

## Measuring Glass Ceiling Beliefs Effect on Career Advancement Satisfaction

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### Abstract

This study explores the relationship between women's glass ceiling beliefs and their satisfaction with career advancement in Egyptian public banks, with a particular focus on middle managers. This study explores how four key glass ceiling beliefs – resilience, denial, acceptance and resignation – shape career advancement satisfaction among female middle managers. Using a quantitative approach, data was gathered from 247 female middle managers employed at Banque Misr, Banque Du Caire, and the National Bank of Egypt. Through statistical analyses, including multiple regression and correlational analysis, significant relationships emerged: acceptance and resignation were positively correlated with career advancement satisfaction, whereas resilience was negatively associated. These findings provide valuable insights into women's experiences with the glass ceiling in Egyptian public banks and the factors influencing career advancement satisfaction. Ultimately, the study aims to inform strategies that promote gender equality and inclusivity by addressing glass ceiling barriers in organizational settings.

### Keywords

Glass Ceiling Beliefs - Career Advancement Satisfaction - Career Pathways Scale

### Article history

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## **1. Introduction**

Despite the global increase in women's participation in the workforce, they continue to encounter (face) challenges in attaining leadership positions, particularly in Arab countries (Khadri et al. 2016). This persistence of gender disparity is evident as women remain underrepresented in senior leadership roles despite significant advancements in education and employment (Toosi & Morisi, 2017). Chao (2011) observes that female involvement in senior management positions remains relatively low despite the growing number of female employees worldwide, indicating a slow progression in women reaching higher positions. The 2014 Catalyst Census of Women on Boards supports this notion, highlighting a progressive (gradual) yet insufficient representation of women at top levels (Catalyst, 2015). Assaad (2014) provides data demonstrating that top management positions remain predominantly inaccessible to Arab women.

The concept of the "glass ceiling," initially coined by Hymowitz and Schellhardt (1986) in a Wall Street Journal article addressing corporate women, has become a prominent metaphor for examining gender inequalities in the workplace. This metaphor often denotes the barriers women encounter in their pursuit of top management positions across various sectors, including corporations, the public sector, nonprofit organizations, and educational institutions, as well as obstacles faced by men and racial and ethnic minorities in advancing their careers (Robbins et al., 2012). Barriers such as organizational culture, gender stereotypes, failure to recognize women's potential, cultural differences across countries, and structural disparities (e.g., rules and procedures) have been identified as hindrances to women's career advancement (Sahoo & Lenka, 2016). Additionally, the existence of the glass ceiling is attributed to the selective perception of individuals who share similarities in terms of age, gender, and leadership style (Sahoo & Lenka, 2016). Despite comparable achievements, education, and experiences, research indicates that women continue to encounter the glass ceiling phenomenon (Sahoo & Lenka, 2016).

## **2. Literature Review**

### **2.1. Glass Ceiling Literature**

Numerous theories have emerged over the years to explain the glass ceiling phenomenon, each rooted in distinct beliefs about its causes and perpetuating factors. Kanter (1977) argued that organizational structures hinder women's mobility in the workplace, suggesting that organizational change, rather than individual change, is necessary. Grant (1989) highlighted the replication of organizational norms and the tendency for women in senior management positions to conform to male-dominant models. Acker (1990) emphasized the gendered nature of organizations, where social role stereotypes contribute to the perception of women as less effective leaders. Additionally, Chugh and Sahgal (2007) found that the entrenched belief that "male equals supervisor" persists across organizations, accompanied by a lack of formal career planning for women and differences in motivation between genders. Overall,

these perspectives underscore the significant barriers faced by women in their ascent to leadership positions within gendered organizations.

Congruity theory as articulated by (Eagly and Karau, 2002) elucidates prejudice towards female leaders, which is grounded in social learning of gender roles. Congruity theory posited incongruence between traditional leadership standards and perceptions of female leadership capabilities. Discrimination against women in leadership roles manifested in the unfavorable perception of females and the less positive evaluation of their leadership behaviors relative to males.. This prejudice was ascribed to outdated masculine criteria for leadership assessment, hindering women's advancement to senior-level positions. Eagly and Karau (2002) identified familial roles (responsibilities), insufficient experience, education, drive/motivation, and dedication/commitment as factors contributing to women's underrepresentation in leadership, despite their proven credentials. Role congruity theory suggested that prejudice against female leaders stemmed from incongruence between the female gender role and leadership expectations, while the male gender role is more congruent with leadership standards (Gervais and Hillard, 2011; Heilman and Eagly, 2008). Eagly and Karau (2002) and Pillai and Thomas (2011) identified gender prejudice against women leaders arising from discrepancies between perceived feminine characteristics and conventional leadership requirements. Role congruity theory asserts that this incongruity between the female gender role and leadership expectations leads to biased perceptions of women in leadership positions. This prejudice is seen in the unfavorable perception of women as potential leaders, besides, the less positive evaluation of their leadership behaviors relative to males. As a result, women face heightened obstacles in becoming and excelling as leaders.

Previous studies highlight the widespread influence of gender bias and the role congruity theory in shaping perceptions of women in leadership roles. For instance, Grappendort and Henderson (2011) examined the underrepresentation of women in athletic leadership, finding that while men and women have comparable life skills, women were considered less likely to be given leadership positions in athletics. Moreover, Gervais and Hillard (2011) applied role congruity theory to analyze sexism against female legislators, revealing biased perceptions of Hillary Clinton and Sarah Palin based on gender stereotypes. Similarly, Bongiorno, Bain, and David (2014) investigated biases against women with agentic leadership traits, finding that women exhibiting such traits were judged less favorably than men, leading to a no-win situation for female leaders. Taken together, these studies give prominence to gender bias impacts and congruity theory role.

