Studying Career Commitment of Indian Technology Professionals with the Moderating Effect of Perceived External Employability

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Abstract

Purpose : This study aimed to assess the impact on Indian technology professionals' career commitment through adverse career events such as career plateau and its manifesting factors. The key objectives of the study were: First, learn about the underlying factors that may have impacted ITians' ability to curate sustainable career growth in IT; second, assay how these factors, in turn, could affect the overall IT career commitment; and third, analyze how perceived external employability could moderate the impact on career commitment.

Methodology : A measurement model based on social cognitive theory, career plateau, and conservation of resources was designed. Three hundred sixty-one responses were received from Indian IT professionals using a structured questionnaire. SEM analysis was performed using AMOS to analyze the model's and hypotheses's validity.

Findings : The results showed career commitment having a significant negative influence due to career plateau, the levels of which were alleviated when employees exhibited more vital growth aspirations coupled with a high sense of belief in their ability to acquire new skills and competencies continually.

Practical Implications : This study provided a critical reference for employees to proactively curate career development strategies invigorating career commitment and long-term career growth prospects. It also generated insights for organizational policymakers to construct career development and training frameworks that could boost employee motivation, resulting in improved job engagement and productivity.

Originality : To our knowledge, this is the first study to foray into analyzing the career commitment of Indian IT professionals and, as such, could serve as a robust foundation for future research on this topic, furthering knowledge of newer career patterns emerging in this sector.

Keywords : **career commitment, career plateau, self-efficacy, promotion aspiration, information technology**

JEL Classification Codes : L2, L8

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A "career" is an important psychological construct for an individual, which is a predictable, sequential, and an organized path pursued through various phases of work life (Holmes & Cartwright, 1993). "Career Commitment" is an individual's motivation to remain working in a chosen field (Hall, 1971). It elicits a sense of identity, inspiration, achievements, and occupational meaning for an individual, whose significance goes

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over and beyond transactional relationships with the job, wherein the latter may be seen just as a source of earning and stability (Kumar et al., 2023) in which individuals expend their skills, knowledge, and services and get compensated in return. The individuals thus often augment their efforts and decisions about various job and work alternatives, keeping in sight their motivation and projected sense of self-achievement aligned with longer-term career goals and, as such, expect to undertake responsibilities that broadly align with these objectives (Kumar et al., 2023).

With its thriving IT industry over the last two decades, India has emerged as one of the world's major exporters of IT software, employing over five million experts (NASSCOM, 2023). In order to keep up with the rapid technological evolutions required to achieve higher productivity and competitiveness (Biswas & Chakraborty, 2019), simply having more work experience in this field does not imply that you are highly skilled, as knowledge and skills in this field typically have shorter shelf lives when compared to other industries where experience alone can be a major contributor to an individual's skills and career growth (Ang & Slaughter, 2000). Furthermore, despite overall exceptional growth, IT organizations must continue to respond quickly and dynamically to changing economic landscapes, resulting in frequent cost optimizations, downsizing, and capacity creations, which may affect employees' (Chakraborty et al., 2019) subsequent career growth prospects (Lin et al., 2018), despite initial lucrative employment opportunities as freshers. Furthermore, the cost advantage generally achieved from a traditional outsourcing approach gradually diminishes. At the same time, the traditional pyramid structure of organizations continues perpetually, meaning career growth becomes limited, and attainment of set career goals gets subdued (Dhar, 2013). Lack of career growth implies vertical mobility halts (hierarchical plateau (HP)), horizontal mobility constricts (job content plateau (JP)), or both. For employees driven by the career advancement paradigm (Chang Boon Lee, 2002), sustaining such experiences can be incredibly frustrating, raising contemplations about a career change since the long-term potential of the career field to fetch progressive career opportunities appears bleak (Lin & Chen, 2021). As a result, amidst a flurry of mass downsizing, which is not uncommon to observe in this sector, studying ITians' commitment toward their career becomes all the more pertinent.

Thus, in this study, we propose a model by exploring factors from the extant literature that can influence ITians' commitment toward their career, enabling us to assay an insidious new career pattern potentially to emerge in this sector. We use social cognitive theory (SCT) (Bandura, 1991), the theory of career plateau (Ference et al., 1977), and the COR theory (Hobfoll, 1989) to build a research model that can expatiate answers to the following research questions:

- What are the underlying factors that may cause an impact on ITians' ability to curate a sustainable career in this sector?
- How can this impact the overall commitment of ITians toward their career?
- Does perception about external employability have a moderating role on career commitment (CC) when faced with adverse career events such as career plateau?

To our knowledge, no previous study has attempted to foray into this subject, and it is the first one aiming to propose such an explanatory model of CC in the context of Indian IT sector employees. We thus expect it to generate valuable insights for career researchers, organizations, and industry policymakers to effectively design career management strategies that can act as the linchpins for curating sustainable career development paths for Indians.

Theoretical Linkage and Hypotheses Development

Career Plateau and Promotion Aspirations

A career plateau is that phase of an employee's career wherein the possibility of a vertical promotion is very low (Ference et al., 1977). Traditionally, such a phase had been referred to in the case of older employees. However, it also applies to any mid-career or early-career employee. Although earlier career studies referred to career plateau as an objective measure that primarily considered age and experience as contributing factors (Veiga, 1981), subsequent researchers extended this view by arguing that career plateau is subjective to employees' perception, i.e., dependent on what they believe about the possibility of future advancements, which predisposes them toward the plateaued phase (Milliman, 1992; Tremblay & Roger, 1993). Such a phase is termed a hierarchical plateau (HP) and is one of the two forms of career plateaus; the second one is a job content plateau (JP), which occurs when employees perceive their potential, productive capacity, and skills as being underutilized (McKee-Ryan & Harvey, 2011). They no longer perceive their job as tricky or having the opportunity for future progress. Furthermore, they may develop a sense that they are being treated unfairly by their various employers.

