The role of glass ceiling in women's promotion to managerial positions from the perspective of faculty members at Iran University of Medical Sciences

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Abstract:

BACKGROUND: In recent years, many changes have been observed in women's roles in organizations. In Iran, women face challenges to be promoted to high-level organizational positions. The present study aimed to examine the role of glass ceiling in promoting women to managerial positions from the perspective of the faculty members at Iran University of Medical Sciences.

MATERIALS AND METHODS: This research was an applied study in terms of objectives and a descriptive-survey study in terms of data collection, variable monitoring and control, and generalizability. The statistical population of the study encompassed all clinical and basic sciences faculty members at Iran University of Medical Sciences in 2019–2020. The simple random sampling method was adopted, and the study instrument was the standard questionnaire of women's beliefs about glass ceiling developed by Smith (2012). To analyze the data, descriptive and inferential (namely paired-sample t-test and one-sample t-test) statistics were run in the SPSS software.

RESULTS: The results revealed that glass ceiling dimensions could predict 48% of the variance of women's promotion to managerial positions. Furthermore, a significant difference was noticed between men and women's perspectives toward glass ceiling ($P < 0.001$); however, there was no significant difference between the two groups of clinical and basic sciences ($P > 0.001$).

CONCLUSIONS: Failure to provide appropriate opportunities for qualified women to be promoted to managerial positions would result in nonexploitation of about half of the available capacities and talents. Women have unique abilities and soft skills in the human resource management. At the macro-level, policy-makers and planners to review the plans and delegation of organizational-managerial positions and also to further consider the role of women in managerial positions by observing gender justice and meeting criteria such as capability and expertise.

Keywords:

Gender justice, glass ceiling, women leadership, women management

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Introduction

The main feature of the postindustrial era is an increase in white-collar jobs (i.e., administrative and service jobs), compared to blue-collar ones (i.e., jobs requiring physical and technical activities).

Since "communication" is one of the main features of the information society, and women seem empowered in this feature, and given that women are more accustomed to monotonous and disciplined office jobs, employers are more willing to employ

women. Castells referred to women's flexibility in the workforce and labor flexibility as factors affecting the explosion of women's employment in the 1990s.[1] Women tackle with problems in achieving the managerial positions in organizations. According to some studies, women do not spare their efforts are willing to give up their positions to start a family or do not receive enough training and experience to lead an organization. However, some other studies reject this issue.[2] Although there have been changes in women's roles in organizations, the statistics confirm the challenges and obstacles exposed to women in their attempts to be promoted to managerial positions in organizations.[3] Regarding the critical status and roles of women in society and their centrality in families, one of the most prominent criteria to measure the degree of development in a country is the significance and positions delegated to women in the concerned country. Not only do women play a critical role in achieving social and political development but also they, as active and productive forces, can accelerate the economic development and social justice. That is why their participation in various fields while keeping up with men has become a necessity at the present era and a main social problem to be concerned. Unfortunately, patriarchal roles, the prevailing perception of men's superior ability, women's attitudes toward family responsibilities and housekeeping, and women's lack of self-confidence have made them far away from the managerial positions in our country. In Iran, evidence indicates that gender discrimination in employment and wages is still common and widespread, even though women form half of the population and half of the human capital in the country. In this regard, women are not equally employed in the managerial positions of organizations, and there are few managers among the managers of successful companies. Glass ceiling is a metaphor used to describe such a situation in the management, which refers to the invisible artificial barriers posed by organizational and ideological prejudices and discriminations. Such barriers in practice hinder women to be promoted to managerial positions.[4] The term "glass ceiling" was first used by Morris *et al*. in the Wall Street Journal in 1986 and 1987. The term describes women's promotion in the workplace and in organizations, indicating that there is a set of obstacles and challenges for women in their workplaces and that they hinder women's promotion. Glass ceiling encompasses invisible cases, including customs and norms but not laws. In Iran, the laws may not pose obstacles for women in many cases; however, the glass ceiling, i.e., the existing but invisible restrictions, hinder their promotion.[5-7] Regarding an increased need for diversity in the workforce, studies by Powell and Graves (2009) and McKimman *et al*. (2003) reported an increased number of women held in the lower and middle managerial positions, which coincides with their increased demand for equality in the workplace. On the other hand, a small proportion of women have reached senior managerial positions, implying the existence of discriminatory barriers, i.e., the "glass ceiling."[8] It needs to be acknowledged that beliefs about barriers to occupational achievements imposed on women and minorities (or glass ceiling) can increase or decrease their promotion, and that such beliefs may also lead to the selection of career directions and persistent behaviors in organizations, which include denial, flexibility, acceptance, and resignation.[9,10] Despite the desirable results extracted from women's management in organizations, a large number of senior managers in organizations tend to select male managers; hence, gender restrictions and its relevant problems are considered more than competence and empowerment. According to the most recent statistics released by Iran's Statistics Center, significant differences exist between the involvement rates of men and women in Iran's economy. The average rate of economic involvement in 2013 was 37.6 (63% for men and 12.4% for women) (Iran's Statistics Center, 2013). More unfavorable conditions can be observed in management and decision-making fields as such the rate further decreases at higher management levels. Many researchers believe that the climate of organizations as well as male managers, employees, and even working women's lack of belief in women's managerial skills are effective factors in this regard. These public beliefs exist at the community level while a relative increase in the number of female academicians in the country is being noticed.[11] In this regard, the present study aimed to examine the role of glass ceiling in making women be promoted to managerial positions from the perspective of the faculty members of Iran University of Medical Sciences in 2019–2020.

