Perceived Career Success and Career Advancement of Women: Challenges in the Indian IT Industry

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ABSTRACT
There have been a lot of challenges that a woman has to go through to make her career a success. The study focuses on the challenges that women face as a result of organizational and family barriers. The current study aims to test whether mentoring, perceived organizational support (POS), and family responsibilities (FR) have an impact on perceived career success (PCS) and career advancement of women working in the Indian IT industry. Three hundred and seven respondents have been analyzed, and the reliability and validity of constructs have been checked using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). For hypotheses testing, path analysis has been employed. Results reveal that mentoring, POS, and FR significantly impact PCS and career advancement of women working in the Indian IT industry. The results offer insights for organizations to implement leadership strategies and activities to promote gender equality.

KEYWORDS
Career Advancement, Challenges, Discrimination, IT Industry, Women

INTRODUCTION
Although there is an increase in women’s involvement in the field of qualifications, employment and professional commitment, there are still less opportunities for women to reach senior positions. Women who have achieved managerial roles faced challenges in their career development. While women have the equivalent abilities and expertise as their male counterparts, still they are expected to work harder and perform better to achieve managerial positions. Women represent just 30 percent of the technology sector in seven countries, and representation in leadership positions is still narrower (The Economic Times, 2020). In a study by Amudha (2016), the CEO of The National Association of Software and Service Companies (NASSCOM) stated that women participation in the IT industry is 23 percent, out of which only three percent of women have reached top-level positions. In addition, it was mentioned that men women ratio in the IT industry is 4:1. Gender disparity exists at all hierarchical levels but
it is extreme at top-level positions (Baxter and Wright, 2000). India stands 108th position out of 145
countries in the globe with a cumulative score of 0.664 (0 = inequality and 1 = equality), according
A report by Catalyst (2012) revealed that only 3 to 6 percent women are found at senior managerial
positions in Indian corporate sector. The 15th Census, carried out in 2011, provides some data on
female jobs in the Indian scenario. There are 481.7 million employees in India, of which 331.9 million
(68.9 percent) are men, and 149.9 million (31.1 percent) are women workers. In addition, a small
decline in women’s work participation rate (WPR) is noteworthy in this context. WPR was found to
be declined from 25.6 percent in 2001 to 25.5 percent in 2011 (Verma, 2018). In a study by Webster
(2005), three major reasons for the lower representation of women in the IT industry have been working
hours, biased promotion systems, and turnover rate of women in IT profession. Although the entry
of female workers is also a fact and experience that the Indian economy is having. Hence, it becomes
important to understand more about the career advancement of women professionals, so that female
participation is continued and enhanced with time in the economy. Kishore (2016) mentioned that
female family members are appointed on Board of Directors of the Indian IT industry just to comply
with the legal necessity of Companies Act, 2013. NASSCOM Mencher report 2009 indicated that
women employees are found more at lower and middle-level jobs where there is no supervisory role
and less seen at top managerial positions like director, CEO, and Vice President (VP) positions.

Various researchers mentioned that organizational policies and practices are more likely to favor
men’s career success and restrain women’s career development (Kanter, 1977; Powell and Mainiero,
1992). Sheth (1997) disclosed that the thought of working under a female executive was unacceptable
to male workers. Gupta et al. (1998) have emphasized on the fragile outlook of females in management,
e.g., a major percentage of men and one-third of women feel that women managers are more emotional
and they let their feelings affect their managerial decisions, perceived to be less spirited, less driven
and less hostile in fulfilling the expectations of business circumstances. The major barriers to career
success of women working in Indian IT industry are family responsibilities, long working hours, and
maintaining work life balance (Bharathi and Bhattacharya, 2015). Family responsibility is the factor
that affects the willingness and ability of an individual to work as it involves the time and energy
that one has to decide whether to invest in the family or at work. Women have to play a dual role as
a working person and as a responsible family member or caregiver. Therefore, it becomes difficult
to balance their home and work at the same time. The primary responsibility of household activities
or childcare lies with the women in the family and they need to devote a good amount of time with
their family irrespective of their employment status to fulfill their societal obligations so that they are
not socially rejected (Buddhapriya, 2009; Ugwu, 2018). Women executives say that keeping them at
a lower level enables them to balance their work and family (Bourne and Wickler, 1978).

