THE GLASS CEILING OF WOMEN'S PARTICIPATION IN LEADERSHIP POSITION: THE CASE OF HAWASSA INDUSTRIAL PARK, ETHIOPIA

Hiwot Tedla[1*] Dr. Arvinder Singh Chawla[2]

[1]PhD Scholar, Gurukashi University
[2]Visiting Professor, Gurukashi University

Abstract

This study investigates the persistent glass ceiling hindering women's participation in leadership positions, with a focus on Hawassa Industrial Park (HIP), Ethiopia. The research adopts an explanatory design and a quantitative research approach, collecting data from 393 employees through questionnaires. The data were analyzed using multiple linear regression to identify factors influencing women's access to leadership roles. The results highlight that internal organizational structures and communication networks play a pivotal role in promoting women's leadership opportunities. Organizations with well-defined structures that encourage open communication and support can create an environment conducive to women's advancement, positioning these elements as key contributors to achieving gender equality in leadership. The study also identifies significant barriers, including gender stereotypes, situational challenges, and personal limitations. Among these, gender stereotypes emerge as the most detrimental, substantially limiting women's opportunities for upward mobility. Situational barriers, such as societal expectations and workplace dynamics, further exacerbate the challenges women face. Although personal barriers, such as self-perception and confidence, also negatively impact women's leadership prospects, they are relatively less influential than structural and situational factors. These findings suggest that addressing organizational structures and fostering inclusive communication networks can counteract these barriers, enabling more equitable leadership opportunities. Consequently, targeted interventions to dismantle structural impediments and challenge societal norms are essential for overcoming the glass ceiling and achieving meaningful gender equality in leadership roles within industrial parks and beyond.

* Corresponding author email: hiwited@gmail.com

1. INTRODUCTION

Global efforts to champion gender diversity in leadership have yet to overcome the significant underrepresentation of women in top positions across organizations (Groeneveld et al., 2019). Despite thriving at lower levels, women face numerous barriers to ascending to senior and executive roles, even when early career opportunities seem favorable (Baumgartner & Schneider, 2010). These challenges highlight systemic biases that create a complex labyrinth of obstacles, including promotion scarcity, unequal pay, and gender stereotypes. Rigid organizational structures and implicit biases further hinder women's progression, while life realities such as childcare

responsibilities, organizational restructuring, and burnout exacerbate the situation (Hite & McDonald, 2003; Wentling, 2003).

The metaphor of the "glass ceiling" has been criticized for oversimplifying the challenges women face in leadership, failing to account for the diverse and nuanced barriers they encounter (Eagly & Carli, 2007). Unlike the glass ceiling, which portrays a singular obstacle, the "leadership labyrinth" acknowledges the multiple, shifting barriers that women must navigate. These include both blatant and subtle forms of exclusion, such as discrimination, stereotypes, and the lack of visible opportunities. The labyrinth metaphor better captures the complexity of women's leadership struggles and emphasizes the importance of understanding and addressing these multi-faceted barriers, rather than merely focusing on a single, impenetrable ceiling.

In Ethiopia's Hawassa Industrial Park, the glass ceiling remains a critical issue for women in leadership roles. Despite the government's efforts to promote gender equality and the industrial sector's growth, women make up a significant portion of the workforce, yet they remain underrepresented in leadership positions. With many women working in lower-ranking roles, often on factory floors, the challenges they face in advancing to top positions are not well understood. The lack of targeted policies and interventions to address these barriers hampers efforts to increase female representation in leadership within the park. The proposed research aims to investigate the factors contributing to this persistent glass ceiling, with the goal of advocating for policies that enhance female leadership participation in Ethiopia's growing industrial sector.

2. REVIEWED LITERATURE

2.1. Organizational Structures as a Glass Celling

Formal and informal structures within organizations significantly contribute to the glass ceiling. Recruitment and promotion practices often lack transparency and objectivity, perpetuating biases that favor men (Lawson, 2022). Access to training and development opportunities might be disproportionately limited for women, hindering their skill development and readiness for leadership roles. The absence or inadequacy of mentorship and sponsorship programs further exacerbates this imbalance, as women may lack the crucial support and guidance needed to navigate career advancement (Bustamante, 2024). Organizational culture plays a pivotal role; if it fosters traditional gender roles and reinforces stereotypes, it creates an environment hostile to women's leadership aspirations (Klerk, 2017). A lack of flexible work arrangements and family-friendly policies can also disproportionately affect women, making it difficult to balance work and family responsibilities (Hoyt, 2017).