Materials and Methods

Study design and setting
This research was an applied study in terms of objectives and a descriptive-survey study in terms of data collection, variable monitoring and control, and generalizability. The required data were collected using a questionnaire. To analyze the data, descriptive (namely mean and standard deviation) and inferential (namely paired-sample *t*-test and one-sample *t*-test) statistics were run in the SPSS (IBM, SPSS Inc, Chicago, Illinois, USA) software version 16.

Study participants and sampling
The statistical population of the study encompassed all the members of clinical and basic sciences faculties ($n \approx 800$) at Iran University of Medical Sciences in 2019–2020. According to Krejcie and Morgan's sampling table, the sample size was estimated to be 262, who were selected using the simple random sampling method.

Data collection tool and technique

The research instrument was the standard questionnaire of women's beliefs about glass ceiling developed by Smith (2012). Smith's (2012) standard questionnaire was used to assess faculty members' beliefs about glass ceilings, which encompassed 38 items scored based on a five-point Likert scale to evaluate four components (namely denial, acceptance, resilience, and resignation). The minimum and maximum scores were 1 and 5 for each item and 38 and 190 for the total items. Moreover, its validity and reliability were confirmed in Iran by Bordbar *et al*. (2015). The questionnaire was scored based on a five-point Likert scale, and its Cronbach's alpha was reported to be 0.84. The experts approved the face and content validity of this scale. This instrument was submitted to faculty members in person or through E-mail and website link. The collected data were then analyzed. The validity of the questionnaire was confirmed by experts, and its Cronbach's alpha coefficient was reported to be 0.84. The experts of the field also reviewed and confirmed the face and content validity of the instrument. To evaluate the reliability of the questionnaire, Cronbach's alpha score was calculated in a pretest taken by 20 persons. Moreover, content validity method was used to confirm its validity. To this end, the research questionnaire was submitted to professors and a number of experts (The participants were selected to verify validity with regard to their knowledge and expertise in the field of evaluation and assessment). Waltz and Bausell's technique were used to evaluate the questionnaire's content validity index (CVI),[12] according to which the experts scored the "relevance," "clarity," and "simplicity" of each item based on a four-part Likert scale. Eight experts took part in this phase, and the CVR index was reported to be 0.77. The experts also scored the relevance of each item based on a four-point Likert scale ranging from 1 (not relevant), 2 (relatively relevant), 3 (relevant), to 4 (highly relevant) to calculate CVI. The simplicity of the item also ranged from 1 (not simple), 2 (relatively simple), 3 (simple), to 4 (highly simple). Moreover, the clarity of the items also rated from 1 (not clear), 2 (relatively clear), 3 (clear), to 4 (highly clear) as such the obtained was 0.82.

Ethical considerations and inclusion criteria

Permission from the University's Ethics Committee, informed consent from the participants, information confidentiality and anonymity, faculty members working at Iran University of Medical Sciences, and work experience above 1 year.

