

The Laminated Glass Ceiling

by

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Abstract

Purpose – This paper addresses the disparity of gender representation in upper level management. The cause may be a glass ceiling of a two-ply laminate construction.

Design/methodology/approach – The glass ceiling appears to be a two-ply laminate construction. The first ply is the opinion women have of themselves, which is an internal factor. The second ply is the opinion that men have of women's leadership traits, an external factor. The binding agent is similarity-attraction theory. This study used a Likert-style survey instrument from 135 female and 130 male respondents to evaluate differences in perception.

Findings – Nine internal factor statements yielded five statements with a significant ($t(263) = 1.96, p < .05$) difference between the female and male respondents. Nine external factor statements yielded two statements with a significant ($t(263) = 1.96, p < .05$) difference between female and male respondents. The data supports the hypothesis that both internal and external factors contribute to a laminated glass ceiling, with internal factors more dominant.

Research limitations/implications – This paper presents the concept that the glass ceiling is a two-ply laminate structure. This suggests that the different components may be separately researched and socially addressed.

Practical implications – Early education may be the best method of changing the internal factors that contribute to the glass ceiling. This early education, regardless of gender, would guide the child's perceptions and preclude the development of self-restricting internal factors. Additionally, it is possible that continued education, encouraged by government funding similar to the post World War II G.I. Bill, may

change both the internal and external factors by influencing both social and cultural norms.

Originality/value – This paper presents a new paradigm for evaluating components that may comprise a two-ply laminate glass ceiling.

The Laminated Glass Ceiling

1.0 Introduction

The glass ceiling is defined as a career barrier to women in corporate organizations (Hymowitz & Schellhardt, 1986). Gender stereotypes may be a partial explanation for this phenomenon and are defined as “shared beliefs about the psychological traits that are characteristic of each sex” (Powell & Graves, 2003, p. 37). Gender stereotypes are considered the basis of gender bias in the work environment and the main cause of discriminatory treatment of women in organizations, thereby limiting their upward mobility (Heilman, 2001).

Self-perception, influenced by cognitive dissonance, may be another partial explanation. Women may perceive their own characteristics as different from those they attribute to a group of managers traditionally dominated by men. The women perceive a mismatch between themselves and the group of managers. This self-perception may partially explain women’s relative absence in higher management functions (van Vianen & Fischer, 2002).

Catalyst, a New York based business dedicated to the advancement of women, noted that of the 2,458 executives in the Fortune 500 companies, only 61 or 2.5% are women (Jordon, Clark, & Waldron, 2007). This finding suggests that the glass ceiling has strength and resilience. Even though women have used vociferous expression and legal action to drive out blatant discrimination, the barriers to breaking the glass ceiling that persist today are pervasive. Gender bias may be embedded so deeply in organizational life that it may be found in work practices and cultural norms that only appear unbiased (Pichler, Simpson, & Stroh, 2008). This creates an understated pattern of systemic

disadvantage and blocks most women from career advancement (Meyerson & Fletcher, 2000).

1.1 Statement of the Problem and Purpose

In the current literature reviewed for this study, the glass ceiling was considered to be a simple, homogeneous, single pane structure (Insch, McIntyre, & Napier, 2008). However, if the glass ceiling is a laminated, composite structure, it may have additional resistance. Jill Hamlyn described the glass ceiling as laminated with enormous resistance that, when broken, still holds together (Manson, 2003). However, the components of a laminated glass ceiling were not discussed. This research proposes that different laminated panes may be composed of different psychological or organizational features. The purpose of this research was to offer a possible explanation for this particularly powerful barrier that prevents many women from achieving executive levels.

1.2 Background and Significance of the Problem

For the purposes of this study, the glass ceiling was defined as a structure reinforced by a two-ply (layer) laminate construction (Insch et al., 2008; Manson, 2003). The first ply (layer) may be the opinion women have of themselves, which is an internal factor. Some women may be raised with the expectation that they will not be corporate leaders. Psychological mechanisms such as cognitive dissonance may make these expectations a self-fulfilling prophecy.

Cognitive dissonance is the mental conflict that occurs when an individual attempts to hold inconsistent beliefs or suppositions (Harmon-Jones & Mills, 1999). Cognitions are small amounts of knowledge. The fact that one is a woman is a cognition, which may or may not be consonant with other cognitions. For example, the fact that one

is a woman and that one also holds an executive management position would be consonant if the one believes that it is appropriate for a woman to hold an executive management position. However, these cognitions would be dissonant if one is a woman and feels that it is inappropriate for a woman to hold an executive management position.