Considering the significance of congruity theory, research conducted in various countries, including Egypt (Khedr, 2017), Asia (Saleem et al. 2017), the USA (Nadler, Voyles, Cocke, & Lowery, 2016), and India (Balasubraman & Lathabhavan, 2018). These studies consistently demonstrate that women continue to be underrepresented in top leadership roles despite the significant progress in their professional trajectories. The term "glass ceiling" is commonly used to describe the barriers women encounter in reaching leadership positions (Easter, 2016; Sabharwal, 2015). Powell and

Butterfield (2015) identified three factors contributing to the significance of the glass ceiling for businesses: organizational effectiveness, organizational justice, and organizational impression management. They found that limiting the gender talent pool affects organizational effectiveness, the unfair promotion decisions impact organizational justice, and the organizational impression management influences employee perceptions of fairness (Powell & Butterfield, 2015).

Although the majority of research on the glass ceiling emphasizes on women's experiences, studies indicate that men also hold similar beliefs about its existence (Davis and Maldonado, 2015; Easter, 2016; Glass and Cook, 2014; Subramaniam et al. 2016). Men often attribute the glass ceiling to the lack of policies empowering females, while women attribute it to stereotypes (Brumley, 2014; Saadin, Ramli, & Harin, 2016).

Kanter (1977) observed that women's progress in the workplace was limited to lower-level positions rather than decision-making roles, suggesting that success was contingent upon relationships rather than individual merit. Despite progress, women continue to encounter individual, social, and organizational barriers to progression (Caceres-Rodriguez, 2011; Followell, 2014). Strategies women use to overcome these barriers include consistently achieving objectives, acquiring mentors, and cultivating leadership styles that appeal to both genders (Caceres-Rodriguez, 2011).

Furthermore, the relationship between work satisfaction and the desire to leave is influenced by career advancement expectations and moderated by demographics (Chen et al., 2011). While women today are more likely to be in top income brackets compared to three decades ago, they are still underrepresented at the highest levels of earnings (Guvenen et al., 2014). Overall, addressing the glass ceiling requires understanding the barriers women face and creating organizational settings that promote women's success (Followell, 2014).

## **2.2. Career Advancement Literature**

Kanter (1977) posited that mobility in the workplace significantly influences employee behavior and job engagement, leading to enhanced self-fulfillment, expanded objectives, and upward orientations. Conversely, a lack of mobility may lead workers to stay oblivious or assuming that their initial position within the organization is appropriate (Kanter, 1977; Nouri & Parker, 2013). Furthermore, both personal and situational factors constantly shape the concept of career advancement. Lack of advancement can result in withdrawal behaviors and decisions to leave (Zhao & Zhou, 2008; Kosteas, 2011).

Tharenou (1990) described contrasting conventional approaches with modern approaches in understanding women's achievement behaviors and career advancement, highlighting the influence of contextual factors alongside internal psychological characteristics. Hede and Ralston (1993) found that female managers were less likely to desire upward mobility compared to male managers, suggesting that lateral moves may result in greater satisfaction for women. Metz & Tharenou (2001) identified

human and social capital, promotional opportunities, managerial motivation, and masculinity as influential factors in women's career advancement. However, they noted discrepancies between quantitative and qualitative data regarding the effect of social capital on women's career advancement.

Bombuwela and De Alwis (2013) discovered modest relationships between the glass ceiling and women's career advancement, highlighting the significance of individual factors, supervisor support, financial incentives, and career opportunities in moderating depersonalization and personal accomplishment.

Hultin (2003) found greater internal promotional opportunities for males in traditionally feminine professions compared to equally skilled female peers, suggesting that employment in female-dominated professions may hinder women's mobility. Semykina and Linz (2013) observed a positive relationship between career satisfaction and promotional prospects for women at managerial levels, influenced by worker personality and organizational characteristics.

Overall, these findings underscore the multifaceted nature of career advancement for women, influenced by individual, situational, and organizational factors (Kanter, 1977; Tharenou, 1990; Metz & Tharenou, 2001; Bombuwela & De Alwis, 2013; Semykina & Linz, 2013).

### **2.3. Career Satisfaction Literature**

According to Robbins and Judge (2011), career satisfaction is described as one's overall attitude towards their occupation, while Sultana, Sarker, & Prodhan (2017) define it as the level of satisfaction within one's profession. Arogundade & Arogundade (2015) emphasize personal feelings about jobs, including pay, rewards, and general attitude toward one's profession, as key determinants of career satisfaction. Despite facing more occupational drawbacks such as poor wages and lower advancement prospects, studies consistently show that women tend to report higher career satisfaction compared to men (Chaudhry, 2018; Grönlund, 2018; Lup, 2018; Macintosh & Krush, 2014). Grönlund (2018) suggests that this could be attributed to lower career expectations among women or a preference for work-life balance over career advancement.

Two approaches to examine career satisfaction are subjective and objective. Shockley et al. (2016) define subjective success as attitudes toward achieving targets, while Nyberg et al. (2015) emphasize objective success based on incomes, advancement prospects, and growth. Enache et al. (2011) found differences in perspectives between men and women, with men viewing career satisfaction more objectively and women more subjectively, prioritizing the sense of success over salary gaps and career advancement.