2.2. Gender Stereotypes as a Glass Celling

Gender stereotypes and implicit biases significantly shape perceptions of female leaders within organizations. Prevailing beliefs about women's capabilities and leadership styles often portray them as less decisive, less assertive, or less competent than their male counterparts (Hoyt, 2017). These biases influence hiring and promotion decisions, with qualified women overlooked in favor of men, even when their qualifications are comparable or superior. Performance evaluations may also be affected, with women's achievements downplayed or attributed to external factors, while men's successes are attributed to their inherent abilities

(Lawson, 2022). The concept of "role congruity" highlights the incompatibility between the stereotypical image of a leader (often masculine) and the stereotypical image of a woman, creating a mismatch that hinders women's advancement.

2.3. Situational Barriers as a Glass Celling

Situational barriers, particularly those related to work-life balance, disproportionately affect women in organizations. The burden of family responsibilities, including childcare and eldercare, often falls predominantly on women, limiting their availability for extra work, networking events, and leadership training (Farrukh, 2024). A lack of supportive workplace policies, such as flexible work arrangements, affordable childcare, and parental leave, further exacerbates these challenges. Cultural norms and expectations surrounding gender roles can also play a significant role, with societal pressure on women to prioritize family over career creating a conflict that hinders their leadership ambitions (Islam, 2023).

2.4. Personal Barriers as a Glass Celling

Personal barriers, such as self-doubt and lack of confidence, can significantly hinder women's leadership aspirations. The concept of "stereotype threat" suggests that women may internalize negative stereotypes about their capabilities, leading to anxiety and underperformance in situations where their gender is salient. This can manifest as self-doubt, a reluctance to take risks, and a lower likelihood of applying for leadership positions (Hoyt, 2017). The lack of visible female role models within organizations can further exacerbate these feelings, as women may lack the inspiration and guidance needed to believe in their own leadership potential (Kelil, 2019).

2.5. Communication Networks as a Glass Celling

Communication networks and social capital play a crucial role in career advancement, and women in organizations may face significant disadvantages in this area. Access to mentorship, sponsorship, and informal networks is often skewed in favor of men, who may benefit from stronger social ties and informal support systems. The "queen bee syndrome" (Klerk, 2017), where women in leadership positions may inadvertently hinder the advancement of other women, can also be a factor. Communication networks consider the importance of building supportive networks among women, fostering mentorship relationships, and creating opportunities for women to develop social capital.

3. RESEARCH METHODOLOGY

3.1. Research Design

This study employed an explanatory research design, which is well-suited for investigating causal relationships and understanding the effects of independent variables on dependent variables, as it enables the identification of key factors associated with the phenomenon under study (Oleary, 2004). Explanatory research design is particularly effective when the aim is to explore and establish connections between variables, providing insights into the underlying causes or effects. Furthermore, the study employed a mixed approach, combining quantitative and qualitative data collection and analysis techniques to gain a comprehensive understanding

of the complex interplay of factors contributing to the glass ceiling within HIP. The quantitative component surveys administered to a representative sample of women at various levels within HIP's organizational hierarchy. The qualitative component utilize semi-structured interviews with women currently in leadership positions This mixed-methods approach allows for both breadth (quantitative data on prevalence and correlations) and depth (qualitative data on experiences and perspectives) in understanding the phenomenon of the glass ceiling.