Dissonant cognitions cause mental conflict, and as a result, the conflicted individual will attempt to eliminate the dissonance (Harmon-Jones & Mills, 1999). In regard to the glass ceiling, dissonance may be reduced by either changing one's beliefs regarding the appropriateness of women in executive management or by moving to (or simply remaining in) a job that the individual finds more gender appropriate. This occupational sex typing may be influenced by the perception that the majority of managers were men. Thus, managerial jobs were classified as a masculine occupation. These jobs required personal attributes thought to be more characteristic of men rather than women (Powell, Butterfield, & Parent, 2002). For instance, "During last year's celebrations of the 50th anniversary of [first female cosmonaut Valentina] Tereshkova's flight, the first woman in space was shocked when she asked a large group of school kids, 'Who wants to be a cosmonaut?' and not a single girl raised her hand" (Zak, 2014, para. 7). Apparently, those female schoolchildren have decided that it would be inappropriate for girls to become cosmonauts, and have decided to not even try.

The second ply (layer) of the glass ceiling may be the opinion that men (in positions of corporate authority) have of women's leadership traits, which is an external factor. This male opinion may be based on the concept of social identity, which refers to "the part of a person's sense of self that is defined by a group" (Reicher, Haslam, & Platow, 2007, p. 25). Some theorists suggest that leaders are more successful when they

can persuade followers to view themselves as members of a group and then see the group's interest as their own (Chow & Crawford, 2004; Reicher et al., 2007). Social identity denotes self-definitions in terms of memberships in social categories such as gender, race, class, or nationality (Porter, 2001). Gender differences may make social identity more difficult to achieve, and thus exclude women from promotion to a leadership position. For example, women's leadership traits may not be deemed suitable for an executive management position by men who currently hold those senior positions (Reicher et al., 2007).

Similarity-attraction theory may explain how internal and external factors could interact by suggesting that individuals are attracted to people whom they perceive as similar to themselves (Byrne, 1971). When you interact with someone you believe to be similar to yourself, you tend to think more highly of that person, tend to speak more frequently to that person, and tend to attribute more positive characteristics to that person. As a result, similarity-attraction may partially explain why the employee's view of the employer, and the employer's view of the employee, may need to coincide for the employee to be promoted (Tsui, Egan, & O'Reilly III, 1992).

Mlodinow (2008) noted, "When people interpret the behavior of someone who is a member of a minority, they interpret it in the context of preconceived stereotypes" (p. 191). In the executive suite, women are a minority, holding only 5.8% of top executive positions (Jordon, et al., 2007). If an individual forms stereotyped beliefs concerning gender and leadership, that individual tends to ignore any information that might contradict those preconceived notions (Bodenhausen & Wyer, 1985; Hamilton & Rose,

1980; Strangor & Ruble, 1989). Stereotyped beliefs may thus temper a glass ceiling that is already laminated (Manson, 2003).

The combination of internal factors (such as cognitive dissonance), external factors (such as social identity), their interaction (through similarity-attraction theory), and maintenance factors (such as stereotyped beliefs) may give the glass ceiling a strength that it otherwise would not have. The interaction of these factors may create a gestalt, where the strength of the whole is greater than the sum of its parts (Levey, 1992).

2.0 Findings

The purpose of this research was to offer a possible explanation why women are significantly underrepresented in the executive ranks of business organizations and to examine the relationship between gender and perceptions. The participants for this research, both male and female, were currently employed full-time. Their perceptions may influence their promotion potential in addition to contributing to the culture of their work environment.

A survey instrument was used to examine perceptions of the glass ceiling, perceptions of female leadership traits, self-perceptions, and perceptions regarding the work environment. Using a *t* test, internal and external perceptions of employed women and men were compared. Invitations to participate in the survey were e-mailed to a random sample of 1,000 (500 female and 500 male) Zoomerang zSample participants who had identified themselves as being employed full time. Of the 265 respondents to this survey, 49% were female and 51% were male.

2.1 Evaluation of Findings

The t scores, which were obtained when the means for internal and external perceived factors for each of the 18 Likert-type scale survey statements were compared, are displayed in Appendix A. The first nine survey statements examined internal perceived factors. Of the nine internal factors, five survey statements yielded significant results ($t(263) = 1.96, p < .05$). Of the nine external factors, two survey statements yielded significant results ($t(263) = 1.96, p < .05$). Survey statements with significant differences between female and male participants are marked with an asterisk in Appendix A.

These findings indicate that both internal and external factors contribute to the glass ceiling. This combination of factors, suggesting a laminated glass ceiling, is not recognized by other studies. Eagly and Carli (2007) stated that “by depicting a single, unvarying obstacle, the glass ceiling fails to incorporate the complexity and variety of challenges that women can face in their leadership journeys” (p. 64).