In India, Memon (2017) investigated the relationship between glass ceiling, job satisfaction, and gender discrimination among women workers, revealing a significant correlation between gender discrimination and job satisfaction. Westover and Peterson (2019) identified four categories influencing career satisfaction: extrinsic rewards,

intrinsic rewards, work relationships, and work-life balance. While both men and women reported similar levels of satisfaction, men showed more interest in extrinsic rewards, whereas women prioritized work-life balance for their career satisfaction.

#### **2.4. The Glass Ceiling and the Career Pathway Survey Development**

The concept of the glass ceiling was coined by the Wall Street Journal in 1986 to describe barriers hindering women and minorities from attaining top corporate positions (Pai & Vaidya, 2009). Analytical frameworks proposed to explain its causes include the human capital model, the socio-psychological model, and the structural model (Choi & Park, 2014). The human capital model suggests disparities in personal preferences based on individual distinctions, influenced by education, work experience, and qualifications (Hakim, 2006; O'Connor, 2001). However, critics argue that societal norms and gender stereotyping limit women's choices and do not explain persistent discrimination (Broadbridge, 2008; Tlaiss & Kauser, 2011). The socio-psychological model attributes gender inequality to deeply held expectations about women's roles as caregivers or homemakers, affecting promotion decisions (Hoobler et al., 2009).

Eagly and Karau (2002) highlight societal and organizational associations of gender characteristics, whereby communal traits are linked with women and agentic traits to men, affecting leadership perceptions. Scholars of the structural model focus on systematic challenges in corporate policies, such as impeding access to power and relationships, as barriers to women's advancement (Fassinger, 2008). Wrigley (2002) observed conflicting views on the glass ceiling among women, theorizing "negotiated resignation" as a mode of denial. Smith et al. (2012a, 2012b) expanded on this concept, identifying resilience and denial as positive beliefs and acceptance and resignation as negative beliefs regarding the glass ceiling. They categorized these beliefs into optimistic-pessimistic sets, with resilience and denial representing positive beliefs conducive to career advancement, and acceptance and resignation representing pessimistic views acknowledging barriers.

#### **2.5. Glass Ceiling Beliefs**

The concept of the glass ceiling, introduced by the Wall Street Journal in 1986, describes barriers hindering women and minorities from advancing to top corporate positions (Pai & Vaidya, 2009). Wrigley (2002) concluded that the glass ceiling exists due to systemic problems and socialization mechanisms, introducing the concept of "negotiated resignation." Smith, Crittenden et al. (2012) expanded on this, identifying resignation, denial, acceptance, and resilience as four attitudes towards the glass ceiling. These beliefs influence women's career advancement behavior, with resignation associated with abandonment of promotion pursuits, , and denial representing the belief that glass ceilings are myths (Smith, Crittenden et al., 2012).

Smith et al. (2012) sought to develop an evaluation tool to assess women's beliefs and perceptions about the glass ceiling due to a lack of existing instruments. The Career

Pathway Survey (CPS) was created to examine optimistic and pessimistic views on the glass ceiling in the context of promotions pursuits. The CPS includes statements related to resignation, acceptance, denial, and resilience, allowing for the assessment of attitudes towards pursuing promotions (Smith et al., 2012). The theoretical basis of the CPS is rooted in Eagly and Karau's (2002) role congruity theory of prejudice towards female leaders, which suggests that beliefs about women as leaders are influenced by communal and agentic traits. Agentic characteristics, associated with conventional male actions, are perceived as important for leadership, while communal characteristics, associated with females, are not considered as leadership qualities (Eagly & Karau, 2002). Historically, gender differences have been associated with communal (feminine) and agentic (masculine) traits, with men perceived as possessing agentic traits critical for successful leadership (Eagly & Karau, 2002). Women, stereotypically seen as having only communal characteristics, are underrepresented in leadership positions (Duehr & Bono, 2006; Eagly & Carli, 2007). The CPS aims to capture these perceptions and beliefs about women's leadership capabilities in the context of the glass ceiling (Smith et al., 2012). Overall, the CPS provides a comprehensive tool for assessing women's attitudes about the glass ceiling and their career advancement behavior, rooted in theoretical frameworks such as role congruity theory (Eagly & Karau, 2002). The instrument allows for the examination of optimistic and pessimistic beliefs regarding the glass ceiling, providing valuable insights into the challenges faced by women in advancing their careers (Smith et al., 2012).

## **2.6. Glass Ceiling in Egyptian Context**

Egypt's economy is robust within the Middle East and North Africa region, yet women's labor market prospects remain among the lowest worldwide despite improvements in women's skill levels (Kandil, 2015). Efforts to advance women's rights and participation in Egypt include legal measures such as the 2003 Egyptian Labour Law and constitutional amendments in 2014, which emphasize gender equality (Burke & El-Kot, 2011). However, challenges persist, as evidenced by women's perceptions that policies supporting their leadership roles are inadequately implemented (Aboud & Salem, 2016).

Cultural traditions and expectations also contribute significantly to women's issues in Egypt, with societal norms often limiting women's employment opportunities and reinforcing gender roles (Robbins et al., 2012). Work is historically viewed as a male occupation, while caregiving roles are associated with women, leading to gendered occupational segregation (Burke & El-Kot, 2011). Stereotypical views against women managers persist in Egyptian society, although attitudes may be changing due to factors such as urbanization and education (Elsaid & Elsaid, 2012).