3.2. Sampling Design

The sampling strategy aimed for representativeness, ensuring that the survey sample includes a sufficient number of women across different departments within HIP. A stratified random sampling technique was employed to ensure proportional representation of different departments. Based on the data that obtained from the park, the total study population were 20800. Therefore, the sample size was determed using Yamane (1967) formula as follows:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{20800}{1 + 20800(0.05)^2}$$

$$n \approx 393$$

3.3. Data Collection Tool

The survey instrument were meticulously designed, with pre-testing conducted to ensure clarity and validity. Questions were prepared to assess perceptions of organizational structures, experiences with gender bias, work-life balance challenges, self-efficacy, and networking opportunities. The semi-structured interviews were employed an interview guide focusing on women's career journeys, experiences with barriers, coping strategies, and perspectives on promoting gender equality. All data collection procedures were adhere to ethical guidelines, ensuring informed consent, confidentiality, and anonymity.

3.4. Data Analysis

In the analytical phase of this research, the collected data, acquired through a comprehensive questionnaire, were undergo thorough examination using SPSS software version 26. The data were analysed using correlation and multiple linear regression analysis to delve deeper into the intricate dynamics of the glass ceiling effect on women's involvement in leadership roles. To enrich the quantitative findings and ensure a comprehensive perspective, the qualitative data from interviews were analyzed using thematic analysis, a systematic approach to identifying recurring patterns and themes in the data. Thematic analysis involved coding the data, identifying emergent themes, and developing detailed descriptions of these themes, supported by illustrative quotes from the participants. The integration of quantitative and qualitative data provide a rich and nuanced understanding of the glass ceiling within HIP, allowing for triangulation of findings and a more complete interpretation of the results.

4. RESULT AND INTERPRETATION

4.1. Glass Ceiling of Women's Participation in Leadership Position

The glass ceilings of women participation in leadership positions were identified using multiple linear regression analysis. Before performing the regression analysis, the basic assumptions of normality, multicollinearity, linearity, and heteroscedasticity were assessed as follows:

Figure 1: Frequency Distribution of Standardized Residual
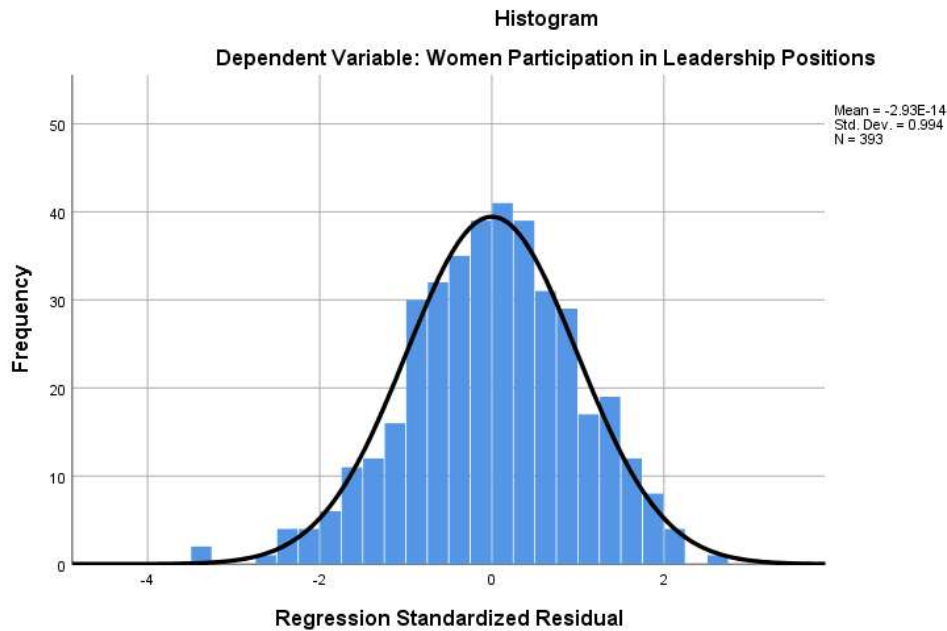
Source: Model output, 2024

As can be seen from Figure 1, the frequency distribution of the standardized residuals compared to a normal distribution. Although there are some residuals (e.g., those occurring around 0) that are relatively far away from the curve, many of the residuals are fairly close. Moreover, the histogram is bell shaped which lead to infer that the residual (disturbance or errors) are normally distributed. Thus, no violations of the assumption normally distributed error term.