2.2 Summary

The findings indicate that both internal and external factors contribute to the glass ceiling. Internal factors, such as cognitive dissonance, indicate that the opinion women have of themselves may be a factor that limits women’s determination to enter upper management. A self-limiting belief may have been inculcated into the value system of a child at a very early age and may be largely unconscious in adulthood. If a woman believes that only men should lead large corporations, that belief may become a self-limiting and self-fulfilling prophecy.

External factors, such as social identity and gender stereotypes, may lead current male corporate leadership to believe that women are simply too different to be successful corporate leaders. This *good old boys' club* mentality may exclude anyone who does not appear to belong to the club by reason of gender, background, or ethnicity. These external factors are an expression of *de facto* discrimination.

Similarity-attraction theory binds internal and external factors together. Individuals, who believe themselves to be like others, will have a higher opinion of those others, wish to interact with those others, and feel more comfortable with those others (Byrne, 1971; Van der Vegt, 2002). For similarity-attraction to benefit a female executive, the female executive must believe that she has much in common with the male corporate leadership, and the male corporate leadership must believe that they have much in common with the female executive. Both parties in a similarity-attraction situation must participate in both the similarity and the attraction. This indicates that both internal and external factors must act in concert if the glass ceiling is to be broken.

The study findings were consistent with the hypothesis that both internal factors, such as cognitive dissonance, and external factors, such as social identity, contribute towards a laminated glass ceiling. The five significant internal factors, compared to the two significant external factors, indicated that internal factors may be the stronger force.

3.0 Recommendations and Conclusions

3.1 Recommendations

There are historical examples of civilizations that failed to invest in their citizens. In 133 B.C.E. Attalus III of Pergamum died without heirs. To avoid a civil war, he willed his kingdom and its treasury to Rome (Asimov, 1966). Tiberius Sempronius Gracchus,

grandson of Scipio Africanus (the Roman general who defeated Hannibal), wanted to use the Pergamum wealth to create new Roman family farms. At that time, the family farmer was the backbone of the Roman army. Graccus' plan would have enhanced the economy, strengthened the army, and made a needed investment in the Roman people (Matyszak, 2003). Graccus' appeal to the Roman people was direct: "You fight and die to give wealth and luxury to others. You are called the masters of the world, but there is not a foot of ground that you can call your own" (Durant, 2001, p. 126).

Unfortunately, the Roman Senate did not wish to invest in the Roman people; the Senate wished to invest in themselves. Tiberius Graccus was assassinated and the Senate kept the money. Large plantations, owned by Senators and worked by slaves obtained in foreign wars, became even larger. Roman citizens were driven from the land to crowd the cities (Richardson, 1976). The resulting civil unrest created by the Senate's greed eventually destroyed the Republic, and in the end, the Senate itself (Asimov, 1967).

The government of the United States and American corporations must invest in each citizen and then give each individual the practical opportunity to make full use of his or her talents. Providing this opportunity is extremely important. As Pascale, Sternin, and Sternin (2010) note, "It's easier to act your way into a new way of thinking, than to think your way into a new way of acting" (p. 38). In a highly competitive world, this may not be a matter of political correctness, but a matter of national survival. Investment in the American people may enhance both our economy and our technology to the point where we may avert Rome's fate.

Shambaugh (2008) observed:

Catalyst, an independent research organization, conducted a study of 353 Fortune 500 companies and found that the companies with the most women in top management positions provided a total return to shareholders that was 35 percent better than in companies with more male-centric executive teams. (p. x)

A more inclusive and diverse C-level suite may not be only a moral, but also an economic imperative. A 35% increase in return to shareholders in all United States corporations would strengthen the national economy and permit enhanced investments in education, health programs, and scientific research. Enhanced investment in the American people may make the entire nation more competitive and allow the United States to compete economically in a world with nations that are more populous.

The source of discrimination may be varied and difficult to identify, but the solution may be more direct.

The first recommendation is that early education may be the best way to change internal factors that contribute to the glass ceiling. If the United States made pre-school a mandatory part of elementary education, a wide variety of positive social attitudes might be presented to young children that could influence them for the rest of their lives. Among these social attitudes could be the concept that ability and success are not restricted to any specific gender.

The second recommendation is that continued education at the college and graduate level will help both women and men overcome their pre-conceived notions that may contribute to gender stereotypes. Effective corporate leadership must evolve from gender specific leadership traits to situational specific leadership traits that best accomplish corporate goals. Continued education may be the best method of changing the

external factors that contribute to the glass ceiling, but the education does not need to be restricted to colleges and universities. Corporations should realize that, like the Roman senate, concentrating solely on short-term profits may lead to long-term destruction. In a highly competitive environment, American corporations may reduce management-skills and other training budgets. However, such short-term savings will create a less trained, less able, and less enlightened workforce. American corporations should join the American government by investing in the skill-set for each employee.