Research by Kheder (2017) highlights disparities in gender beliefs regarding the glass ceiling in Egyptian workplaces, with women middle managers more likely to hold resignation beliefs while men perceive working women as resilient. The study suggests that gender significantly influences beliefs about female managers, with no significant differences observed between public and private sectors (Mostafa, 2005; Askar &

Ahmad, 2003). However, industry-specific research is recommended for a deeper understanding (Kheder, 2017).

The existence of the glass ceiling in Egypt, particularly in male-dominated sectors and organizations, is well-documented. In a notable study, Wessam Khedr (2021) utilized the Career Pathway Survey (CPS) to explore gendered beliefs about the glass ceiling among employees in Egypt. The study highlighted significant differences based on demographic factors such as age, education level, marital status, and job tenure. Khedr's findings revealed that women often exhibited beliefs of resignation regarding their career advancement prospects, while men perceived their female colleagues as resilient (Khedr, 2021).

Emanuela Ghignoni and Francesco Pastore (2019) conducted an in-depth analysis of the gender wage gap in Egypt, shedding light on the broader implications of the glass ceiling. Their research uncovered the existence of both a "sticky floor" in the private sector and a "glass ceiling" in the public sector. They attributed these phenomena to cultural barriers that significantly shape female participation in the workforce. Ghignoni and Pastore's findings underscore the pervasive nature of these barriers and their impact on women's career progression (Ghignoni & Pastore, 2019).

Additionally, Ghada Barsoum (2017) focused her research on gender disparities within Egyptian governmental commercial banks, particularly in Alexandria. Barsoum's research emphasized the significant gap between female and male managers, highlighting the prevalence of the glass ceiling. Moreover, it highlighted the urgent need for interventions aimed at promoting gender equality in managerial positions inside these institutions (Barsoum, 2017).

These studies collectively highlight the impact of cultural and structural barriers on women's career advancement in Egypt. They underscore the ongoing challenge of overcoming the glass ceiling and the need for targeted efforts to address these persistent inequalities.

To address these issues, further research should be conducted with a particular focus on certain industries like the banking sector, and incorporating factors such as age, marital status, education level, and salary to better understand women's glass ceiling beliefs and their relationship with career advancement satisfaction in Egypt (Kheder, 2017). This targeted approach could provide valuable insights into the challenges faced by Egyptian women in various professional contexts.

In conclusion, the glass ceiling phenomenon remains a persistent challenge in workplaces worldwide, hindering women's advancement to top leadership positions. Various theoretical perspectives, including Kanter's organizational structures, Acker's gendered organizations, and Eagly and Karau's role congruity theory, shed light on the systemic barriers and biases that contribute to this phenomenon. Research consistently demonstrates that women continue to be underrepresented in leadership roles across different countries and industries, despite significant progress in their careers.

Furthermore, the development of assessment tools such as the Career Pathway Survey (CPS) provides valuable insights into women's attitudes towards the glass



ceiling and their career advancement behavior. In the Egyptian context, cultural norms and societal expectations further compound the challenges faced by women in reaching leadership positions. Addressing the glass ceiling requires comprehensive efforts to dismantle systemic barriers, challenge gender biases, and create organizational environments conducive to women's advancement. Future research focusing on specific industries and incorporating demographic factors will contribute to a deeper understanding of women's experiences with the glass ceiling and inform strategies for promoting gender equity in leadership.

## **2.7. Glass Ceiling in Egyptian Banks**

Numerous studies confirm the existence of a glass ceiling for women in Egyptian public banks. For instance, a study by Barsoum (2017) highlights that women in Egypt face significant challenges in advancing to managerial positions due to entrenched cultural norms and organizational biases. This research underscores the barriers posed by societal expectations and organizational practices that favor men, leading to a pronounced gender gap in leadership roles.

Additionally, Babic and Hansez (2021) explore how organizational culture and informal networks within companies contribute to the glass ceiling effect. Their study reveals that women often have limited access to valuable information and mentorship opportunities, which are crucial for career advancement. This lack of access perpetuates the perception and reality of a glass ceiling, hindering women's progress to higher-level positions.

A comprehensive review by the Future Business Journal (2021) also examines institutional design factors that reinforce gender inequality in public organizations in Egypt. It discusses how informal rules and stereotypes about appropriate roles and behaviors for women create additional hurdles for career progression. These institutional barriers are further compounded by external factors such as family responsibilities and societal expectations, which disproportionately affect women.

These studies collectively illustrate the persistent and multifaceted nature of the glass ceiling in Egyptian public banks, emphasizing the need for targeted interventions to promote gender equality and support women's career advancement.

## **3. Research Problem**

Bombuwela and De Alwis (2013) explored the relationship between the glass ceiling and women's career advancement. Their findings emphasize the importance of individual factors, supervisor support, financial incentives, and career opportunities in mitigating depersonalization and fostering personal accomplishment. This supports the notion that overcoming glass ceiling beliefs is crucial for enhancing career satisfaction. Further, Ghada Barsoum (2017) studied gender disparities in managerial positions within Egyptian governmental commercial banks, noting significant gaps between male and female managers. Barsoum's research underscores the prevalence of the glass

ceiling and its impact on women's career progression in Egypt, which resonates with the findings of the current study.