According to the model of career plateau proposed by Ference et al. (1977), a lack of solid desire for promotion is one of the originations for the eventual state of career plateau, even if the individual is a high performer. Some employees may not be willing to transcend into higher positions in the organization as that could mean jeopardizing the security and stability of the present job, or they may be well satisfied with their current span of duties that the perceived risks associated with getting promoted may be higher than the benefits leading to a more cautious behavior. Thus, individuals not driven by a sense of growth need may exert lower levels of effort in jobs or intend to only "maintain" their position but eventually become plateaued (Feldman & Weitz, 1988). On the contrary, the level of advancement aspiration in the hierarchy, i.e., promotion, is one of the critical determinants of subjective career plateaus and is linked to career success (Tremblay & Roger, 1993). To advance in the ranks of the organizational hierarchy, employees may expend higher resources such as work efforts and greater productivity, resulting in higher contribution and performance that raises the likelihood of promotions or role change, which can either avoid or act as preventive mechanisms to counter plateau (Kim et al., 2020). Personal success is a psychological demand that might influence how people react to career stagnation. Promotional desire and ambition are acceptable and important for being recognized as productive contributors in the organization, and their absence may raise concerns among supervisors about the individual's aptitude and potential to execute an excellent job (Ference et al., 1977). As a result, we propose the following hypotheses:

- **Hypothesis H1 :** Promotion aspiration negatively impacts the HP.

- **Hypothesis H2 :** Promotion aspiration negatively impacts JP.

PSE and Career Plateau

Based on SCT, self-efficacy is individuals' belief in their abilities to execute a change or course of action necessary to attain the desired goals (Bandura, 1991). Amidst fast-paced technological, informational, and social changes, individuals must continually and critically exercise self-efficacy for self-development and the successful functioning of a team/group. This aspect is placed with a high premium to perform sustainably even in turbulent times. SCT is a learning theory that posits that individuals learn by observing others and characterizes a three-way reciprocal interaction model between personal (self-efficacy), behavioral (feedback or a successful experience which an individual receives after correctly producing the learning), and the environment (provides necessary resources or material for enabling successful completion of the learning/behavior). Furthermore, it argues that

such learning may not necessarily transpire into an associated action or behavior as it is contingent upon an individual's self-efficacy.

Professional self-efficacy (PSE), in general, is the extent of individuals' judgment about their ability to manage their respective professions (Yoo & Cho, 2020). High PSE suggests high confidence to produce quality outcomes as demanded in the work context and subsequently generates more remarkable persistence and dedication to complete a task. In contrast, low self-efficacy accompanies a pessimistic view that casts doubt about one's potential to achieve results, stemming from a low sense of achievement and belief that one is a promising candidate for promotions (Kim et al., 2020). On the contrary, individuals exhibiting high PSE select challenging goals with a focus on growth opportunities they present rather than considering them as inhibitors for success. In such goal attainments, these individuals trust their abilities. They are perseverant, self-driven, and motivated to learn, exerting better engagement and control (Chakraborty et al., 2021) over fulfilling their developmental needs. We argue that in our current study, PSE is an underpinning factor guiding the overall career trajectory of IT employees; wherein, continuous learning, upskilling, and developing newer capabilities in a highly constrained and volatile environment may manifest as critical determinants for remaining proficient and successfully avoiding or negotiating career stagnation (a term synonymously used for plateau) (Fu, 2011). As a result, we create the following hypotheses:

- **Hypothesis H3 :** PSE negatively impacts the hierarchical career plateau.

- **Hypothesis H4 :** PSE negatively impacts JP.

Career Commitment (CC) and Career Plateau

Blau (1985) defined CC as "one's attitude toward their profession or vocation" (p. 278). It is an individual's motivation to continue functioning in a career (Hall, 1976). Commitment is one of the six characteristics (autonomy, collegial maintenance of standards, commitment to work and profession, ethics, expertise, and identification with profession) that are firmly present in an ideal profession and depicts the degree to which work-related activities overlap into the lifespan, and in a hypothetical situation, a willingness to continue to work even in the absence of a financial need (Blau, 1989; Patre & Chakraborty, 2022). According to Pelz and Andrews (1966), a career is a sequence of predictable employment structured hierarchically in a specific field. It is behaviorally expressed as coping with setbacks or disappointments while striving for career goals. CC is thus a representation of the degree of motivation individuals exhibit to achieve personal advancements (Carson & Bedeian, 1994) and is distinct from organizational commitment, wherein the former is a characteristic of setting personal goals that accompany an individual's attachment and identity (Hall, 1976) but can complement in the study of the latter by enabling explication of employee CC and its linkage with the organization (Fu, 2011). London (1985) proposed career motivation to be a multidimensional construct consisting of career identity, which represents close emotional association with one's career; career planning, which depicts identifying development requirements and setting up career goals; and career resilience, which is about being able to adapt to changing circumstances and remaining persistent even in the face of adversity in one's career. This view was subsequently enriched by Carson and Bedeian (1994), who conceptualized CM as another term for career motivation. One of the key factors contributing to such a degree of motivation is a sense of advancement that aligns with career goals and self-identity. However, when a plateau develops, intrinsic motivation may be degraded due to a lack of external rewards linked to an individual's talents and abilities. Blau (1989) believed this relationship should be investigated further to study the job change process.