Figure 2: The Linearity test of Standardized Residual
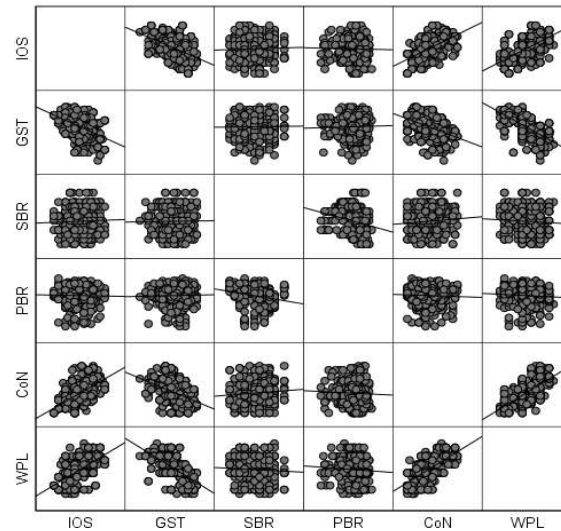
Source: Model output, 2024

The scatter plot of residuals indicates a consistent spread across the range, as shown in Figure 2. This observation supports the assumption of a linear relationship between the variables. Additionally, the residuals are distributed symmetrically around their mean value of zero, further confirming the fulfillment of the linearity assumption. Based on this figure, it can be concluded that the inferences drawn by the researcher about the population parameters from the sample are valid.

Table 1: Multicollinearity assumption

Variables	Collinearity Statistics	
	Tolerance	VIF
Internal Organizational Structure	.615	1.627
Gender Stereotype	.744	1.345
Situational Barriers	.938	1.066
Personal Barriers	.946	1.057
Communication Network	.643	1.556

Source: Model output, 2024

The results of Table 1 presented the multicollinearity test. If there is high correlation between any two independent variables among independent variables, the regression model assumes redundancy of one of these variables that the significance of it becomes too low and its coefficient also be negatively affected. The result showed that a tolerance of >.10 and a VIF < 10 are considered as good enough to minimize the effect of multicollinearity (Miller & Whicker,1999). Thus, the result showd that the regression model is not affected by higher correlation between two independent variables.

Figure 3: Hetroskedasticcity Test

Scatterplot

Dependent Variable: Women Participation in Leadership Positions
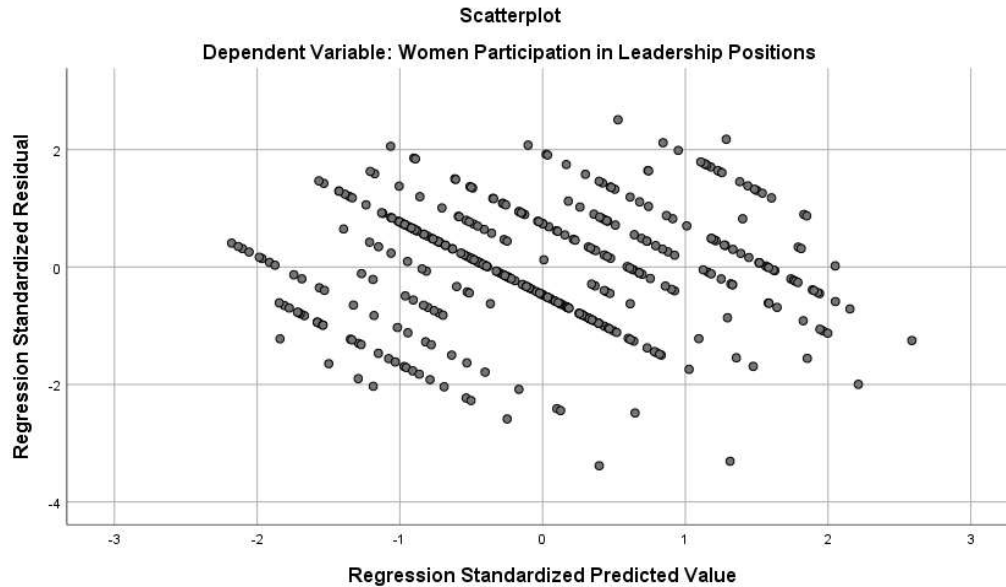
Source: Model output, 2024

The heteroscedasticity graph illustrates the spread of residuals against predicted values, providing insights into the variance of errors. A consistent and random pattern in the residuals across all predicted values suggests that the assumption of homoscedasticity is met, indicating equal variance. Conversely, if the residuals show a funnel-shaped pattern, with either increasing or decreasing variance, it implies the presence of heteroscedasticity. In this analysis, the residuals appear evenly distributed without any discernible pattern, confirming that the assumption of homoscedasticity is satisfied.