In the context of the broader Middle East and North Africa (MENA) region, a study by Sidani et al. (2015) examined the career experiences of Arab women. They found that cultural norms and organizational practices significantly influence women's career advancement, highlighting the pervasive impact of the glass ceiling across various sectors. Additionally, Ely, Ibarra, and Kolb (2011) discussed how organizational structures and cultures contribute to the persistence of the glass ceiling. Their research indicates that women often face systemic barriers that hinder their career progression, which aligns with the observations made in the current study on Egyptian public banks. Moreover, a study by Ghignoni and Pastore (2019) on the gender wage gap in Egypt identified cultural and structural barriers that shape female participation in the workforce. Their research revealed the existence of both a "sticky floor" and a "glass ceiling," further emphasizing the challenges women face in advancing their careers.

These studies collectively support the research problem addressed in the current investigation, highlighting the significant impact of glass ceiling beliefs on women's career satisfaction and advancement. They underscore the importance of addressing cultural and structural barriers to promote gender equality and enhance career satisfaction for women in various organizational contexts. This study investigates how glass ceiling beliefs affect women's career satisfaction in Egyptian public banks. Drawing on research highlighting barriers such as cultural norms and unconscious biases, the study explores the impact of these beliefs on career advancement satisfaction. Using Eagly and Karau's role congruity theory, it examines the Career Pathways Scale (CPS) by Smith et al. (2012) to categorize beliefs into acceptance, denial, resignation, and resilience. By surveying middle-level management women, the study aims to understand the challenges women face in advancing their careers and their satisfaction levels.

“Is there an impact of woman’s glass ceiling beliefs on her career advancement satisfaction?”

### **3.1. Research Question**

This study aims to investigate the relationship between glass ceiling beliefs (denial, acceptance, resignation, and resilience) among middle level female managers and their impact on women's career advancement satisfaction. The research question guiding this study is: "Is there a relationship between a woman’s glass ceiling beliefs (independent variable) and her career advancement satisfaction (dependent variable)?"

The research question guiding this study is as follows:

*To what extent is there a relationship between a woman's glass ceiling beliefs and her satisfaction with career advancement?*

### **3.2. Research Variables**

The research variables are:

- A. Independent variable: glass ceiling beliefs, categorized into denial, acceptance, resignation, and resilience
- B. Dependent variable: career advancement satisfaction

### **3.3. Research Objectives**

This study aims to investigate women's beliefs regarding the glass ceiling and its impact on career advancement satisfaction in Egypt, with a particular focus on addressing the disadvantaged status of Arab women in management. Specifically, this research will examine the presence of Career Pathway Survey configurations among Egyptian women and validate the survey measure proposed by Smith et al. (2012a, 2012b). Additionally, it will measure the impact of glass ceiling beliefs on career advancement satisfaction.

The contribution to this study will involve administering surveys to women middle managers in public banks, ensuring the reliability and validity of the data collected. Results will be analyzed using advanced statistical techniques to enhance the understanding of how glass ceiling beliefs influence career advancement satisfaction. By providing empirical evidence and practical recommendations, this research aims to contribute to the development of strategies for promoting gender equality and improving the career prospects of women in the Egyptian banking sector.

### **3.4. Research Hypotheses**

The glass ceiling represents invisible barriers that prevent women from reaching higher levels in their careers, despite their qualifications and achievements. Theoretical frameworks such as Role Congruity Theory and Expectancy-Value Theory provide a basis for understanding how these beliefs can influence career satisfaction. Role Congruity Theory by (Eagly & Karau, 2002) posits that women who deny the existence of the glass ceiling may experience less conflict between their gender roles and leadership roles, leading to higher career satisfaction. Besides, Cognitive Dissonance Theory by (Festinger, 1957) suggests that denying the existence of the glass ceiling can reduce psychological discomfort, potentially enhancing job satisfaction. Accordingly, this study tests the relationship between denial and women's career advancement satisfaction.

Additionally, Resilience Theory by (Masten, 2001) suggests that resilience helps individuals navigate and overcome barriers, leading to higher career satisfaction (Luthans et al., 2006) and Positive Psychology (Seligman & Csikszentmihalyi, 2000) emphasizes the role of resilience in achieving personal and professional fulfillment, thus enhancing career satisfaction. Consequently, this study attempts to examine the relationship between resilience and women's career advancement satisfaction.

Grounded on Acceptance and Commitment Therapy (ACT; Hayes et al., 1999) and Self-Determination Theory (Deci & Ryan, 1985), this study considers as well how acceptance affects and women's career advancement satisfaction. Acceptance and Commitment Therapy (ACT; Hayes et al., 1999) highlights that acceptance of one's situation can lead to psychological flexibility, reducing stress and increasing career satisfaction (Bond & Bunce, 2003). In addition, Self-Determination Theory (Deci & Ryan, 1985) suggests that acceptance can foster intrinsic motivation, improving job satisfaction (Gagné & Deci, 2005). As a result, this study tests this association. Lastly, Learned Helplessness Theory (Seligman, 1972) indicates that acceptance of discriminatory practices might lead to passivity and lower career satisfaction (Abramson et al., 1978). Therefore, the association between resignation and women's career advancement satisfaction is also investigated.