In either form of career plateau, employees perceive a loss of personal resources in the form of a lack of challenging/novelty in work, low recognition, and down to no possibilities of promotion or higher pay, which

lowers employees' confidence to meet the expectations of a fiercely competitive job market which, in turn, impacts their resistance to career disruptions and career identity (Lin & Chen, 2021). A plausible relationship between career plateau and CC can be underpinned by Hobfoll's (1989) COR theory. Resources in this theory are factors such as an individual's goals and rewards or psychological factors such as a sense of self-worth and accomplishments, identity, and stability. As per this theory, individuals strive for or accompany actions that aim at maintaining these resources or minimizing losses in the event of adversities. By applying COR, we argue that such perceived loss of resources during a career plateau lowers employees' psychological state and depletes their psychological resources such as motivation, satisfaction, morale, and sense of self-worth. They thus eventually feel less valued and recognized by their supervisors/employers/peers in the profession, perceiving these as a hindrance in achieving their career goals. They may avoid such depletion by reducing commitment and considering a career change (Gu, 2017). As a result, we propose the following hypotheses:

- **Hypothesis H5 :** Hierarchical career plateau negatively affects CC.

- **Hypothesis H6 :** JP negatively affects CC.

The Moderating Role of Perceived External Employability

Employability has been one of the critical areas of interest for career management researchers. In general terms, it is an ability to remain employable in the labor market, while perceived external employability is an employee's perception of the employment opportunities for self in the external job market (De Cuyper et al., 2012). Perceived employability is a personal psychological resource that accompanies a sense of hope, satisfaction, and commitment with better protection against exhaustion (Zhou et al., 2022).

The moderating role of perceived external employability between career plateau and CM can be explained by COR theory. Employees in a state of career plateau in an organization derive high relevance and meaning from the assessment of perception of the self in becoming employable (Chakraborty et al., 2022) externally as part of the viability in pursuing their career goals in the same vocation despite being confronted with challenging circumstances such as a plateau (Lin & Chen, 2021). The state of career plateau incurs a depletion of psychological resources of employees and seeds contemplations about the relative cost-benefits of remaining in the same career vis-à-vis career change (Nachbagauer & Riedl, 2002). We argue that a lowered perceived external employability can further constrict these resources, impacting the confidence in capitalizing on job opportunities externally, thus further negativizing the attachment with the career as there are seemingly inadequate options at the disposal to remain pursuant in the career without compromising on career aspirations.

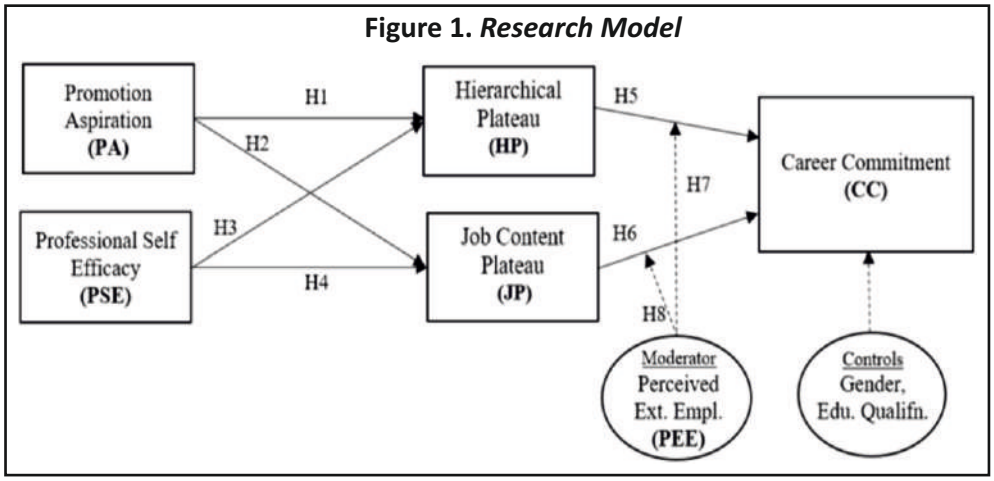
On the contrary, a high sense of possibility in mobilizing the self toward attractive external job opportunities in a similar vocation may dampen the adverse effect on commitment arising from a career plateau as it can still be gauged as feasible to traverse on the roadmap of career success by repleting the constrained resources. Furthermore, no other study, to our knowledge, has investigated such a moderating effect in the context of ITians. As a result, we propose the following hypotheses:

- **Hypothesis H7 :** Perceived external employability moderates the relationship between HP and CC.

- **Hypothesis H8 :** Perceived external employability moderates the relationship between JP and CC.

Figure 1 displays the proposed research model based on the above hypotheses.

Figure 1. ***Research Model***



Research Methodology

Measures

All items used in this research were from proven scales from the extant literature to study the respective constructs and their relationships. The questionnaire was divided into two parts – the first was the demographic information, and the second part contained the items related to various constructs under study.

Items relating to promotion aspiration (PA), HP, and JP were adopted from Milliman (1992) ; whereas, the scale for PSE was adopted from Fu (2011). Survey questions related to CC were adopted from Blau (1989).

Data Collection

A structured questionnaire was designed in Google Forms. By applying a convenience sampling technique, this questionnaire was initially circulated using e-mails and other digital channels to all acquaintances who befitted the participation criterion, i.e., IT professionals employed in Indian technology companies involved in software design/development/testing /maintenance/IT governance/delivery/project management. Data collection lasted five months (September 2022 to January 2023). Three hundred sixty-one complete replies were gathered,

Table 1. ***Demographic Information***

Measure	Category	Respondents	Percentage
Age	< 25	66	18.24
	25 – 30	115	31.73
	30 – 45	105	29.22
	45 – 55	58	15.96
	> 55	17	4.84
Gender	Male	171	47.37
	Female	190	52.63
Educational	Grad.	187	51.80
Qualification	Post Grad.	138	38.23
	Ph.D.	36	9.97

organized, and examined to reach logical conclusions concerning the research hypotheses. Table 1 shows the dataset's demographic information.