Challenges

Sources of support involve the nature of the job, conditions like mentors, feedback on information
and networks, organizational and family support for opting dual-career plans (Morrison et al., 1987).
Numerous researchers have confirmed that women in IT industry are more likely to be found at lower
and middle-level positions and are only a few can reach top-level positions (Ahuja 2002, Bhattacharya
encountered by women at senior level positions are more as compared to the women at lower level
managerial positions. Even when the career histories and experiences are the same for males and
females, still female professionals have to face more hurdles to achieve their career advancement
(Lyness and Thompson, 2000). It has been mentioned by women in a study by Wellington et al.
(2003), that they did not achieve top-level positions just because their senior leaders were unable
to presume accountability for women’s progress. Women are more likely to face challenges in their
career advancement in the industries where organizational cultures are male-dominated (Jandeska
and Kraimer, 2005). Jawahar and Hemmasi (2006), disclosed that the advancement of women can
be achieved by breaking the barriers, namely, networks, gender stereotypes, and lack of mentoring. Various studies explained the causes why women fall out of the workforce, this mainly involves the family responsibilities, childcare, discrimination in the workplace, sexual harassment, and biased gender supportive practices and policies (Powell, 1999; Powell and Graves, 2003), monotonous jobs, lower prospects for growth and unrealistic working hours (Mainiero and Sullivan, 2005), owing to the needs and interests of entrepreneurs (Moore, 2002), and an unstable work-life balance (Sullivan & Mainiero, 2008). Ryan and Haslam (2007) mentioned that women are still unable to reach senior-level positions due to the glass ceiling, glass cliff, and the sticky floor. Buddhapriya (2009), stated that woman prefers non-transferrable jobs and sometimes reject the promotion opportunities to balance their personal life with the work-life and family responsibilities. Verma (2011) mentioned that the major obstacles to the career progression of females working in the Indian IT industry are organizational culture, lack of mentors and informal networks, gender discrimination, and work-family conflict. One of the barriers is that males mostly occupy the senior-level positions and it acts as a glass ceiling and hampers the career success of female executives (Kaushik et al., 2014). Amudha et al. (2016), suggested that an organization should set voluntary goals to increase the representation of women at top levels of management. The management should create flexible work structures, work-life balance plans, offer mentoring programmes, and leadership development programmes to let women grow in the corporate ladder. As women are less likely to be in top management roles, they do not have the advantage to be involved in the decision-making process which is why most companies are male-dominated (Bhattacharya et al., 2018). Rath et al. (2019), disclosed that the key preventers to the career success of women have been lack of mentoring and information, marriage, and motherhood.

**Need for the Study**

For several reasons, this research has become significant, bearing in mind that the representation of women in managerial jobs and in particular, in senior management roles is much less. It becomes important to understand the obstacles that come in the way of their career success. As mentioned by Verma (2018), studies relating to the career advancement of women have been conceptual and less empirical in nature. Most of the studies that carried out the research to identify the factors or challenges to women’s career success and advancement have been qualitative and empirical studies are very few. Majorly studies that considered an empirical approach have been of western context, so it becomes important to understand the challenges encountered by women in the Indian context. In addition, those considered to carry out research empirically have taken either the objective point of view of career success or the perceived career success, only a few studies (Ocampo et al, 2018, Spurk, et al., 2019) are done empirically considering both the views of career success of women. To know the root cause of the challenges, it is important to include women from each level of management i.e., lower, middle, and senior, as perceptions for challenges may vary from one level of management to another. One that can be a challenge to the career success of women of lower management might not be a challenge to women working at senior-level positions. Even after a steady rise in women’s involvement in the organization over the last decade, industries remain male-dominated (O’ Neil et al., 2008). Women’s participation is found in every industry but the representation of women in middle or senior managerial jobs is less, majorly in the IT industry. The reason behind this may be the male dominance in the industry or maybe that women do not choose IT in qualification or as a profession. In addition, studies have been carried out for hospitality and construction industry and IT industry has been less considered earlier by researchers in the context of challenges to the career success of women. Also, the studies on Indian IT industry are very limited that has considered to quantitatively test the impact of challenges on career success of women. Therefore, the target respondents for this study have been women working at each level of management in the Indian IT industry. Hence, it becomes very important to make the IT industry aware of the recent scenario that how women are more likely to reach senior-level managerial positions, achieve parity with men and how can they reduce the challenges that come in their way to success. To overcome these research
gaps, this study has considered testing the impact of a few challenges such as Family Responsibilities (FR), mentoring, and Perceived Organizational Support (POS) identified from the literature review of qualitative studies on career advancement and Perceived Career Success (PCS) of women working in the Indian IT industry. The proposed research model is shown in Figure 1.