Exclusion criteria

Nonco-operation, unwillingness to participate, unexperienced faculty members (work experience <1 year), and incomplete questionnaires.

Results

According to the data collected from the participants, Table 1 presents the participants' specifications by personality traits.

Table 1 shows the participants' demographic variables, according to which the sample consists of male (39%) and female (61%) members with the highest frequency for the mean age of 35–45 years (37%). A majority of the participants were assistant professors (30%) with work experiences of 1–10 years (44%).

Mean and standard deviations of variables

Denial (mean: 3.91 ± 2.14), management positions (mean: 2.44 ± 1.78), acceptance (mean: 3.89 ± 2.58), resilience (mean: 3.28 ± 2.68), and resignation (mean: 3.60 ± 2.37).

The normality test of the data collected by the questionnaires and given the significance levels of these tests for the relevant variables, the research variables had a normal distribution; hence, parametric tests were used to test them. (acceptance: 0211, denial: 0.290, management positions: 0.198, resilience: 0.146, and resignation: 0.281): Sig >0.005.

The collected data revealed a significant difference between the two gender groups regarding faculty

Table 1: Demographic variables of the research sample

Variable	Frequency (%)
Gender	
Male	104 (0.39)
Female	158 (0.61)
Age	
>35	55 (0.21)
36-45	96 (0.37)
46-55	61 (0.23)
<55	50 (0.19)
Education	
Instructor	40 (0.15)
Assistant professor	80 (0.30)
Associate professor	77 (0.29)
Professor	65 (0.26)
Record of service	
1-10	116 (0.44)
10-20	83 (0.32)
<20	63 (0.24)
Field of study	
Basic sciences	154 (0.59)
Clinical sciences	108 (0.41)
Marital status	
Single	11 (0.4)
Married	243 (0.93)
Divorcee	8 (0.3)

members' beliefs about women's promotion to managerial positions. Accordingly, gender is one of the variables affecting women to be promoted to managerial positions, the research hypothesis was thus confirmed. As Table 2 shows, the mean score of female faculty members' belief about women's promotion to managerial positions is higher than that of the male members, and a significant difference exists between males and females regarding their belief about promotion to managerial positions.

Table 3 shows no significant difference between the two groups of the basic and clinical sciences faculty members in terms of their beliefs about women being promoted to managerial positions, and the mean scores of their belief were highly close.

Determining women's contribution to managerial positions at Iran University of Medical Sciences

Student's *t*-test (single sample) was used to test the hypothesis since the data had a normal distribution.

According to the descriptive statistics, the sample mean 2.3421, which is <2.5 (total mean) and <4 (the optimal score). Considering $P < 5\%$, women's contribution to managerial positions at Iran University of Medical Sciences is not desirable. Given the negative upper and lower limits for the test, the mean of this variable is below the tested value; hence, this variable is not at a desirable level (df = 261, Sig: 0.000, $T = 7.195$).

Determining the roles of denial, acceptance, resilience, and resignation in women's promotion to managerial positions at Iran University of Medical Sciences

Simultaneous regression method was adopted to predict the roles of the glass ceiling dimensions in women's promotion to managerial positions. First, the statistical assumptions of the test were examined by using the statistical data. The results confirmed the observation of two assumptions for both regression tests: the independence of residuals (using Durbin-Watson statistic) and noncollinearity (using variance inflation factor and tolerance indices) (Lawrence, Gamst, and Garynv, 2006).

Table 4 presents the regression coefficients to predict the roles of glass ceiling dimensions in women's promotion to managerial positions. The coefficient of determination (R^2) implies that 48% of the variance of women's promotion to managerial positions can be predicted by the glass ceiling dimensions. Moreover, beta coefficients show that denial, resignation, acceptance, management positions, and resilience had 0.53, 0.49, 0.46, 0.35, and 0.38 impact on women's promotion to managerial positions.