Data Analysis

Using SPSS 27.0, data analysis was performed on the identified dataset. As a first step, data were successfully validated for normalcy using skewness and kurtosis. Furthermore, data were validated for common method bias and multicollinearity. Thus, data were ascertained to be legitimate for further study, and hence, to proceed further with the reliability and validity of the measurement instrument and to measure the goodness of fit of the proposed research model, a confirmatory factor analysis (CFA) was performed using AMOS version 24. The successful validation of CFA and the research hypotheses were tested using structural equation modeling (SEM), including moderation analysis using AMOS. To test the moderation effects of perceived external employability (PEE) on the relationship between HP and CC and JP and CC, interaction variables (PEE × HP and PEE × CP) were formed using a mean-centered variables approach. The causal association of these interaction variables with the dependent variable (CC) was included in the SEM model to derive the path analysis and significance levels.

Analysis and Results

Normality, Multicollinearity, and Common Method Bias

The values of skewness and kurtosis were within limits, and hence, the dataset was confirmed to be normally distributed. The variance inflation factor for all constructs was between 1.0 and 1.3, indicating that the data are devoid of multicollinearity. The data were considered nonlinear after validating for skewness, kurtosis, and multicollinearity. All precautions were taken to reduce the common method bias. Herman's single-factor test for measuring common method bias was carried out. The results indicated that the dataset explained 24.07% of the variance. Since this value is well below 50%, the dataset was confirmed to be absent of the common method bias.

Measurement Model

CFA was performed to assess the measurement model using AMOS version 24. CFA showed an acceptable model fit – the ratio of chi-square to degrees of freedom, i.e., χ^2/df was 2.006; CFI, i.e., the comparative fit index was 0.948; the Tucker – Lewis index (TLI) was 0.942; RMSEA, i.e., root mean square error of approximation was 0.053. Thus, all the goodness of fit values were within the threshold requirements of an acceptable model fit (Anderson & Gerbing, 1988). The validity and reliability analysis values are presented in Table 2.

Table 2. ***Validity and Reliability Analysis***

	CR	AVE	MSV	MaxR(H)	*PEE*	*CC*	*HP*	*JP*	*PSE*	*PA*
PEE	0.915	0.606	0.056	0.919	**0.779**					
CC	0.942	0.732	0.126	0.949	0.085	**0.856**				
HP	0.951	0.764	0.130	0.956	0.112*	–0.344***	**0.874**			
JP	0.888	0.613	0.130	0.894	0.130*	–0.354***	0.360***	**0.783**		
PSE	0.905	0.657	0.111	0.911	–0.199***	0.144*	–0.334***	–0.309***	**0.811**	
PA	0.767	0.523	0.116	0.768	–0.236***	0.163	–0.341***	–0.326***	0.154	**0.723**

Note. * means < .05; ** means < .01; *** means < .001.

Table 3. ***HTMT Analysis***

	PEE	***CC***	***HP***	***JP***	***PSE***	***PA***
PEE	–	–	–	–	–	–
CC	0.106	–	–	–	–	–
HP	0.116	0.336	–	–	–	–
JP	0.121	0.337	0.367	–	–	–
PSE	0.199	0.136	0.357	0.306	–	–
PA	0.235	0.134	0.337	0.321	0.149	–

Since the square root of average variance explained (AVE) for each construct is more than the correlations between all other constructs, the discriminant validity is proven (Fornell & Larcker, 1981). This validity is further ratified by the HTMT analysis performed to ensure discriminant validity and is presented in Table 3. All the values of HTMT analysis are below 0.85, as Henseler et al. (2015) recommended. All construct factor loadings (Table 4) are more than the required threshold of 0.5. Furthermore, the AVE for each construct is greater than 0.50, demonstrating its convergent validity. The CR is established when each construct's composite reliability (CR) is more than 0.7 (Nunnally & Bernstein, 1994). Thus, the measurement instrument's reliability and validity are demonstrated using discriminant, convergent, and composite reliability.

Table 4. ***Factor Loadings and Cronbach's Alpha***

Factors	Items	Factor Loadings	Cronbach's Alpha
PEE	*PEE1*	0.722	0.911
	PEE2	0.839	
	PEE3	0.734	
	PEE4	0.813	
	PEE5	0.787	
	PEE6	0.731	
	PEE7	0.815	
CC	*CC1*	0.843	0.953
	CC2	0.788	
	CC3	0.842	
	CC4	0.899	
	CC5	0.836	
	CC6	0.92	
HP	*HP1*	0.856	0.951
	HP2	0.865	
	HP3	0.795	
	HP4	0.927	
	HP5	0.897	
	HP6	0.898	
JP	*JP1*	0.727	0.905
	JP2	0.765	

	JP3	0.75	
	JP4	0.85	
	JP5	0.818	
	JP6	0.828	
PSE	*PSE1*	0.742	0.904
	PSE2	0.819	
	PSE3	0.773	
	PSE4	0.864	
	PSE5	0.849	
PA	*PA1*	0.7	0.767
	PA2	0.723	
	PA3	0.745	

Structural Model

We used a covariance-based SEM technique to validate the hypotheses using AMOS version 24. We studied the model fit values for the structural model. They are as follows: χ^2/df = 2.520; CFI = 0.909; TLI = 0.901, and RMSEA = 0.065, all indicating an acceptable fit of the model (Anderson & Gerbing, 1988). Standardized regression weights and their significance levels were noted. Gender and educational qualifications were controlled for the study. As per the recorded observations, promotional aspiration is found to have a significant negative impact on the HP ($\beta = -0.314$, $p < 0.001$) as well as a significant negative impact on the JP ($\beta = -0.274$; $p < 0.001$), implying that the hypotheses H1 and H2 are supported. Similarly, PSE ($\beta = -0.306$; $p < 0.001$) has a significant negative influence on the hierarchical career plateau as well as a significant negative impact on the JP ($\beta = -0.265$; $p < 0.001$), thus supporting H3 and H4. Finally, our study variable CC is found to be negatively influenced by hierarchical career plateau ($\beta = -0.233$; $p < 0.001$) and JP ($\beta = -0.289$; $p < 0.001$), and both these associations are found to be significant, thereby supporting H5 and H6.