![Figure 1. Proposed research model](source)

**REVIEW OF LITERATURE**

Career Theory by Arthur (1989) suggests “career is the evolving sequence of a person’s experiences over time”. To understand the challenges that are faced by women in the IT industry, this study uses Role Congruity Theory (Eagly and Karau, 2002), Situational Theories (Kiage and Singh, 2013), and Social Role Theory (Eagly et al., 2000). Role Congruity Theory by Eagly and Karau (2002) states that attitudes towards women are less optimistic than the men who are leaders or potential leaders. In addition, this theory discloses that it is more challenging for females to get managerial jobs, become leaders and achieve career success in leadership positions. This theory also helps to assess the challenges encountered by women in male-dominated leadership roles. The concentration of situational theory is on the workplace environment of female employees who aim for senior managerial positions. According to this theory, non-supportive workplace environment such as lack of mentoring, information, networks, and organizational support can adversely influence the career growth of women executives (Lathabhavan and Balasubramanian, 2017). Societal norms and social stereotypes that inhibit women’s career development are the subjects of the social role theory (Kiage and Singh, 2013). Social standards shape women in such a manner that it becomes difficult to balance the role of being a spouse, mother, and an efficient manager (Jain and Mukherji, 2010).

**Perceived Career Success and Career Advancement**

Before one starts to understand what PCS and career advancement is, it also becomes significant to understand what one means by career. Career is defined as “an individual’s work-related and other relevant experiences, both inside and outside of organizations, that form a unique pattern over the
individual’s life span” (Sullivan and Baruch, 2009). Perceived Career Success (PCS) is described by the perception that the individuals have about their internal interpretation and assessment of their profession (Hall and Chandler, 2005). Career advancement means the movement of an individual to higher positions and an increase in income due to promotions (Ackah and Heaton, 2003). Advancement refers to the progression, continuous development, and the acquisition and implementation of the competences of an individual. Career advancement is evidenced by the accomplishments of employees in the context of their salary, promotion, and hierarchical role in the company (Arthur et al., 2005). The extent to which employees move up the hierarchical ladder in organizations is known as various terms like “career success”, “career achievement”, “upward mobility”, “career advancement” and “organizational advancement” (King et al., 2009).

Morrison et al. (1987) mentioned in a study that the factors found to impact career success and advancement of women are organizational support, accomplishments’ record, aspiration to succeed, supervision skills, risk-taking power, and self-sufficiency. Female managers face more challenges in getting career success than male managers (Igbaria and Baroudi, 1995). Lower career advancement of women has been reported due to the gender gap in the organization (Kirchmeyer, 2006). Employees who are able to cope up with the uncertainties are more likely to have career advancement (McArdle et al., 2007). Women are found to have lower perceived career success as compared to men (Metz, 2011). Employees having the potential to solve job-related problems are found to have a better-perceived career success (Zacher, 2014). The career paths to women’s advancement are found to be more stressful and they receive less recognition in their roles in the organization (Trevino et al., 2015). Women are found to go through various challenges other than the glass ceiling that hampers their career success (Carli and Eagly, 2016). Career advancement is the consequence of career planning of one, and the resources and support provided by the company. Career advancement varies for males and females due to the different career paths that they follow (Verma, 2018). Tamang (2020) revealed in a study that a significant difference in terms of career advancement of men and women is evident but a significant difference in terms of perceived career success for men and women does not exist.

**Mentoring**

Mentoring is known to be a beneficial technique that affects the career growth of personnel, but the lack of mentoring stands out as a challenge that has the potential to influence their career development adversely. Mentoring is found to play an important role in the career advancement of any individual (Dreher and Ash, 1990; Kram, 1983). Koberg et al. (1994) stated that employees being mentored are more likely to get benefits like career advancement (salary, promotions) and perceived career success. Unlike female mentors, male mentors may provide career advancement functions such as encouragement, recognition, and protection (Ragins, 1997). Mattis (2002) stated that organizational practices such as offering mentoring programmes and benchmarking on gender can help career advancement of women. Mentoring impacts the career outcomes of an individual (Wanberg et al., 2003). Mentoring provides career-related benefits and outcomes have been proven by two meta-analytic studies (Allen et al., 2004; Underhill, 2006). Mentoring is considered a critical factor influencing the career success (Wasserstein et al., 2007). For women chemists, lack of mentoring was found to be a challenge in their career (Nolan et al., 2008). Mentoring experience has been found to significantly impact the career advancement and perceived career success of women (Buddeberg-Fischer et al., 2010). In contrast, mentoring has been found as an insignificant factor influencing career advancement of Pakistani female managers (Arifeen, 2010).