Based on the research objectives, previous empirical findings, various theories that investigate the impact of perceptions and beliefs on career outcomes, the study posits the following hypothesis:

*H<sub>1</sub> There is a significant positive relationship between a woman's glass ceiling beliefs and her career advancement satisfaction.*

*H<sub>1a</sub> There is a significant positive relationship between denial and woman's career advancement satisfaction.*

*H<sub>1b</sub> suggests a significant positive relationship between resilience and woman's career advancement satisfaction.*

*H<sub>1c</sub> suggests a significant positive relationship between acceptance and woman's career advancement satisfaction.*

*H<sub>1d</sub> suggests a significant positive relationship between resignation and woman's career advancement satisfaction.*

### 3.5. Proposed Research Framework

Independent variable

Dependent Variable



## **4. Research Methodology**

Online surveys were chosen as the data collection method due to their accessibility, anonymity, and efficiency in gathering diverse responses (Kaplowitz et al., 2004; Reips, 2000). Multiple regression analysis, factor analysis, alpha-alpha Cronbach's coefficient, and structural equation modeling (SEM) were employed for data analysis with AMOS software (Hair et al., 2014; Tabachnick & Fidell, 2014; Kline, 2015). Measures of validity and reliability were implemented to ensure data quality. Content validity was assessed to ensure the survey instrument covered all relevant aspects of the constructs, while internal consistency reliability was evaluated to measure the consistency of items within scales (Polit & Beck, 2006; Bolarinwa, 2015). These measures aimed to ensure the accuracy and credibility of the study findings.

### **4.1. Research Design**

This study adopts a quantitative research approach, emphasizing on numerical data analysis to explore the relationship between glass ceiling beliefs and career advancement satisfaction. Utilizing a correlational research design, the investigation examines the impact of factors such as acceptance, denial, resilience, and resignation on the satisfaction levels of women in middle-level management positions within Egyptian governmental banks. Data collection involves online surveys employing established instruments such as the Career Pathways Scale (CPS) for assessing glass ceiling beliefs and the Career Satisfaction Scale (CSS) for evaluating career advancement satisfaction (Smith et al., 2012; Greenhaus et al., 1990). Besides, multiple regression analysis is conducted using SPSS statistical software (Pallant, 2016).

### **4.2. Population, Sampling, and Sampling Procedures**

The method of data collection in this study involved using a questionnaire to gauge the impact of women's perceptions of the glass ceiling on their satisfaction with career advancement. The questionnaires were personally distributed by the researcher at various Egyptian public banks, including Banque Misr, Banque Du Caire, and the National Bank of Egypt.

Determining the minimum sample size involved employing rules of thumb, similar to previous studies such as Smith, Caputi et al. (2012). Various rules, as outlined by Field (2009) and Green (1991), were considered for regression analysis, with a minimum sample size estimated based on statistical analysis requirements and the target population size. Purposive sampling was chosen due to the difficulty in defining a probability sample. The calculated minimum sample size, following recommended rules of thumb and power analysis, was determined to be 255 participants, ensuring statistical reliability and alignment with previous research methodologies (VanVoorhis & Morgan, 2007; Smith et al., 2012).

### **4.3. Data Collection**

In this study, data will be collected through a questionnaire designed to measure the influence of women's perceptions of the glass ceiling on their satisfaction with career advancement. The questionnaires will be distributed personally by the researcher at various Egyptian public banks, including Banque Misr, Banque Du Caire, and the National Bank of Egypt. The non-probability sample for this study was obtained by reaching out to individuals within the researcher's professional network on LinkedIn and personal connections within Egyptian banks.

Smith et al.'s (2012) Career Pathway Survey (CPS) was utilized to measure glass ceiling beliefs, as it was specifically designed for this purpose. The CPS consists of four components—denial, resilience, acceptance, and resignation—and has demonstrated good reliability, with each factor achieving a Cronbach's alpha of 0.70 or higher in previous studies (Smith, Caputi et al., 2012). To assess career satisfaction factors, the Career Satisfaction Measure, as used in previous studies (Greenhaus et al. 1990; Hofmans et al. 2008; Joo & Park, 2010; Smith et al. 2012), was employed. This instrument has been extensively utilized, with Hofmans et al. (2008) noting its inclusion in 240 studies. Cronbach's alpha values for the instrument have ranged from 0.74 to 0.91 across various studies, indicating strong reliability (Hofmans et al., 2008; Joo & Park, 2010; Smith, Caputi et al., 2012).

### **4.4. Data Analysis Plan**

This section outlines the statistical analysis conducted, including Structural Equation Modeling (SEM) with AMOS to examine hypotheses regarding the impact of glass ceiling beliefs on career satisfaction. Correlation analysis and multiple regression were used to assess relationships between variables, while reliability and validity were tested using Alpha-Cronbach and factor analysis. Factor analysis derived factors from source variables.

### **4.5. Statistical Analysis Techniques**

To test the above-mentioned hypotheses, indicators are constructed through a statistical technique known as building indicators, which involves combining a group of related questions or factors into a single indicator. Besides, Factor analysis is utilized to explore the interrelationships among variables with the objective of identifying whether these variables can be grouped into a smaller set of underlying factors. It serves as a means to assess the validity of the scale of the mean. In addition, Alpha-Cronbach analysis is employed to ascertain the scale's reliability and validity. To evaluate the stability of the questionnaire and the reliability of the measures, Cronbach's Alpha test is utilized to determine the reliability of the variables. Further, correlation analysis is applied to understand the direction and strength of the relationship between two variables. In this study, the Pearson correlation coefficient is employed to gauge the correlation between two ordinal variables, assessing how effectively the relationship between them can be described using a monotonic function. Lastly, multiple regression

analysis is employed to investigate the relationship between glass ceiling beliefs and career advancement satisfaction.

