


# Influence of Career Adaptability on Career Satisfaction and Turnover Intention of IT Professionals

Vikram Singh Chouhan, Jaypee University of Engineering and Technology, Guna, India\*

 <https://orcid.org/0000-0002-8643-2618>

## ABSTRACT

The information technology sector is characterized by a dynamic environment with layoffs, although concurrently generating potential opportunities. To absorb unpredicted and hasty occupational shocks amid such volatility as well as possibilities, human capital in Indian IT industry have been striving hard to construct their capabilities that emanate from career adaptability. Current research endeavors to measure career adaptability and linkage with turnover intentions, career satisfaction, and job performance in the context of the Indian IT sector. Data were gathered from 401 Indian IT professionals. The findings revealed that career adaptability has a negative impact on turnover intention and positive impact on career satisfaction. Turnover intentions of Indian IT professionals are due to their career adaptability. Finally, a profound knowledge of the association of career adaptability with turnover intentions may facilitate us in discovering techniques to assist human capital in guiding the growingly multifarious career path, thus forestalling turnover intention and enhancing satisfaction.

## KEYWORDS

Career Adaptability, Career Satisfaction, Indian IT Sector, IT Professionals, Job Performance, Job Satisfaction, Occupational Attitudes, Turnover Intentions

## 1. INTRODUCTION

Indian IT sector employs 4.4 million people. During 2019-20, it generated approximately 2 lakh new jobs (NASSCOM, 2020), thereby becoming one of the highest sector employers. On one hand, jobs generated by the IT sector have amazingly changed the lives of its workforce, offering better pay, a possibility for an overseas trip, and sustaining superior quality of life (Upadhya, 2008). In contrast, instability and suspicions drawn from technological advancements and business volatility create hazards for employment prospects (Verma & Agarwal, 2017). Indian IT sector has been encountering a variety of challenges recently. Automaton and modern technologies such as Cloud, Azure, and Aws have caused an enormous fall in the number of jobs. Furthermore, occurrences of dot-com failure, stringent visa rules, and digital technologies provide additional challenges for present jobholders within the IT sector.

Overall human capital has a significant impact on the financial performance of IT organizations (Gupta and Raman, 2021). For the sustainability of the Indian IT industry, there is a need to focus on career determinants as it impacts employee engagement (Kumari, 2021). What differentiates

the scenario of the IT sector from other sectors is the faster speed of technological evolution as compared to the expansion of skills in human capital. Skills scarcity is predicted owing to the disparity between skills development and technological advancement (McLaughlin et al., 2012), resulting in an enormous deficiency of skilled human capital that can support emerging technologies (Imran et al., 2019). Furthermore, IT professionals in India do not seem to have adequate skill sets to meet this demand of enormous re-skilling themselves in exponential technologies swiftly. The management of IT organizations has been pursuing various strategies to “up-skill and cross-skill” their workforce. However, it is a lack of resources awareness on the latest technologies and employees are not willing to work beyond their comfort zone to learn according to the emerging technologies for their cross-skills (Ramasamy and Reddy, 2018). Though the instability in the IT industry might imperil the careers of various professionals, it concurrently creates better opportunities going forward. Operating in this unpredictable environment of job prospects, IT professionals in India have gradually become skilled at shaping their careers through overcoming threats they face. Such as, the workforce was found to be engaged in self-initiated up-skilling amid the latest technological developments (Khatri, 2017). In literature, such willingness to tackle the volatile alterations due to transformations in the jobs and transformations at the workplace, proactively taking part in the work-role, and still finding the way amid a dynamic and erratic environment is identified as career adaptability (Bimrose & Hearne, 2012).

This study aims to uncover how career adaptability can bring changes in the professional attitude at the workplace in the context of the Indian IT industry, a topic that has not gathered much focus indeed, although career adaptability can be a crucial factor in the survival of IT workforce amidst high market turbulence of IT industry. Merely a small number of newspapers and consulting firms published its importance in the Indian IT industry as far as revamping skills, learning, and knowledge to tackle uncertainty is concerned (The Hindu, 2017; India Today, 2018). The turnover rate of the Indian IT industry was 14.6% and 15.1% during the fiscal year 2018 (Statista, 2021). This demonstrates that the Indian IT industry has been encountering turnover challenges. Hence, research on factors that impact intentions to leave will assist IT managers to recognize the root causes and retain the workforce. Therefore, this study evaluated the factors of turnover intention to mitigate the risk of inadequate skill supplies in the Indian IT industry. Job satisfaction is a critical aspect of any profession; however, it continues to be uncharted territory in the literature on the IT industry in India. Possibly, existing studies express that career satisfaction is mostly related to the concept of pay satisfaction in the Indian IT sector context. Researches on turnover intentions are imperative to differentiate stayers from leavers and career adaptability can be an important factor influencing turnover intentions among IT practitioners.