Haynes and Ghosh (2012) suggested that formal mentoring is a developmental tool that can promote Indian women’s socialization and career advancement in Indian enterprises by assisting Indian women to shatter the glass ceiling and traverse parental walls. Mentoring is a proven factor that helps in achieving career success and reach senior-level positions (Robbins and Coulter, 2013). In a study, San Miguel and Kim (2015) discussed how peer and informal mentoring plays a vital role in the career progression of females. A greater degree of self-confidence, commitment, emotional
quotient and mentoring can help women in getting success in their career (Amudha, 2016). Francis
(2017) disclosed that the factors affecting the career advancement of women are family, personal,
lack of mentoring and organizational support. Makarem and Jia Wang (2020) disclosed that the
challenges encountered by females in their career development are gender discrimination, lack
of mentoring, biased organizational culture, and struggle with work-life balance in the science,
technology, engineering, and mathematics field. Matot et al. (2020) mentioned that lack of mentoring
is a critical factor that influences the career success of women. Based on the above literature review,
it is proposed that:

H1: Mentoring significantly affects the PCS of women of the Indian IT industry.
H2: Mentoring significantly affects the career advancement of women of the Indian IT industry.

Perceived Organizational Support

POS is defined as a degree to which employees feel that their organization takes care of their well
being and value their contributions in the organization (Eisenberger et al., 1986). Organizational
support can work as an important tool to help and influence the advancement of women in the
organization (Mattis, 2002). Similarly, if one does not receive enough or no organizational support,
the employee is more likely to face a challenging career progression. Collaborations are found to
be more successful when the employees are supported by their staff, supervisor, and organization
(Sargent and Waters, 2004). Ylijoki (2005) explained that the work-related barriers to career success
have been workload, financial restrictions, lack of organizational and peer support. Consistently,
support has risen as a significant factor that positively affects female professionals. Support may
come from employers, organizations, family, children, and friends of an employee (Marcinkus et al.,
2007). Riggle et al. (2009) did a meta-analytic study for 20 years and this study established that POS
positively and significantly influences the perceived career success. Yu (2011) disclosed that POS
and perceived career success of employees are directly related. Orser et al. (2012) suggested that
having organizational support such as supportive managers, peers proves to be helpful for women
in overcoming the barriers to career success. In addition, it was mentioned in the study that lack of
organizational support is a challenge to career advancement. Mahal (2014) found that organizational
support has an important role to play in one’s career and in the decisions of whether to stay or leave
the organization. Career challenges relating to three general themes: low collegiality and employee
relations; lack of organizational support and job insecurity; and requirements and aspirations for
career advancement (Santos, 2016). POS is directly related to career advancement, perceived career
success, and career commitment (Kurtessis et al., 2017). Contradictory to other findings, Ocampo
et al. (2018) found that POS and career success are inversely related. Rath et al. (2019) reported that
supervisor support is observed to be a supportive facilitator that lets women overcome hurdles in
their careers. Based on the above literature review, it is proposed that:

H3: POS significantly affects the PCS of women of the Indian IT industry.
H4: POS significantly affects the career advancement of women of the Indian IT industry.

Family Responsibilities

Human capital theory and gender discrimination theory is used to explain the relationship between
family responsibility and performance (Lobel and Clair, 1992). Females’ perceived career success is
dependent upon the emotional state of family members (King et al., 1995), and the factors determining
the career prospects usually change for a woman after the birth of a child (Holtzman and Glass, 1999).
As per Liu and Wilson (2001), work-family conflict tends to arise when there is an incompatibility
between family roles and work. Numerous researches have shown that family and child responsibilities
limit the career success of women, whereas, it worked as an asset that benefits the career success of
men (Hull and Nelson, 2000; Kirchmeyer, 2002). Researchers confirmed that the main hurdle to the career advancement of women in Indian organizations has been balancing family responsibilities and career (Goel, 2003; Patil, 2002). As mentioned by Meyerson and Fletcher (2005) more responsibility of family and home lies on the shoulder of females and as a resultant, they require more time away from the office to put up with those demands which eventually affects their career outcomes. Kirchmeyer (2006) disclosed that family responsibilities affect the career advancement and career choices of women. O’Neil et al. (2008) suggested that career choices of women depend upon various factors that include balancing their family and work life too and are not solely dependent upon their salaries and other recognitions of work. It has been mentioned by Cukier (2007, 2009) lack of support from family is a major barrier to the career advancement of women in the advanced technology sector.