Humes (2006) noted that the G.I. Bill transformed the social and cultural foundations of the nation, educating “fourteen future Nobel Prize winners, three Supreme Court justices, three presidents” and hundreds of thousands of teachers, engineers, and accountants (p. 6). It allowed the United States to face, and win, the cold war. A similar educational effort, aimed at all Americans, regardless of gender, may again be necessary if the United States is to remain a world power and technological leader.

Towards the end of the empire, Rome effectively outsourced what some consider its core competency – the Roman army. As the empire unraveled, the Roman army was mainly composed of barbarian soldiers (Asimov, 1967). If a core competency of American corporations is the talent of its managers, that core competency should be enhanced by training all those with managerial talent, not obviated by outsourcing, or limited by stereotypes. In acting solely for short-term gains, American corporations may be ensuring the long-term destruction of the American economy as it exists today. Federal Government intervention appears to be the most direct answer to corporate shortcomings. For example, in both 1929 and 2009, “bankers assured Congress that heavy-handed regulation was unnecessary—even counterproductive. They would reform

themselves” (Partnoy, 2009). It appears that little has changed during the last 80 years. Perhaps heavy-handed government regulation is the only answer to pressing social and economic problems.

3.2 Conclusions

The glass ceiling literature often stresses the importance of mentoring, legislation, and modifying organizational culture as the keys to breaking the glass ceiling. These are all external factors. These data, however, suggested that internal factors, such as self-perception and cognitive dissonance, may be the real keys to breaking the glass ceiling. As a result, internal factors may be more pronounced than external factors, although both internal and external factors appear to contribute to perceptions regarding the glass ceiling. Shakespeare may have been correct when he stated, "The fault, dear Brutus, is not in our stars, but in ourselves, that we are underlings" (Shakespeare, trans. 2001, 1.2.140-141). When women themselves conclude that they are not underlings, the glass ceiling may finally cease to exist.

This study examined the different internal and external factors that may contribute to the glass ceiling, a serious economic, political, and ethical problem. If the United States is to remain a world leader, all citizens must contribute to our national goals. To this end, successful women may change established stereotypes and self-perceptions in order to demonstrate that there is more than one way to practice successful leadership, transcend the glass ceiling, and contribute to the strength of the nation.

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Appendix A:

Please indicate your agreement /disagreement with each of the following statements:

[Internal factor statements]

1. *Some people say there is an invisible barrier or a *glass ceiling* that hinders or excludes women from advancement to upper management positions. I believe that gender barriers generally exist in today's American business world.
2. *I believe that a *glass ceiling* exists in my company.
3. *I believe women are as capable as men of serving in senior executive positions.
4. I believe women and men are respected equally in my company.
5. *I believe competitiveness/assertiveness in women is viewed as a negative trait.
6. I believe a woman could be CEO of my company within the next 10 years.
7. I believe my company structure and practices favor male employees.
8. I believe anti-discrimination/affirmative-action regulations are viewed as a mandated inconvenience in my company.
9. *I believe "good old boy" networks in my company limit women's opportunities for promotions to senior positions.

[External factor statements]

10. In my company, women are primarily encouraged to apply for support roles (such as staff positions, administrative services, etc.) rather than operational, technical, and general management positions.
11. In my company, women have advanced into senior management positions.
12. In my company, the number of women penetrating the hierarchy and achieving senior positions is steadily rising.
13. In my company, there are equal career development opportunities for men and women.

14. *In my company, management has established anti-discrimination practices.
15. In my company, I have been considered for and denied a promotion based on my gender.
16. *In my company, women's careers are advanced with the help of specialized training.
17. In my company, senior-level mentors are designated to help expand one's career.
18. In my company, there are sufficient numbers of women role models in the highest level of the organization.

An asterisk (*) indicates a significant difference between the responses of female and male participants.

Sandberg and Scovell (2013), in their book, look at the barriers preventing women from taking leadership roles in the workplace; barriers such as sexism, sexual harassment, and discrimination. They also examine societal barriers such as women working both inside the home and outside the home. The work inside the home is devalued as opposed to work outside the home being valued. In addition, there are the barriers that women create for themselves through internalizing systematic discrimination and societal gender roles. The gender stereotypes are so ingrained in women that they continue to perpetuate them subconsciously. Sandberg and Scovell present evidence showing that women hold themselves back. Their ultimate goal is to encourage women to lean in to their ambitions because with more women in positions of leadership, there will be more opportunities created for everyone. Women have to overcome the inner barriers that are holding them back.

Sandberg, S., & Scovell, N. (2013). *Lean in: Women, work, and the will to lead*. New York: Alfred A. Knopf.