Table 2: *Results of Regression Analysis Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780[a]	.608	.603	.16511

a. Predictors: (Constant), Communication Network, Personal Barriers, Situational Barriers, Gender Stereotype, Internal Organizational Structure

b. Dependent Variable: Women Participation in Leadership Positions

Source: Survey Data, 2024

The results of the regression analysis provide valuable insights into the model's ability to explain variations in women's participation in leadership positions. The R-Square value of 0.603 reveals that approximately 60.3% of the variability in women's participation in leadership positions can be explained by the independent variables included in the model.

Table 3: *Results of ANOVA Output*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.368	5	3.274	120.085	.000[b]
	Residual	10.550	387	.027		

Total	26.917	392

a. Dependent Variable: Women Participation in Leadership Positions
b. Predictors: (Constant), Communication Network, Personal Barriers, Situational Barriers, Gender Stereotype, Internal Organizational Structure
Source: Survey Data, 2024

The ANOVA table evaluates the overall significance of the regression model in explaining the variability in women's participation in leadership positions. The mean square for the regression (3.274) is substantially higher than the mean square for the residual (0.027), resulting in an F-statistic of 120.085. The corresponding p-value (Sig.) is 0.000, which is less than the conventional significance level of 0.05. This indicates that the model is statistically significant, and the independent variables collectively have a meaningful impact on women's participation in leadership positions.

Table 4: *Results of Multiple Linear Regression Analysis*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.869	.171		16.747	.000
Internal Organizational Structure	.101	.021	.199	4.903	.000
Gender Stereotype	-.266	.027	-.359	-9.735	.000
Situational Barriers	-.103	.031	-.108	-3.293	.001
Personal Barriers	-.025	.014	-.058	-1.765	.078
Communication Network	.222	.022	.395	9.956	.000

Note: B: Regression coefficient (Estimate), Std.Error: Standard Error, Dependent Variable: Women Participation in Leadership Positions
Source: Survey Data, 2024

The multiple linear regression analysis in Table 4 presents the relationship between several independent variables and the dependent variable, which is "Women Participation in Leadership Positions." The results show how different factors such as internal organizational structure, gender stereotypes, situational barriers, personal barriers, and communication networks affect women's participation in leadership positions.

Internal Organizational Structure has a positive and significant effect on women's leadership participation (B = 0.101, $p < 0.001$), indicating that a better internal structure within organizations is associated with increased women's representation in leadership roles. The standardized coefficient (Beta = 0.199) suggests that it has a moderate impact. Inline with this finding, Pradhan et al. (2023) suggest that supportive organizational structures and policies can create a more positive environment for women to thrive in leadership roles. Additionally, Kebede et al. (2021) discusses organizational factors that influence women's participation in leadership, implying that the internal structure plays a role. Likewise, Ifeanyi-obi and Ndee, (2023) also examines organizational factors and their impact on women's leadership within community-based organizations.

Gender Stereotype negatively influences women's participation in leadership positions (B = -0.266, p < 0.001), with a strong standardized coefficient (Beta = -0.359), showing that more pronounced gender stereotypes are linked to reduced participation. This variable has the largest negative effect among the predictors. In connection to this finding, Hailemariam and Yang (2023) points to attitudes that undermine women's leadership participation and the influence of patriarchal culture. Pradhan et al. (2023) discusses stereotyping and patriarchy as major barriers, reinforcing the negative impact of societal expectations and gender roles. Furthermore, Kebede et al.(2021) mentions stereotyping as a key factor hindering women's leadership aspirations.