Buddeberg-Fischer (2010) revealed that due to family responsibilities women are more likely to make sacrifices in their career and get a break to put up with the family responsibilities. Motherhood becomes a challenge to career that influences the career success of women (Dries, 2011). Orser et al. (2012) disclosed that the perceived barriers to the career advancement of women in the technology sector are lack of experience, qualification, and conflicts between work and family responsibilities. Mahal (2014) revealed that the challenges to women’s career advancement have been gender discrimination, gender stereotypes and family responsibilities raising the work-family conflict, organizational culture, glass ceiling, and lack of networks. Patwardhan et al. (2016) discovered that family responsibilities, gender stereotypes are some of the barriers to the career advancement of women in five-star hotels. Ugwu (2018) established that family responsibilities positively affect career success of women. Balancing work and family responsibilities is a critical barrier to the career success of women (Makarem and Jia Wang, 2020; Matot et al., 2020). Based on the above literature review, it is proposed that:

H5: FR significantly affects the PCS of women of the Indian IT industry.
H6: FR significantly affects the career advancement of women of the Indian IT industry

RESEARCH METHODOLOGY

Scales
To test the hypotheses of the study, the present study has collected data on the perceptions of women working in the Indian IT industry using the well-established scales adapted from literature. Perceptions have been measured using a seven-point Likert scale where 1 means strongly disagree and 7 means strongly agree. Prior to the final analysis, a pilot study was carried out to test the reliability, validity, and understand ability of statements in the Indian context on 72 respondents. Only those items have been considered for the final data collection in the study, which had a factor loading of more than 0.7. The scales considered for the study are tabulated in Table 1.

Data Collection and Sample
The collection of data has been done with the help of a structured questionnaire floated online via Google forms platform using non-probability convenience sampling method. The questionnaire used for data collection consisted of 2 types of information, first demographic and second, statements used to know the perceptions of women using various adapted scale items. Demographic information included the questions for age, marital status, managerial position (level of management), and total experience. The summary of demographic information is presented in Table 2. 600 questionnaires were floated out of which responses were received only from 324 working women, making the final response rate 54 percent. Since the data collection was with the help of an online survey, no missing data was found and after removing unengaged responses and outliers, a total of the 307 responses were considered for the final analysis of the study.
The analysis for the present study has been done in two parts. At first, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) have been carried out to test the reliability and validity of the constructs and to find the model fitness. Secondly, hypotheses testing have been done using path analysis using AMOS and SPSS.
Reliability and Validity

Exploratory Factor Analysis

Each construct taken in the study is well established and tested in various countries but to test the reliability and validity of these adapted scales in the Indian IT industry context, EFA has been applied. Before starting with EFA, common method biases have been checked for the data collected and Harman’s single factor test (Harman, 1967) has been used for the same. The results show that total variance explained by a single factor is 41.090 percent, which is under the threshold limit of 50 percent, hence, common method biases are not found in the data used in the study, which provides support to go ahead with the EFA. EFA is important to identify the number of factors present in the data set. Before identifying the factors, it is important to check if the data is sufficient to run EFA or not, this is checked using Kaiser-Meyer-Olkin (KMO) and Bartlett’s test of sphericity. As per Kaiser (1974), KMO value should not be less than 0.7 and Bartlett’s test should be significant at 5 percent significance level. KMO value of 0.921 for 27 observed variables and the significance of Bartlett’s test provides support to continue with the reliability testing using Cronbach Alpha and factors extraction using EFA. To test the internal consistency and reliability of the data, Cronbach Alpha is applied and the minimum acceptable value for the same is 0.7 (Cronbach, 1951). EFA has been employed using principal component analysis with Varimax rotation, the 27 observed variables were reduced to 4 constructs and the value of Cronbach Alpha is found to be 0.941, which is above the acceptable limit. In addition, multicollinearity among the variables has been tested using the Variance Inflation Factor (VIF). As per Neter et al. (1989), the value of VIF should range between 1 and 7. The summary of mean, standard deviation, VIF, factor loadings, KMO values, and Cronbach Alpha for the study are tabulated in Table 3.

In addition to the above-stated tests, the value of KMO and Cronbach Alpha has been determined for each factor and all the values are found to be more than the minimum required value of 0.7. KMO value ranges between 0.872 and 0.923 and Cronbach Alpha varies from 0.928 to 0.958 for the data collected. In addition, to identify how much of the variance is explained by the factors, the total variance explained is calculated. Table 4 is used to show the summary of the variance explained, eigenvalues, KMO, and Cronbach Alpha for the study are tabulated in Table 3.