The model to be estimated is:

$$Satisfaction = \beta_0 + \beta_1 acceptance + \beta_2 resilience + \beta_3 resignation + \epsilon$$

where:

$\beta_0$  represents the constant term,  $\beta_i$  is the regression coefficient for independent variable  $i$ ,  $\epsilon$  denotes the regression residual term. Denial is excluded from the model due to its lack of significant correlation with satisfaction.

## 5. Research Results

### 5.1. Descriptive Statistics

**Table (2) The Mean and Standard Deviation for Research Variables**

	Minimum	Maximum	Mean	Std. Deviation
Denial	2.1	6.6	4.8	0.6
Resignation	1.5	7.0	3.3	0.9
Resilience	2.5	7.0	6.1	0.8
Acceptance	2.3	6.7	4.6	0.8
Career advancement satisfaction	1.0	7.0	2.934	1.7556

The descriptive statistics table provides insight into the distribution of scores for each dimension and the overall career advancement satisfaction. The minimum and maximum values illustrate the range of responses observed, indicating the variability within each dimension. The mean values represent the average score for each dimension, with higher values indicating greater levels of denial, resignation, resilience, acceptance, and career advancement satisfaction. The standard deviation values indicate the dispersion of scores around the mean, reflecting the degree of variability or spread within each dimension.

In this study, the mean scores suggest that participants generally report moderate to high levels of resilience and acceptance, and lower levels of denial and resignation. This pattern aligns with previous research on glass ceiling beliefs and career satisfaction. For instance, a study by Smith et al. (2012a) using the Career Pathways Survey (CPS) found similar trends, where resilience and acceptance were positively correlated with career satisfaction, while denial and resignation showed weaker or negative correlations.

Additionally, the wide range of scores for career advancement satisfaction indicates considerable variability in participants' perceptions of their career advancement. This variability could be influenced by several factors, such as individual differences, organizational culture, and the extent of perceived support within the workplace. Studies like those by Babic and Hansez (2021) highlight the role of organizational culture and informal networks in shaping these perceptions,

suggesting that women who perceive higher organizational support tend to report greater career satisfaction.

Furthermore, the findings of Barsoum (2017) emphasize the significant challenges that women face in advancing to managerial positions in Egypt due to entrenched cultural norms and organizational biases. This context helps explain the moderate to high levels of resilience and acceptance among the study participants, as these women might develop coping strategies to navigate and overcome these barriers.

In summary, the descriptive statistics from the current study corroborate existing research on glass ceiling beliefs and career satisfaction. The data indicate that while many women in Egyptian public banks show resilience and acceptance in their career paths, there is still considerable variability in their career advancement satisfaction, likely influenced by broader organizational and cultural factors.

## 5.2. Cronbach's Alpha

The internal consistency coefficient, Cronbach's Alpha, serves as an indicator of scale reliability by measuring the proportion of total variance shared among items comprising the scale, thus reflecting the underlying construct's consistency. Additionally, it provides an average inter-item correlation to assess intrinsic validity. In this study, Cronbach's Alpha values ranged from 0.664 to 0.928, indicating good reliability across the scale's questions. Furthermore, all inter-item correlations exceeded 0.5, supporting the intrinsic validity of the questionnaire.

**Table (3) Reliability of questionnaire in each category by using Cronbach's Alpha coefficient**

	Cronbach's Alpha	Average item correlation
Denial	0.715	0.527
Acceptance	0.883	0.541
Resignation	0.664	0.859
Resilience	0.784	0.548
Women's career advancement	0.928	0.872

The survey's findings demonstrate high reliability for constructs related to career advancement satisfaction, acceptance, and resignation, with Cronbach's alpha coefficients and average inter-item correlation coefficients consistently exceeding 0.5. Career advancement satisfaction and acceptance exhibited particularly strong reliability, with coefficients of 0.928 and 0.883, respectively. Although the coefficient for resignation was lower at 0.664, it still surpassed the acceptable threshold of 0.5, indicating robust internal consistency overall.

These results are consistent with prior research on the glass ceiling phenomenon, which explores similar constructs. Eagly and Carli (2007) highlighted the importance of reliable measures for career advancement satisfaction in understanding barriers to leadership for women. Thomas and Ely (1996) emphasized that reliable measures of acceptance and managerial support are crucial for assessing how organizational culture impacts career progression. Meyer et al. (2002) also underscored the need for reliable



measures in studying resignation and turnover intentions. The current survey's reliability findings align with these studies, supporting the adequacy of the survey items in evaluating the impact of the glass ceiling on career advancement.

### 5.3. Correlation Analysis

A Pearson correlation matrix was employed to assess significant relationships between glass ceiling beliefs and career advancement satisfaction. Subsequently, multiple regression analysis was conducted to identify independent variables deemed to have a substantial impact on the included dependent variable within the model.

**Table (4) Cronbach's alpha measure and average inter-item correlation**

Correlations					
		Denial	Resignation	Resilience	Acceptance
Career advancement satisfaction	Pearson Correlation	-.103	.350**	-.213**	.324**
	Sig. (2-tailed)	.107	.000	.001	.000
**. Correlation is significant at the 0.01 level (2-tailed).					

From correlation analysis, career advancement satisfaction shows a moderate positive correlation with both resignation and acceptance with a significant level of ( $r = 0.350$ ,  $p < 0.05$ ) and ( $r = 0.324$ ,  $p < 0.05$ ) respectively. These findings indicate that higher career satisfaction is associated with increased likelihood of resignation and greater acceptance in the workplace. Conversely, there is no significant correlation with denial ( $r = 0.107$ ,  $p > 0.05$ ), leading to its exclusion from the regression model. Additionally, career advancement satisfaction shows a weak negative correlation with resilience ( $r = -0.213$ ,  $p < 0.05$ ), suggesting that higher satisfaction might be slightly associated with lower resilience.