Situational Barriers also have a negative impact (B = -0.103, p = 0.001), though it is weaker than the impact of gender stereotypes (Beta = -0.108), suggesting that situational factors such as job constraints or personal circumstances slightly hinder women's leadership roles. As a situational barrier, Hailemariam and Yang (2023) discusses several situational barriers, including women's withdrawal from leadership assignments due to fear of geographical mobility and separation from family. Pradhan et al. (2023) mentions work-family conflict as a major barrier, echoing the challenges of balancing personal and professional responsibilities. Kebede et al., (2021) also touches upon similar challenges, highlighting the multiple roles women often play and the resulting difficulties in pursuing leadership positions. Ifeanyi-obi and Ndee (2023) discusses how women's traditional roles and responsibilities can create barriers to their participation in leadership.

Communication Network has a significant positive effect (B = 0.222, p < 0.001) with a large standardized coefficient (Beta = 0.395), suggesting that stronger communication networks are a key facilitator for women's advancement into leadership positions, highlighting the importance of networking and organizational communication. Similarly, in their finding, Pradhan et al. (2023) discusses the importance of networking and mentoring, which can be considered aspects of a broader communication network. Networking provides access to information, resources, and support that can be crucial for career advancement and leaders to leadership position.

6. CONCLUSION

The findings of the multiple linear regression analysis indicate that key factors like internal organizational structure and communication networks play a crucial role in enhancing women's participation in leadership roles. A well-structured organization that fosters open communication and provides support can create an environment conducive to women's advancement, making these elements significant contributors to gender equality in leadership. On the other hand, gender stereotypes and situational barriers present substantial obstacles to women's progress, with gender stereotypes being the most detrimental factor, significantly limiting their opportunities for advancement. While personal barriers also have a negative impact, they do not appear to be as influential as the aforementioned factors. This suggests that organizational structures that are inclusive and facilitate strong communication networks can counteract these barriers, promoting an atmosphere where women have better chances to rise

to leadership positions. In conclusion, efforts to address these structural and networking challenges could be key to achieving greater gender equality in leadership across organizations.

REFERENCES

Baumgartner, M.S., & Schneider, D.E. (2010). Perceptions of women in management: A thematic analysis of razing the glass ceiling. *Journal of Career Development*, 37(2), 559–576. doi:10.1177/ 0894845309352242

Chugh, S., & Sahgal, P. (2007). Why do few women advance to leadership positions? Global Business Review, 8(2), 351. SAGE Publishing. https://doi.org/10.1177/097215090700800211

Cosentino, A. B., Weese, W. J., & Wells, J. E. (2021). Strategies to advance women: Career insights from senior leadership women in professional sport in Canada. Frontiers in Sports and Active Living, 3. Frontiers Media. https://doi.org/10.3389/fspor.2021.716505

Galsanjigmed, E., & Sekiguchi, T. (2023). Challenges women experience in leadership careers: An integrative review. Merits, 3(2), 366. https://doi.org/10.3390/merits3020021

Hailemariam, D. T., & Yang, Y. (2023). Factors affecting women's participation in leadership positions: The case of Yeka Sub City, Addis Ababa, Ethiopia. Social Science Research, 8(3), 185.

Ifeanyi-Obi, C. C., & Ndee, B. F. (2023). Assessment of women's participation in leadership roles in rural community-based organizations in Gokana Local Government Area, Rivers State, Nigeria. Atlantis Highlights in Women's Studies, 4, 293.

Kebede, A., Bogale, N., & Lecturer, T. (2021). Women's low participation in top leadership positions in North Shoa Zonal Administration, Amhara Region, Ethiopia: Its determinants. International Institute for Science, Technology and Education (IISTE).

Pradhan, R. S., Ojha, K. P., Bista, N. B., Dahal, G., & Pradhan, S. (2023). Perspectives in Nepalese management. Nepal Management Review.

Voicila, A., Ghinea, V. M., & Filculescu, A. (2018). Women in leadership positions: Perspectives from an international consulting company. International Journal of Academic Research in Business and Social Sciences, 8(8). https://doi.org/10.6007/ijarbss/v8-i8/4457

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.