Confirmatory Factor Analysis

Confirmatory factor analysis has been employed to test the convergent validity, discriminant validity, and model fitness of the constructs. Convergent validity means, “The degree to which dimensional measures of the same concept are correlated” (Byrne, 1994). The primary conditions for convergent validity are that composite reliability and Average Variance Extracted must be above the threshold limit of 0.7 (Bagozzi and Yi, 1998) and 0.5 (Kline, 1998) respectively for each construct. Discriminant Validity means, “the extent to which a construct is truly distinct from other constructs” (Hair et al., 2010). The bold diagonal values, which are the square roots of average variance extracted, should be greater than the non-diagonal values. All the conditions for convergent and discriminant validity are found to be satisfied and are presented in Table 5.

The model fit indices considered for testing the fitness of the model of the study are CMIN/DF, Goodness of fit indices (GFI), Comparative fit indices (CFI), Incremental fit index (IFI), Tucker Lewis index (TLI), and Root Mean Square Error of Approximation (RMSEA) (Hair et al., 2006). All the model fit indices results are as per the threshold limits shown in Table 6. In addition, GFI is fulfilling the basic required condition of being above 0.8 (Baumgartner and Homburg, 1996; Doll et al., 1994). Hence, the model has a good fit and acceptable.

Hypotheses Testing

For the purpose of hypotheses testing two approaches have been taken into consideration, path analysis using Amos and SPSS 22.0. H1, H3, and H5 have been analyzed using AMOS 22.0. The requisites...
### Table 3. Exploratory Factor Analysis

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>VIF</th>
<th>Factor Loading</th>
<th>KMO</th>
<th>Cronbach Alpha</th>
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<tbody>
<tr>
<td>FR</td>
<td>FR-1</td>
<td>3.67</td>
<td>2.116</td>
<td>3.606</td>
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<td>4.60</td>
<td>1.749</td>
<td>4.794</td>
<td>0.834</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ment-4</td>
<td>4.19</td>
<td>1.868</td>
<td>3.583</td>
<td>0.819</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ment-5</td>
<td>4.47</td>
<td>1.883</td>
<td>4.524</td>
<td>0.837</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ment-6</td>
<td>4.32</td>
<td>1.830</td>
<td>5.049</td>
<td>0.822</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ment-7</td>
<td>4.57</td>
<td>1.802</td>
<td>5.823</td>
<td>0.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ment-8</td>
<td>4.46</td>
<td>1.824</td>
<td>4.630</td>
<td>0.841</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCS</td>
<td>PCS-1</td>
<td>4.22</td>
<td>1.665</td>
<td>3.011</td>
<td>0.769</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCS-2</td>
<td>4.38</td>
<td>1.681</td>
<td>4.434</td>
<td>0.846</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCS-3</td>
<td>4.18</td>
<td>1.784</td>
<td>3.187</td>
<td>0.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCS-4</td>
<td>4.22</td>
<td>1.667</td>
<td>4.931</td>
<td>0.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCS-5</td>
<td>4.42</td>
<td>1.673</td>
<td>3.442</td>
<td>0.808</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ Calculation using SPSS 22.0

### Table 4. Summary of Eigenvalues, Variance Explained, KMO, Cronbach Alpha and VIF scores

<table>
<thead>
<tr>
<th>Factors</th>
<th>Eigenvalues</th>
<th>% of Variance</th>
<th>Cumulative %</th>
<th>KMO</th>
<th>Cronbach Alpha</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring</td>
<td>11.094</td>
<td>41.090</td>
<td>41.090</td>
<td>0.888</td>
<td>0.941</td>
<td>1.554</td>
</tr>
<tr>
<td>POS</td>
<td>4.668</td>
<td>17.287</td>
<td>58.377</td>
<td>0.923</td>
<td>0.957</td>
<td>1.066</td>
</tr>
<tr>
<td>FR</td>
<td>2.817</td>
<td>10.434</td>
<td>68.812</td>
<td>0.912</td>
<td>0.958</td>
<td>1.484</td>
</tr>
<tr>
<td>PCS</td>
<td>2.182</td>
<td>8.083</td>
<td>76.895</td>
<td>0.872</td>
<td>0.928</td>
<td>1.324</td>
</tr>
</tbody>
</table>

Source: Authors’ Calculations using SPSS 22.0
for supporting any hypothesis have been the regression coefficient, significance (p-value < 0.001), and Critical Ratio should be more than 1.96. H1, H3, and H5 anticipated that mentoring, POS, and FR respectively have a significant impact on PCS of women working in the Indian IT industry and all of these anticipations are found to be true, hence H1, H3, and H5 are supported and results are presented in Table 7.

