAN RELATIONS	(Dreher, 2003)	The work-life human resource practices in a firm mediate the relationship between the number of lower-level women employees and the number of female representatives on the firm's senior level.



PERSPECTIVE ARTICLE: The impact of Nordic countries' family friendly policies on employment, wages, and children	2008	REVIEW OF ECONOMICS OF THE HOUSEHOLD	(Datta Gupta et al., 2008)	On the one hand, family-friendly policies help boost women's employment participation but are a costly solution. On the other hand, it creates a "system-based glass-ceiling" that holds back a female employee's career progress.
The Role of the Partner in Promotions to Top Positions in Belgium	2011	EUROPEAN SOCIOLOGICAL REVIEW	(Baerts et al., 2011)	This article indicates how a partner's working hours impact women's probability of promotion. The study shows that in order to break through the glass ceiling, women undoubtedly benefit from their partner's resources, but they need more is the opportunity and more specifically, they need time to explore those opportunities.
INVESTIGATING THE "GLASS CEILING" PHENOMENON: AN EMPIRICAL STUDY OF ACTUAL PROMOTIONS TO TOP MANAGEMENT.	Feb1994	Academy of Management Journal	(Powell & Butterfield, 1994)	The article clearly states that policy fairness is a powerful tool that can reduce gender discrimination in the workplace and work in women's favor.
<i>Breaking the Glass Ceiling? The Effect of Board Quotas on Female Labour Market Outcomes in Norway</i>	2019	<i>Review of Economic Studies</i>	(Bertrand et al., 2019)	<i>The presence of the glass-ceiling effect compels the authority to introduce a quota policy for women representation. However, this study indicates that introducing such policies does not significantly impact the broad set of women workforce other than those who had been able to break through the glass ceiling.</i>
EQUAL EMPLOYMENT OPPORTUNITY AND GLASS CEILINGS: A CONTRADICTION IN TERMS?	Winter96	Public Administration Quarterly	(M. A. Newman, 1996)	The concept and policy of Equal Opportunity in Employment for both genders should be expanded beyond recruitment and hiring parameters. More focus is required on block equity that will help deal with the glass-ceiling and be effective in bringing segmented equity.
CHARTING GENDER: THE SUCCESS OF FEMALE ACTS IN THE U.S. MAINSTREAM RECORDING MARKET, 1940-1990.	2005	Research in the Sociology of Organizations	(Dowd et al., 2005)	This article explains how the logic of decentralized production can successfully eliminate the negative impact of concentrated, successful female acts. It also showed that female acts that were successful in one period bode well for female acts for the subsequent periods.

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