The SEM can account for the variance in the dependent variables of the model, such as hierarchical career plateau (19.2%), JP (14.5%), and CC (21.3%). The hypotheses results are depicted in Table 5.

Moderation Analysis

Our study hypothesizes that PEE has a moderating effect between HP, JP, and CC. Using AMOS, we analyze these moderating relationships and find that the moderating effect of PEE on the relationship between HP and CC is

Table 5. ***Hypotheses Results***

	Path	Estimate	*p*-value	Supported
H1	*PA –> HP*	–0.314	< 0.001	Yes
H2	*PA –> JP*	–0.274	< 0.001	Yes
H3	*PSE –> HP*	–0.306	< 0.001	Yes
H4	*PSE –> JP*	–0.265	< 0.001	Yes
H5	*HP –> CC*	–0.233	< 0.001	Yes
H6	*JP –> CC*	–0.289	< 0.001	Yes

Table 6. ***Moderation Analysis Summary***

Relationship	Beta	CR.	*p*-value	Moderation
*HP * PEE –> CC*	–0.107	–1.977	< 0.05	Yes
*JP * PEE –> CC*	0.161	2.953	< 0.01	Yes

Figure 2. ***The Moderating Effect of PEE between HP and CC***

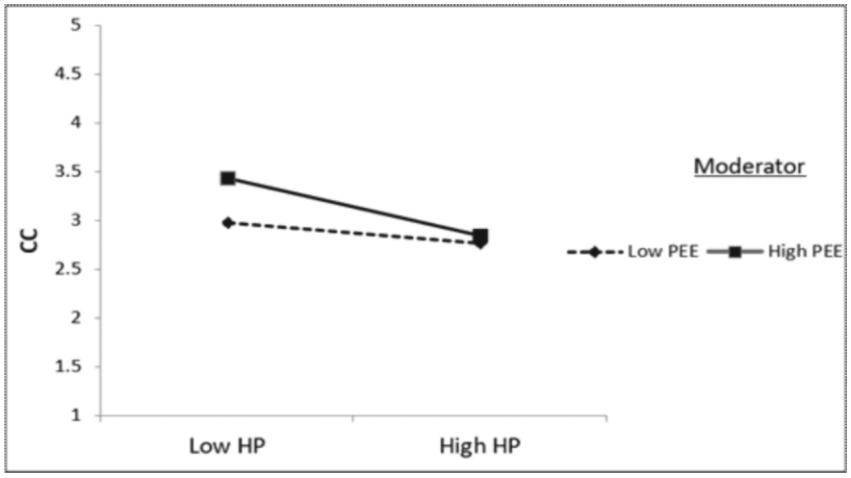
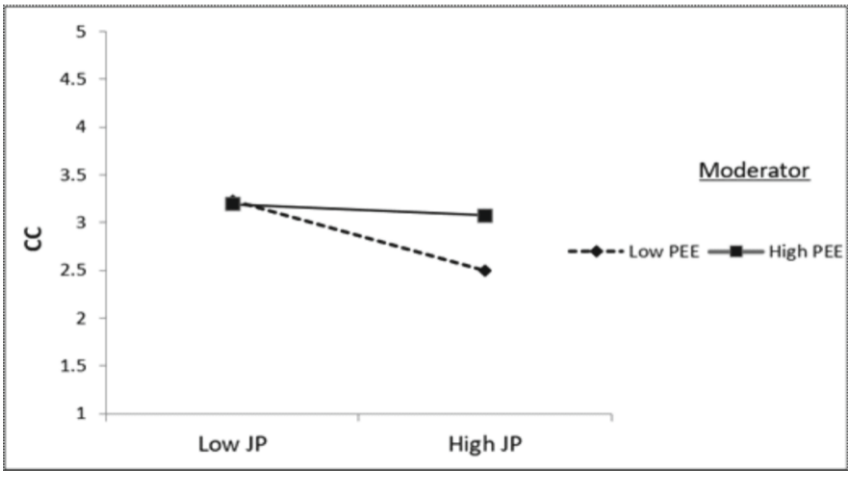


Figure 3. ***The Moderating Effect of PEE between JP and CC***



significant and negative (β = –0.107; $p < 0.05$); whereas, its impact between JP and CC is significant and positive (β = 0.161; $p < 0.01$). Thus, H7 and H8 are supported. The moderation analysis is presented in Figures 2, 3, and Table 6.

The slope analysis indicates that the interaction of PEE and HP exerts a further negative influence on the relationship between HP and CC and is demonstrative from Figure 2; wherein, the slope for high PEE is higher than that for low PEE. However, Figure 3 indicates that higher PEE dampens the association between JP and CC. It suggests that the negative effect of JP on CC gets weakened when PEE is high; whereas, this effect becomes stronger when PEE is low.

Discussion

Synthesizing the theoretical underpinnings of SCT, career plateau, and COR, we develop and validate a measurement model that aims to explain the impact on Indian ITians' CC from the lenses of the career advancement paradigm. The findings of this study highlight the predicting ability of career plateau – a stage in which career mobilization ceases. By earlier findings, hierarchical and JP were proven to have a causal influence on ITians' CC (Gu, 2017; Nachbagauer & Riedl, 2002). When employees are stuck in the same grade or role, the plausibility of long-term career growth appears bleak. The pros and cons of longer-term association in the same field get evaluated, leading to possible turn-away intentions or career change. Although every such instance of lowered commitment may not harbinger an immediate career change, it can be considered a precursor toward reduced willingness to continue in the same career and possible future career change intentions, including early retirement. Referring to the definition of CC, depleted motivation to remain in the same career field means a lack of commitment to the respective career. This study also unleashes the causal factors for a plateaued phase wherein promotion aspirations coupled with high self-efficacy are found to be critical determinants of career success as they are also negatively related to career plateau. These results are similar to previous studies (Tremblay & Roger, 1993) and reiterate the critical role the persistent self-driven approach plays toward upgrading technical and professional skills along with building new competencies by exploring challenging growth-oriented work assignments, which can contribute toward avoiding or successfully negotiating career plateau and thus inducing proclivities toward higher CC.