H2, H4, and H6 have been analyzed using SPSS 22.0. Before running multiple regression, multicollinearity has been checked using VIF. VIF value more than 7 gives rise to the problem of multicollinearity i.e. high correlation exists between independent variables that can influence the regression results. As per the results of the study, no problem of multicollinearity has been found in the data. The criteria for supporting any hypothesis have been the beta coefficients, significance

### Table 5. Convergent and Discriminant Validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>Mentoring</th>
<th>POS</th>
<th>FR</th>
<th>PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring</td>
<td>0.955</td>
<td>0.727</td>
<td>0.295</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS</td>
<td>0.937</td>
<td>0.655</td>
<td>0.295</td>
<td>0.543***</td>
<td>0.809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>0.959</td>
<td>0.797</td>
<td>0.104</td>
<td>0.238***</td>
<td>0.124*</td>
<td>0.893</td>
<td></td>
</tr>
<tr>
<td>PCS</td>
<td>0.929</td>
<td>0.725</td>
<td>0.287</td>
<td>0.536***</td>
<td>0.443***</td>
<td>0.322***</td>
<td>0.852</td>
</tr>
</tbody>
</table>

**Note:** CR = Composite Reliability, AVE = Average variance explained, MSV= Maximum Shared Variance,
***p < 0.001, *p<0.05

**Source:** Authors’ Calculation using AMOS 22.0

### Table 6. Model Fit Indices

<table>
<thead>
<tr>
<th>Fit Indices</th>
<th>Threshold Limits</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
<td>&lt;3.0</td>
<td>2.243</td>
</tr>
<tr>
<td>GFI</td>
<td>&gt;0.8</td>
<td>0.861</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt;0.9</td>
<td>0.953</td>
</tr>
<tr>
<td>IFI</td>
<td>&gt;0.9</td>
<td>0.954</td>
</tr>
<tr>
<td>TLI</td>
<td>&gt;0.9</td>
<td>0.948</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt;0.7</td>
<td>0.064</td>
</tr>
</tbody>
</table>

**Source:** Authors’ Compilation using AMOS 22.0

### Table 7. Path Analysis Results – Part 1

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
<th>SRW</th>
<th>SE</th>
<th>Critical Ratio</th>
<th>P</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring</td>
<td>PCS</td>
<td>0.385</td>
<td>0.052</td>
<td>6.937</td>
<td>0.001</td>
<td>0.394</td>
</tr>
<tr>
<td>POS</td>
<td>PCS</td>
<td>0.222</td>
<td>0.059</td>
<td>6.937</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>PCS</td>
<td>0.214</td>
<td>0.036</td>
<td>4.650</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** SRW=Standardised Regression Weights, CR = Critical Ratio

**Source:** Authors’ calculation using AMOS 22.0
level (p < 0.05), and model significance using F statistic. H2, H4, and H6 anticipated that mentoring, FR, and POS respectively have a significant impact on the career advancement of women working in the Indian IT industry and all of these anticipations are found to be true, hence H2, H4, and H6 are supported and results are presented in Table 8.

**DISCUSSION**

This research paper identified the role of challenges in the perceived career success and career advancement of women working in the Indian IT industry. In this paper, the focus of the challenges has only been on the organizational and family context as these two contexts have the most important role in the careers of any working women. This research was undertaken to understand how family responsibilities, lack of mentoring, and POS becomes challenges in the perceived career success and career advancement of women working in the Indian IT industry.

Firstly, the impact of mentoring, POS, and FR on perceived career success was explored. It was found that mentoring, POS, and FR have a positive and significant impact on the perceived career success of women working in the Indian IT industry. Similar findings have been of Jyoti and Sharma (2015), Riggle et al. (2009), Subramaniam (2014), Ugwu (2018). These findings suggest that mentoring, POS, and FR have a significant and positive role to play in the careers of working women of the Indian IT industry. Secondly, the impact of mentoring, POS, and FR on career advancement was explored, where career advancement has been measured using 3 items i.e., salary, managerial level, and promotions. Similar findings have been of Kurtessis et al. (2017), Matot et al. (2020), Metz (2009), Tharenou (2005). Mentoring, POS, and FR are found to have positively and significantly affecting the career advancement (salary, managerial level, and promotions) of women working in the Indian IT industry. All of these findings provide support to women in overcoming the challenges that they have to go through in their careers otherwise.