Discussion

The findings of the present study revealed that 48% of the variance in women's promotion to managerial positions can be predicted by the glass ceiling dimensions. Statistics reveal[13] the nonexploitation of women workforce in the managerial positions. Unfortunately, the same comes true in Iran, compared to many other countries in the world. In general, a small number of female managers are operating in Iran, and women's involvement in managerial positions is unusual and pathological. The artificial and invisible barriers raised by organizational and ideological prejudices and discrimination hinder women and racial minorities in practice from being promoted to higher managerial positions in organizations. The glass ceiling is not just an individual barrier hindering the members of a society from reaching high-level occupations due to their personal in competence. In contrast, the glass ceiling for women implies that this group has been kept out of promotions because of being women.[14] In his

Table 2: ANOVA results by gender for faculty members belief about women's promotion to managerial positions

Statistical indicators gender	Frequency	Mean	SD	SE	*t*	*P*
Male	104	61.17	18.86	1.65	1.32	0.91
Female	158	69.74	13.65	1.12	-	-

SD=Standard deviation, SE=Standard error

Table 3: The results of the two-group *t*-test on the belief of basic and clinical professors in the acquisition of managerial positions by women

Statistical indicators field of study	Frequency	Mean	SD	SE	Significance
Basic sciences	154	66.32	12.93	1.39	0.124
Clinical science	108	64.96	14.10	1.71	

SD=Standard deviation, SE=Standard error

Table 4: Predicting the dimensions of the glass roof in the acquisition of managerial positions by women

Model	*B*	SE	β	*t*	Significance	R	*R*²	F	Significance
Fixed coefficient	9.28	1.64	-	3.15	0.001	0.56	0.48	14.31	0.001
Denial	0.25	0.14	0.53	2.19	0.001				
management positions	0.36	0.28	0.35	4.28	0.001				
Acceptance	0.47	0.16	0.46	3.55	0.001				
Resilience	0.53	0.29	0.38	3.12	0.001				
Resignation	0.39	0.24	0.49	2.19	0.001				

SE=Standard error

study, Wirth (2014) found out that women considered male-dominated atmosphere in organizations and the rejection of female managers by men as barriers to their promotion. To explain the causes, the glass ceiling and the factors influencing this concept were addressed.[15] Regarding an increased need for diversity in the workforce, studies by Powell and Graves (2009) and McKimman *et al*.(2003) reported an increased number of women held in the lower and middle managerial positions, which is intertwinned with their increased demand for equality in the workplace. Furthermore, a small proportion of women have reached senior managerial positions, just revealing the existence of discriminatory barriers. Qolamzadeh *et al*. (2015) examined the effect of leadership style on women's beliefs about glass ceilings. The statistical population of their study encompassed women working in the headquarters of the Ministry of Health and Medical Education, who either held diploma or had academic education. The findings revealed the significant and positive effect of leadership style on women's beliefs about glass ceiling.[11] Mesbahi and Jannati (2017) conducted a study entitled "The effect of glass ceiling on women's creativity regarding the mediating role of leadership styles at Iranshahr University of Medical Sciences." The research population included 1000 female managers and staff at Iranshahr University of Medical Sciences, of whom Cochran's formula, of whom 278 persons were randomly selected. The findings indicated the negative effect of glass ceiling dimensions, including denial, acceptance, resignation, and resilience, on female employees' creativity. Moreover, the mediating role of leadership style was also acknowledged.[16] Shafi *et al*. (2018) in their study adopted interpretive-structural analysis to develop a model based on the classification and segregation of factors affecting the glass ceilings for female employees in the headquarters of National Iranian Oil Products Distribution Company. The factors affecting the glass ceiling were identified using theoretical foundations and Delphi analysis with the participation of 20 experts as panel members. In the quantitative section where 30 human resources experts (inside and outside the organization) were involved, the aim was to form the structural self-interaction matrix by structural and interpretive modeling. According to the findings and based on their proposed model, the main glass ceiling for women in the headquarters of the National Iranian Oil Products Distribution Company was the lack of supporting laws, which was related to the main component of outer-organization factors and the secondary component of political and regulatory factors in Delphi results. Furthermore, at the highest level, a factor with the least effective on forming a glass ceiling was the lack of an appropriate atmosphere for women's work, as one of the structural factors of the main "inter-organizational" component.[17] Marcia (2010)