Employees who lack a strong desire to advance in their careers through, for example, a promotion, are likely to find themselves stagnated in due course, which, while not entirely unwelcome in the short run, begins to precipitate when junior employees start advancing in the career in the same department or organization, contemplations and self-evaluation about career success begin to precipitate, which in the long term could lead to unsettling (Chakraborty & Biswas, 2020). Reluctance in self-leaning or mobilizing toward challenging role assignments having growth potential can lead to ITians spiraling down in their IT careers. Use of the latest self-learning modes, such as AI-based training and e-learnings, can personalize the training content to suit an individual's needs (Chakraborty & Altekar, 2021; Dash & Chakraborty, 2021; Pahari et al., 2023). When viewed from the theoretical underpinning of conservation of resources theory, lack of growth or mobility in the career drains resources such as self-worth, pride, and rewards, which become challenging to fulfill in the same career field. The findings also demonstrate that perceived external employment plays a crucial role in moderating such causal effects of career plateaus on CC. In a job content plateau, if employees see lower external employment opportunities, it heightens the feeling of being 'stuck' in the same job role/organization/industry, all of which can lead to further adverse impacts on CC. However, the results of the moderating effect of perceived external employment on the relationship between hierarchical and career commitment are surprising. As per these results, employees in a hierarchical plateau exhibit a further reduction in their CC when they perceive higher external opportunities. This result contradicts prior research (Lin & Chen, 2021). A plausible explanation is that although external job opportunities appear bright, whether these opportunities get actualized in new employment could be crucial. Good opportunities, but ineptness to capitalize, could further lower confidence. However, we recommend deeper research on this particular relationship.

Practical Implications

Our study provides useful, practical implications in the realm of career management. First, it provides a critical guiding reference for IT professionals who will benefit from the insights of these findings. A conscious focus on exploring ways to continuously learn, develop new skills, and gain wider exposure by picking challenging work

assignments is critical to improving self-efficiency, and the outcomes therein can significantly predict the actualizations of career mobilization opportunities. Similarly, one must uphold self-accountability in curating a sustainable career roadmap for themselves. Aspiring for higher roles and grades paves the way for work efforts that are directed toward realizing promotions, the absence of which can jeopardize long-term career success. Individuals need to anticipate future psychological needs, such as a sense of self-worth, achievement, and recognition, then set career goals accordingly and invest in development efforts today. Otherwise, it can flounder possibilities of achieving long-term career goals. Deprivation of such psychological career needs can lower commitment toward the present career and create challenges for navigating a rather fluctuating industry such as IT. The findings also provide useful guidance for organizations and industry practitioners to design effective career mobilization strategies that can inspire employees (Chakraborty & Biswas, 2021) to step out of the comforts of familiar technology and human personnel so that newer capabilities get built, benefiting organizations as well as individuals to demonstrate elevated competencies to deliver more impactful outcomes.

Conclusion

To the best of our knowledge, this is the first study that has undertaken the endeavor of studying the CC of Indian IT professionals. The IT sector is often characterized by technological obsolescence, lack of job security, and cost pressures leading to downsizing, long working hours, and vicissitudes of growth opportunities; this study assays ITians' strength of association and motivation to remain pursuant in their IT career amidst adverse career events such as career plateau. Extant research on studying career plateau's effects on CC is sparse. Blau (1989), in his seminal work on generalizing measures for CC, clearly recommended future research to study the potential effects of career plateau on a career change. Based on this recommendation and the subsequent study of the extant literature, we identified a clear prevalent gap on this topic and, through this article, have disseminated and added to the body of knowledge regarding these critical career dimensions of CC, career plateau, and related antecedents such as self-efficacy and promotion aspirations. From the results of this study, we conclude that continuous efforts to remain well-versed with technological advancements, not merely in terms of know-how but also in getting actual exposure, leads to upskilling and self-development.

Assuming role assignments that can open future career growth opportunities, if not immediate, can equip ITians with a better repertoire of resources to lift the prospects to advance their careers or subdue the existing stagnated phase, yielding sustainable careers. Career growth is a critical constituent of career success, and growth is only plausible with the individual first aspiring to grow. Prior research (Tremblay & Roger, 1993) and this study re-emphasize the significance of an individual's aspirations and willingness, which form crucial determinants of career trajectory and success. When aspirations are combined with individuals' belief in their capabilities to execute the behavior necessary for producing the desired results, career goals become achievable. In a rapidly transforming IT industry, the onus of developing and carving out a career roadmap lies with the individual; however, when discounted, career growth turns elusive and career success embittering, concomitantly lowering commitment.

Limitations of the Study and the Way Forward

Although curated from the most relevant literature and robust theories, this study does accompany certain limitations. First, it does not consider the organizational or extrinsic factors that can considerably influence an individual's career change decisions. Future research on this topic can reveal how such factors (e.g., organizational character, i.e., product/service, organizational culture) interact with employee commitment. Second, our analysis excludes “pull” factors, which are elements that may increase motivation to change careers (for example, better prospects outside of the current work domain that is highly appealing). Third, a study to assess

the impact of an individual's career stage on CC is highly recommended as it enables uncovering recent career trends manifesting in the IT industry. Finally, this study provides a guiding template for future research to undertake similar exploration even in other sectors.