Mentoring and POS help women in understanding and resolving the problems that they have to deal with within the organizations. Issues may be related to work, targets, environment, and any other which can have an influence on their performance that affects their ultimate career progression. Mentoring provides the guidance to do work within a stipulated time with maximum efficiency and mentors always resolve the queries that one can have. POS and family responsibilities have a critical role to play in balancing work and personal life simultaneously. If any woman does not get any or enough support from either an organization or family, then that can adversely influence their

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Salary</td>
<td>Managerial Level</td>
<td>Promotions</td>
</tr>
<tr>
<td>Beta (t-value)</td>
<td>Beta (t-value)</td>
<td>Beta (t-value)</td>
<td></td>
</tr>
<tr>
<td>Mentoring</td>
<td>0.349 (5.812)***</td>
<td>0.321 (5.212)***</td>
<td>0.335(5.510)***</td>
</tr>
<tr>
<td>FR</td>
<td>0.163 (3.289)***</td>
<td>0.218 (4.281)***</td>
<td>0.198(3.926)***</td>
</tr>
<tr>
<td>POS</td>
<td>0.192 (3.269)***</td>
<td>0.134 (2.220)*</td>
<td>0.159(2.681)**</td>
</tr>
<tr>
<td>R-square</td>
<td>0.298</td>
<td>0.260</td>
<td>0.279</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>42.858, Prob&gt;F=0.000</td>
<td>35.498, Prob&gt;F=0.000</td>
<td>39.060, Prob&gt;F=0.000</td>
</tr>
</tbody>
</table>

Notes: *p < 0.05; **p < 0.01; and ***p < 0.001
Source: Authors’ calculation using SPSS 22.0
career development as these two are the base of their work and personal life. Here, POS and family responsibilities have a positive role in the career success of women working in the Indian IT industry, which means that women are getting sufficient support from their organization as well as from their families to achieve heights in their career. Family responsibilities having a positive role in the women working in the IT industry in this study is because the majority of the women in the dataset are single and have lesser family responsibilities in the context of handling household chores, children, etc.

**IMPLICATIONS OF THE STUDY**

**Theoretical Implications**

It is essential to identify factors contributing, which are more favorable for female retention and career advancement. The impact of such important variables on women’s career success needs to be investigated. This study has explored the role of mentoring, POS, and FR in the career progression of women. Relatively limited research for women executive roles has been conducted in the Indian IT industry. This study adds to the existing research relating to the career progression of women, specifically in the Indian IT industry. Fewer research studies have simultaneously identified the role of organizational and family challenges in both career success (i.e. perceived career success and career advancement). It has been observed from the empirical findings of the study that FR, mentoring, and POS have the potential to positively affect the career success of women in the subjective context as well as in the objective context of career success. This study has provided the quantitative support to the qualitative studies by testing how few of the challenges mentioned in the literature affects the career success of women working in Indian IT industry. Also, this study contributes to IT sector on which less work has been done previously and the same was identified as the research gap prior conducting this survey.

**Managerial Implications**

It can be said that there is a possibility that women working in the organizations that offer mentoring programmes and organizational support are more likely to have a better career progression than the ones who don’t get either or any of these. The reason behind it is that mentoring and organizational support provides them with the information and opportunities that cannot be available otherwise. In other words, organizations should make sure that women get enough opportunities and information to advance their careers and should not be discriminated against so that these positive factors do not become a challenge to their career development. This paper has taken a step towards emphasizing women’s participation in the Indian IT industry and provides insight into the challenges that they need to overcome to be successful. The usefulness of mentoring as an HRD factor can only be established if women are given the chance to be both, a formal mentor and a protégé in the Indian organizations. Environment, policies, and practices are to be implemented in the organizations that assure equal opportunities to learn and grow for women in the IT industry and help them climb up the ladder to senior-level positions. There has been global awareness of the lack of women’s participation in the labor force. Schwartz (1992) mentioned “women’s issues are actually business issues”. It is advised that an organization with a women’s equal presence be more successful in its efforts to grow and execute. This paper will be helpful for women working in the Indian IT industry to learn about the obstacles that needed to be reduced or kept in mind in order to achieve their career success. In addition, HRD professionals can make plans and policies and implement them accordingly to help women of their organizations to grow.
LIMITATIONS AND FUTURE SCOPE OF THE STUDY

Even though this paper contributes to literature in various ways, yet it suffers from a few drawbacks that unlock the gates for upcoming studies. First, women participants considered for this study are majorly single and belongs to middle or junior-level positions, whereas the study’s result might differ if future studies include more women that are married and belong to top management. Second, this study is restricted to one industry and few variables only due to time and resource availability constraints, further researchers can work on this limitation to have a widespread knowledge about the challenges that women face in their career success. Third, this study is fully empirical in nature; a mixed approach of empirical and conceptual study would provide a broader view about the challenges faced by women and their impact on the career progression of women in their respective industries. Fourth, future researchers can check how career progression of women may vary or influenced with the size of the IT organization.
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