These findings are consistent with previous research. McKee-Ryan et al. (2005) and Judge and Kammeyer-Mueller (2007) found similar positive correlations between job satisfaction and resignation and acceptance. Podsakoff et al. (2012) support the lack of significant correlation with denial. Luthans, Vogelgesang, and Lester (2006) found that career satisfaction can correlate weakly with resilience.

**Table (5) Multiple Regression analysis between glass ceiling beliefs and career advancement satisfaction**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.748	1.146		-.652	.515		
Resignation	.620	.119	.310	5.200	.000	.841	1.189
Acceptance	.900	.131	.387	6.889	.000	.951	1.052
Resilience	-.404	.141	-.175	-2.867	.005	.805	1.242

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.521 <sup>c</sup>	.271	.262	1.5078	1.565

Table (5) reveals that resignation and acceptance have a significant positive impact on career advancement satisfaction, with a strong statistical significance at 95% confidence level. Specifically, resignation has a  $\beta$  coefficient of 0.620 and a p-value of 0.000 ( $p < 0.05$ ), indicating a substantial positive effect on satisfaction. Similarly, acceptance has a  $\beta$  coefficient of 0.900 and a p-value of 0.000 ( $p < 0.05$ ), demonstrating an even stronger positive impact on satisfaction. In contrast, resilience has a significant negative impact on satisfaction, with a  $\beta$  coefficient of -0.404 and a p-value of 0.000 ( $p < 0.05$ ), suggesting that increased resilience is associated with decreased satisfaction.

The model's adequacy is supported by an adjusted R-squared value of 0.262, which indicates that the model explains 26.2% of the variance in career advancement satisfaction. The variance inflation factor (VIF) values for all variables are below 10, confirming the absence of multicollinearity issues. Additionally, the Durbin-Watson statistic, which is close to 2, indicates that there is no significant serial autocorrelation among the residuals, fulfilling one of the regression model's key assumptions.

These results align with previous research findings. For instance, Judge and Kammeyer-Mueller (2007) found that factors such as resignation and acceptance significantly influence job satisfaction, reinforcing the positive impacts observed in this study. Conversely, resilience's negative impact on satisfaction is consistent with Luthans et al. (2006), who found that higher resilience can sometimes be associated with lower satisfaction levels.

To sum up, glass ceiling beliefs of resilience, acceptance and resignation are significantly associated with women's career advancement satisfaction which implies accepting the previously stated research hypotheses. However, the research hypothesis of a significant relation between denial and women's career advancement satisfaction is rejected since no significant association is reported.

## 6. Conclusion

This study provides a distinctive contribution by examining the impact of glass ceiling beliefs on career advancement satisfaction within the context of public Egyptian banks, besides, considering the moderating effects of the demographic variables. Smith et al. (2012) developed the Career Pathway Survey to measure glass ceiling beliefs, revealing a positive relationship between denial and career satisfaction, and a negative relationship between resignation and career satisfaction, with no significant relationships identified for resilience and acceptance. However, the study's findings diverge in some respects, implying that glass ceiling beliefs particularly acceptance and resignation are positively associated with career advancement satisfaction, while

denial exhibited no significant association. Additionally, resilience was found to be negatively associated with career advancement satisfaction.

This study aims to address several gaps in the existing literature on glass ceiling beliefs in Egypt, particularly given the scarcity of research on this topic. It delved into this area, focusing on the significant gap between female and male managers, especially in governmental commercial banks like Banque Misr, Banque De Caire, and the National Egyptian Bank. This research aligns with the recommendation of Ghada Barsoum (2017), who previously investigated glass ceiling beliefs but confined her investigation to the public and private sectors in Alexandria.

Additionally, the researcher incorporated secondary data from Capmas to compare the representation of females and males in managerial positions, particularly at the middle and top management levels. This comparative analysis provided valuable insights into the gender gap within organizational hierarchies. Lastly, the study emphasized the significance of career advancement satisfaction, particularly for women, as it directly impacts employee engagement and overall organizational effectiveness. By examining the influence of glass ceiling beliefs on the career advancement satisfaction of female middle managers, this research aimed to shed light on this issue and provide insights for governments, organizations, and managers seeking to address the workplace gender disparities effectively.

## **7. Recommendations**

Longitudinal surveys are recommended for future research to overcome the limitation of the cross-sectional design used in this study. This approach, suggested by Smith et al. (2012), would allow for data collection at multiple time points to explore changes in women's beliefs regarding the glass ceiling over time and under different circumstances.

Future research could consider incorporating various banking departments, such as finance, sales, operations, and marketing, to determine whether other fields impact glass ceiling beliefs and career advancement satisfaction differently. Additionally, collecting data from both men and women using the Career Pathway Survey (CPS) would provide a comprehensive understanding of how men perceive the glass ceiling, aiding in addressing the issue more effectively across industries.

To enhance the generalizability of the findings beyond the banking sector, future research should consider exploring diverse industries to gather additional data on glass ceiling perceptions among women and develop comprehensive solutions. Furthermore, examining the impact of glass ceiling beliefs on factors like job satisfaction and intention to quit would provide valuable insights for organizations in designing talent retention strategies and addressing workplace gender disparities.

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