in her research entitled "Definition of leadership and multilayered glass ceiling," investigated gender and attributes of leadership. According to her, the glass ceiling consisted of two layers. The inner layer was women's belief about themselves, and the outer layer represented men's belief about women. Nine factors from the inner layer and nine factors from the outer layer were considered and examined. According to the findings, although both layers were involved in forming the glass ceiling, the effect of the inner layer was more prominent. Government-sponsored preschool programs were proposed as a technique to improve this condition, which would change the community's culture and thoughts.[18] In his study on how women's beliefs about glass ceiling lead to career advancement, Smith *et al.* examined the relationship between the four dimensions of denial, resilience, acceptance, and resignation with occupational achievements career advancement. Career advancement entailed job satisfaction, happiness, physical and mental health, and occupational co-operation. Regarding the research hypotheses, denial and resilience had a positive relationship and acceptance and resignation had a negative relationship with career advancement as such resilience and resignation could exhibit the strongest positive and negative relationships. However, the findings showed that flexibility rarely contributed to happiness and occupational co-operation. In contrast, denial was the strongest positive predictor of job satisfaction. Resignation also predicted physical and mental health and consequently revealed a negative relationship. Acceptance also had a negative relationship with occupational cooperation.[19] In another study, Loughran and McDonald (2015) investigated the role of women's perceptions of glass ceilings with regard to stereotypes, and the results of their study indicated that gender perceptions in the workplace aroused a great revolution, thereby changing the previous perceptions about women.[20] A large number of reasons can be put forth for the existence of a glass ceiling, the most important of which in Iran is the existence of gender stereotypes. The gender stereotypes are posed by gender gaps in occupation.[21] Choi (2019) conducted a study entitled "Breaking glass ceiling" – Social capital prerequisites for women's career achievements. The study participants were female employees from state organizations, and the study findings revealed that the glass ceiling was a cultural phenomenon, even in countries such as the United States where democracy prevails. Moreover, it was concluded that the existence of human resource strategies and strategic cultural tools and social capitals would reduce gender-based perceptions of women's career advancement and break their glass ceilings.[13] Women tackle with problems in achieving managerial positions in organizations. According to some studies, women do not spare their efforts are willing to give up their positions to start a

family, or do not receive enough training and experience to lead an organization. However, some other studies have not acknowledged this issue.[2]

Limitation and recommendation

One of the most important limitations of this study was to do it quantitatively. If researchers could collect the data using qualitative methods and interviews, richer and more accurate information would certainly be obtained. Another limitation was that the study was conducted in only one university, and its results may differ from other medical universities, so more caution should be exercised in generalizing the results. It is suggested that a qualitative study be used on this issue in the future and that the statistical community be more diverse and extensive. Intervention programs are also suggested to improve women's attitudes and beliefs toward accepting authority, management, and leadership positions and to enable them modify their misconceptions about their inability to reach the managerial positions.

Conclusions

The findings of the present study revealed that a significant difference was observed between the views of male and female faculty members toward glass ceiling; however, there was no significant difference between the two groups of faculty members in the clinical and basic sciences fields. The present study would contribute to the evaluation of faculty members' beliefs about women's promotion to managerial positions at Iran University of Medical Sciences. Identifying these components and dimensions, the policy makers can remove obstacles and play a more critical role in improving the leadership position of women at universities in terms of university management and leadership, thereby achieving social justice. Some suggestions to remove glass ceilings might be using supportive laws and rules in organizations, empowering women to hold senior managerial positions, changing attitudes inside and outside organizations, promoting women's motivation and incentives, developing women's personal and professional skills, removing environmental challenges to further accept and welcome women's accountability at the senior managerial positions, reforming the culture of women and patriarchy, inspiring equality in organization's culture, promoting self-confidence in women, and so on. These would also lead to organizational development and dynamism. Now, the extent of women's involvement in decision-making processes is one of the basic concepts of gender development in different countries. There is an urgent need to reconsider the status of women's involvement in managerial and macro-level parts of making decisions in economic, health, and political fields and to establish authentic mechanisms to promote their

active involvement to achieve sustainable development. A community striving for development must be concerned with the reduction of inequalities, especially gender inequalities, in all political, cultural, social, and economic dimensions to witness more successful development policies. This means that the policies and laws of a country should play a more highlighted role in supporting women's status in the society and organizations to exploit individuals' capabilities and dynamism and to remove lot of psychological pressure already posed on working women. Given their feminine nature and cultural definitions of their status in the heart of society, women play many different roles. In this regard, if the laws and state institutions disregard their roles, the society would fail to progress. In other words, the government and state organizations should remove issues such as the glass ceiling to a large extent by setting protecting rules and understanding women's status. Policy-makers in the Ministry of Health and Medical Education are also recommended to more equitable structures and systems in terms of men and women's equality in reaching managerial and senior management positions in teaching-hospital faculties, departments, and universities.