Authors' Contribution

Rohan Deshpande and Dr. Debarun Chakraborty developed research objectives and strategies, as well as conducted comprehensive literature searches to generate research hypotheses. Dr. Debarun Chakraborty and Rohan Deshpande created a survey questionnaire, collected replies, evaluated those responses using standard statistical software, and interpreted the results without bias. This paper was written in collaboration between Rohan Deshpande and Dr. Debarun Chakraborty.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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References

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423. https://doi.org/10.1037/0033-2909.103.3.411

Ang, S., & Slaughter, S. (2000). The missing context of information technology personnel: A review and future directions for research. In R. W. Zmud (ed.), *Framing the domains of IT management.* Pinnaflex Education Resources.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes, 50*(2), 248–287. https://doi.org/10.1016/0749-5978(91)90022-L

Biswas, W., & Chakraborty, D. (2019). Impact of organizational values, compassion, and well-being on industrial disputes : An empirical study. *Prabandhan: Indian Journal of Management*, *12*(1), 36–51. https://doi.org/10.17010/pijom/2019/v12i1/141427

Blau, G. J. (1985). The measurement and prediction of career commitment. *Journal of Occupational Psychology, 58*(4), 277–288. https://doi.org/10.1111/j.2044-8325.1985.tb00201.x

Blau, G. J. (1989). Testing the generalizability of a career commitment measure and its impact on employee turnover. *Journal of Vocational Behavior, 35*(1), 88–103. https://doi.org/10.1016/0001-8791(89)90050-x

Carson, K. D., & Bedeian, A. G. (1994). Career commitment: Construction of a measure and examination of its psychometric properties. *Journal of Vocational Behavior*, *44*(3), 237–262. https://doi.org/10.1006/jvbe.1994.1017

Chakraborty, D., & Altekar, S. (2021). Work from home (WFH), COVID-19, and its impact on women. *Prabandhan: Indian Journal of Management, 14*(9), 22–29. https://doi.org/10.17010/pijom/2021/v14i9/166294

Chakraborty, D., & Biswas, W. (2020). Going green with green HRM practices – A strategic initiative for reinvigorating performance optimization in companies. *Prabandhan: Indian Journal of Management*, *13*(10–11), 8–26. https://doi.org/10.17010/pijom/2020/v13i10-11/156006

Chakraborty, D., & Biswas, W. (2021). Enlivening workplace climate through strategic human resource management initiatives: Unleashing its efficacy. *Business Perspectives and Research*, *9*(3), 427–445. https://doi.org/10.1177/2278533720983069

Chakraborty, D., Bhatnagar, S. B., Biswas, W., & Dash, G. (2022). The subtle art of effecting a four-day workweek to drive performance. *Management and Labour Studies*, *47*(3), 275–297. https://doi.org/10.1177/0258042X221082893

Chakraborty, D., Biswas, W., & Dash, G. (2021). Marching toward "heart work": Connecting in new ways to thrive amidst COVID-19 crisis. *Conflict Resolution Quarterly*, *39*(1), 7–27. https://doi.org/10.1002/crq.21313

Chakraborty, D., Santra, A., & Dhara, S. K. (2019). Factors affecting the liquid workforce in different organizations and its effectiveness. *Prabandhan: Indian Journal of Management*, *12*(4), 44–60. https://doi.org/10.17010/pijom/2019/v12i4/143348

Chang Boon Lee, P. (2002). Career goals and career management strategy among information technology professionals. *Career Development International*, *7*(1), 6–13. https://doi.org/10.1108/13620430210414829

Dash, G., & Chakraborty, D. (2021). Transition to e-learning: By choice or by force – A cross-cultural and trans-national assessment. *Prabandhan: Indian Journal of Management, 14*(3), 8–23. https://doi.org/10.17010/pijom/2021/v14i3/158151

De Cuyper, N., Mäkikangas, A., Kinnunen, U., Mauno, S., & De Witte, H. (2012). Cross-lagged associations between perceived external employability, job insecurity, and exhaustion: Testing gain and loss spirals according to the conservation of resources theory. *Journal of Organizational Behavior*, *33*(6), 770–788. https://doi.org/10.1002/job.1800

Dhar, R. L. (2013). Reality shock: Experiences of Indian information technology (IT) professionals. *Work*, *46*(3), 251–262. https://doi.org/10.3233/wor-2012-1477

Feldman, D. C., & Weitz, B. A. (1988). Career plateaus reconsidered. *Journal of Management, 14*(1), 69–80. https://doi.org/10.1177/014920638801400107

Ference, T. P., Stoner, J. A., & Warren, E. K. (1977). Managing the career plateau. *The Academy of Management Review, 2*(4), 602–612. https://doi.org/10.5465/amr.1977.4406740

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Fu, J.-R. (2011). Understanding career commitment of IT professionals: Perspectives of push–pull–mooring framework and investment model. *International Journal of Information Management*, *31*(3), 279–293. https://doi.org/10.1016/j.ijinfomgt.2010.08.008

Gu, Q. (2017). Variations in the conditions for teachers' professional learning and development: Teacher development, retention and renewal over a career. In M. Peter, B. Cowie, & I. Menter (eds.), *A companion to research in teacher education* (pp.37–52). Springer.

Hall, D. T. (1971). A theoretical model of career subidentity development in organizational settings. *Organizational Behavior and Human Performance, 6*(1), 50–76. https://doi.org/10.1016/0030-5073(71)90005-5

Hall, D. T. (1976). *Careers in organizations*. Goodyear Publishing.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513–524. https://doi.org/10.1037/0003-066x.44.3.513

Holmes, T., & Cartwright, S. (1993). Career change: Myth or reality? *Employee Relations, 15*(6), 37–53. https://doi.org/10.1108/01425459310047357

Kim, K. Y., Atwater, L., Jolly, P. M., Kim, M., & Baik, K. (2020). The vicious cycle of work life: Work effort versus career development effort. *Group & Organization Management, 45*(3), 351–385. https://doi.org/10.1177/1059601119880377

Kumar, S., Bagherian, A., Lochab, A., & Khan, A. (2023). Protean and boundaryless career attitudes as antecedents of organizational commitment—Evidence from the Indian IT Industry. *Businesses*, *3*(1), 83–97. https://doi.org/10.3390/businesses3010007

Lin, Y.-C., & Chen, A. S.-Y. (2021). Experiencing career plateau on a committed career journey: A boundary condition of career stages. *Personnel Review*, *50*(9), 1797–1819. https://doi.org/10.1108/pr-03-2020-0192

Lin, Y.-C., Chen, A. S.-Y., & Lai, Y.-T. (2018). Breach or bridge your career? Understanding the relationship between career plateau and internal employability. *Personnel Review*, *47*(5), 986–1002. https://doi.org/10.1108/pr-04-2017-0101

London, M. (1985). *Developing managers: A guide to motivating and preparing people for successful managerial careers*. Jessey-Bass.

McKee-Ryan, F. M., & Harvey, J. (2011). "I have a job, but . . .": A review of underemployment. *Journal of Management, 37*(4), 962–996. https://doi.org/10.1177/0149206311398134

Milliman, J. F. (1992). *Causes, consequences, and moderating factors of career plateauing* (Doctoral dissertation). The University of Southern California.

Nachbagauer, A. G., & Riedl, G. (2002). Effects of concepts of career plateaus on performance, work satisfaction, and commitment. *International Journal of Manpower*, *23*(8), 716–733. https://doi.org/10.1108/01437720210453920

NASSCOM. (2023). *Technology sector in India 2023: Strategic review.* https://nasscom.in/knowledge-center/publications/technology-sector-india-2023-strategic-review

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

Pahari, S., Polisetty, A., Sharma, S., Jha, R., & Chakraborty, D. (2023). Adoption of AI in the banking industry: A case study on Indian banks. *Indian Journal of Marketing, 53*(3), 26–41. https://doi.org/10.17010/ijom/2023/v53/i3/172654

Patre, S., & Chakraborty, D. (2022). The pandemic, financial struggles, and mental health of students. *Indian Journal of Finance*, *16*(4), 60–67. https://doi.org/10.17010/ijf/2022/v16i4/169175

Pelz, D. C., & Andrews, F. M. (1966). *Scientists in organizations: Productive climates for research and development.* Wiley.

Tremblay, M., & Roger, A. (1993). Individual, familial, and organizational determinants of career plateau: An empirical study of the determinants of objective and subjective career plateau in a population of Canadian managers. *Group & Organization Management, 18*(4), 411–435. https://doi.org/10.1177/1059601193184003

Veiga, J. F. (1981). Plateaued versus nonplateaued managers: Career patterns, attitudes, and path potential. *The Academy of Management Journal, 24*(3), 566–578. https://www.jstor.org/stable/255575

Yoo, S. Y., & Cho, H. (2020). Exploring the influences of nurses' partnership with parents, attitude to families' importance in nursing care, and professional self-efficacy on quality of pediatric nursing care: A path model. *International Journal of Environmental Research and Public Health, 17*(15), 5452. https://doi.org/10.3390/ijerph17155452

Zhou, W., Pan, Z., Jin, Q., & Feng, Y. (2022). Impact of self-perceived employability on sustainable career development in times of COVID-19: Two mediating paths. *Sustainability*, *14*(7), 3753. https://doi.org/10.3390/su14073753

Appendix

Factors	Items	Item Description
Perceived External Employability *(PEE)*	*PEE1*	I can easily retrain and become more employable elsewhere.
	PEE2	I can use my professional network and business contacts to develop my career.
	PEE3	I could easily get another job like mine in a similar organization.
	PEE4	People who work in organizations similar to the one I currently work in are in high demand by other organizations.
	PEE5	I can easily get a similar job to mine in almost any organization.
	PEE6	Employers in my field will be looking for someone with my level of abilities and expertise, as well as similar job and organizational experience.
	PEE7	I can get any job, anywhere, so long as my skills and experience are reasonably relevant.
Career Commitment *(CC)*	*CC1*	If I could go into an industry other than IT, which paid the same, I would probably do it (R).
	CC2	I want a career for myself in the IT industry.
	CC3	If I could do it again, I would not choose to work in information technology (R).
	CC4	I would probably continue to work in the IT business if I received all the money I needed without having to work.
	CC5	IT is the ideal vocation for me to continue throughout my working life.
	CC6	I am disappointed that I have entered the IT profession (R).
Hierarchical Plateau *(HP)*	*HP1*	My progression opportunities are limited in my present organization.
	HP2	I am anticipating frequent promotions in the future in my company (R).
	HP3	I have reached or will soon reach a point in my career where I don't anticipate advancing much farther.
	HP4	The possibility that I will get ahead in my organization is limited.
	HP5	I am unlikely to get higher job titles in my company.
	HP6	I am expecting to advance to higher levels in my company in the future (R).
Job Content Plateau *(JP)*	*JP1*	In the future, I expect to be consistently challenged in my job (R).
	JP2	I will learn and grow a lot in my job (R).
	JP3	My job activities will become routine in the future.
	JP4	My job responsibilities will increase significantly in the future (R).
	JP5	My job requires me to enhance my abilities and knowledge (R).
	JP6	I will be challenged in my job (R).
Professional Self-Efficacy *(PSE)*	*PSE1*	I have confidence in my technical expertise compared to others in my field.
	PSE2	I have confidence in my professional skills compared to others in my field.
	PSE3	I have faith in my ability to gain new expertise in my field.
	PSE4	I am confident of continually upskilling myself in my field.
	PSE5	I can easily step out of my comfort zone to take on new responsibilities, even if I have no prior expertise.
Promotion Aspiration *(PA)*	*PA1*	I want to get promoted.
	PA2	It is essential for me to get promoted.
	PA3	I desire to move up to higher levels in my company.

Note. R stands for "Reverse Coding."

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