References

1. Bombuwela PM, De Alwis AC. Effects of glass ceiling on women career development in private sector organizations – Case of Sri Lanka. J Competitiveness 2013;5:3-19.
2. Mohajeri B, Mokhtar M, Balash F. Challenges encountering the participation of women in senior administrative status in higher education. Int Educ Stud 2015;8:9.
3. Srivastava S, Madan P, Dhawan VK. Glass ceiling – An illusion or realism? Role of organizational identification and trust on the career satisfaction in Indian organizations. J Gen Manage 2020;45:217-29.
4. Weyer B. Twenty years later: Explaining the persistence of the glass ceiling for women leaders. Women Manage Rev 2007;22:482-96.

5. Pai K, Vaidya S. Glass ceiling: Role of women in the corporate world. Competitiveness Rev 2009;19(2):109-16. [doi: 10.1108/10595420910942270].

6. Sohrabi Z, Koohestani HR, Nahardani SZ, Keshavarzi MH. Data on the knowledge, attitude, and performance of Ph.D. Students attending an educational course (Tehran, Iran). Data Brief 2018;21:1325-8.

7. Soltani Arabshahi K, Keshavarzi MH, Ramezani G. Investigation of the relationship between self-determined motivation and work engagement of faculty members of Iran university of medical sciences. J Med Educ Dev 2019;12:16-25.

8. Farahbakhsh S, Nikpey I, Ghanbari R. Effect of the glass ceiling on women creative ideas with moderating of self-concept. Women Dev Polit 2016;14:161-80.

9. Stamarski CS, Son Hing LS. Gender inequalities in the workplace: The effects of organizational structures, processes, practices, and decision makers' sexism. Front Psychol 2015;6:1400.

10. Kelly M, Wilkinson L, Pisciotta M, Williams LS. When working hard is not enough for female and racial/ethnic minority apprentices in the highway trades. Sociological Forum 2015;30(2):415-38.

11. Gholamzadeh D, Haghshenase Kashani F, Mohammadkhani F. The influence of leadership style on the Womens' glass ceiling beliefs. Womens Stud Sociol Psychol 2015;13:275-197.

12. Waltz CF, Bausell BR. Nursing Research: Design Statistics and Computer Analysis. New York: Davis FA; 1981.

13. Choi S. Breaking through the glass ceiling: Social capital matters for Women's career success? Int Public Manage J 2019;22:295-320.

14. Choi S. Breaking through the glass ceiling: Social capital matters for Women's career success? Int Public Manage J 2019;22:295-320.

15. Wirth L. Breaking through the Glass Ceiling: Women in Management; Geneva: International Labour Office; 2001.

16. Nazari R. The analysis of glass ceiling effect on improving the management position of women in sport organizations in Isfahan province. J Sport Manage 2018;10:477-65.

17. Shafi A, Etebariyan A, Ebrahimzadeh Dastjerdi R. Designing a structural-interpretative model of factors affecting the construction of glass ceilings based on the Delphi method (A Case Study of Women Employed at the Headquarters of the National Iranian Oil Distribution Company). Womens Stud Sociol Psychol 2018;16:55-77.

18. Eghlidi FF, Karimi F. The Relationship between dimensions of glass ceiling and organizational commitment of women employees. Int J Hum Capital Urban Manage 2020;5:27-34.

19. Smith P, Caputi P, Crittenden N. How are Women's glass ceiling beliefs related to career success? Career Dev Int 2012;17(5):458-74.

20. Loughran T, McDonald B. Old glass ceilings are hard to break: Gender usage trends in annual reports. Stud Commun Sci 2015;15:5-11.

21. Nasiri Valikbani F, Beheshtirad R. Investigating the role of glass ceiling on reduction of perceived organizational justice. J Soc Stud Psychol Women 2015;12:149-72.