Focus on career adaptability has been meager in the literature in the context of IT professionals in India. This research aims to bridge this gap by evaluating career adaptability and its relationships with turnover intentions and career satisfaction along with job performance. In this context, career adaptability, turnover intentions, career satisfaction, and job performance appear pertinent and opportune for determining Indian IT professionals’ competitive advantage in the international market. Therefore, to highlight such relevant, but unexplored concepts, present research endeavors to discover an association of career adaptability with turnover intention, career satisfaction, and job performance in the context of the Indian IT industry.

The paper has been structured according to the recommendations of Misra (2021) regarding the professional presentation of an article related to the ICT discipline in terms of its main components. First of all, the introduction is presented followed by a literature review. Consequently, the conceptual background is outlined and hypotheses are formulated. Then research methods used in this study are detailed. Next data analysis and results are illustrated. Subsequently, the research findings are discussed. Afterward, implications are highlighted. Further, limitations are outlined and recommendations are provided for future research. Finally, conclusions are drawn from the research.

## 2. SURVEY OF LITERATURE

Human and organizational factors are frequently ignored in software engineering since its association with software development is compound to scrutinize and engross various areas. Fernández-Sanz et al. (2016) reviewed the influence of human and organizational factors on software quality and concluded that a sustained effort on researching human and organizational factors is necessary for informed decisions on software quality. This research confirmed that human and organizational factors are frequently more influential in terms of costs and effects than many other technical subjects expansively researched.

Fernández-Sanz et al. (2017) emphasized the need for soft skills for complementing technical skills in today's multinational workplaces. The survey of 123 experts from 45 different nations has established the existence of soft skills. Findings have also revealed connections between explicit cultural indicators of Hofstede and preference for some soft skills.

Carmen, Fernández-Sanz, and Misra (2013) explained the role of the CIO (Chief Information Officer) position in the organizations and the requirements for candidates. This research compared the requirements presented in various research works to determine the most valuable skills for successful performance as a CIO. The authors emphasized the significance of non-technical skills (particularly soft skills) as the main determinant of professional performance.

### 2.1. Career Adaptability

According to career construction theory (CCT), career adaptability (CA) is an essential component. CA characterizes the readiness and capacity of people to harmonize with occupational challenges and alterations (Savickas, 2005). CA assist employees to fight several occupational problems through achieving synergy among self, identity, as well as the environment (Savickas, 2005; Bimrose & Hearne, 2012). CA is exemplified through numerous manners in literature, e.g., realism, information, decision making, exploration, and planning. Nonetheless, the concept of CA is comprehensively described in Savickas's (2002, 2005) CCT.

Researchers revealed the importance of CA aggregately and through its diverse resources in outlining employees' occupational paths. Researchers also demonstrated the role of adaptability in forecasting diverse aspects of a career like professional identity (Porfeli & Savickas, 2012; Merino-Tejedor et al., 2016). Additionally, CA altogether was found to enhance job satisfaction among lower-ranked Chinese workers (Chan & Mai, 2015). In a study conducted in the USA and the Netherlands, every day all resources (4Cs) of CA were reported to predict job satisfaction in the assorted workforce. Job satisfaction was also found to have positive relations with each of the CA resources in the workforce operating in diverse firms in China (Guan et al., 2015).

### 2.2. Turnover Intention

Turnover intention (TOI) describes an employees' penchant to seek out different employment options and is believed to be a vital determinant of a company's real turnover (Sommer & Haug, 2011). TOI is a significant predictor of voluntary behavior of quitting the job (Jha, 2009). TOI merits exploration and examination because it replicates the behavioral outcomes of the workforce due to its connection with the real exit behavior of human capital (Sommer & Haug, 2011). The theory of reasoned action (Azjen et al., 2009) states that intention to demonstrate behavior can affect an employees' decision to display that behavior. This specifies that evaluating intentions might mirror an employees' real future behavior.

Numerous studies on the TOI of human capital in the IT industry have been conducted globally (Samgnanakkan, 2010; Cho & Xu, 2012). In international IT careers, aspects like perceived occupational options, better job opportunities elsewhere, career satisfaction, and job stress were the main causes for TOI (Joseph et al., 2007). Omar & Tajudeen (2020) conducted a study on ICT professionals in Malaysia to ascertain an association of CA and career commitment with TOI (Omar & Tajudeen, 2020). Omar (2018) conducted a study on ICT professionals in Malaysia for observing the influence of CA and happiness at the workplace on TOI (Omar 2018). In the IT sector, the turnover rate is growing because of stiff competition among rivals (TINYpulse, 2016). IT professionals'

turnover rate especially in South East Asia is projected to be high from 2016 onwards because of many opportunities offered to qualified applicants. Researchers need to explore such turnover issues, appraisal of TOI is appropriate because it might indicate the reasons behind exit (Azjen et al., 2009). Earlier findings have demonstrated that employees with high TOI frequently display poor performance and high absenteeism rates.

In the context of the Indian IT industry, TOI was associated with attractive job alternatives as per salary expectations, competencies, and knowledge (Ghapanchi & Aurum, 2011), creative career, and salary dissatisfaction.

### **2.3. Career Satisfaction**

Inequity between expected and present working conditions diminishes career satisfaction (CS). CS is believed to be the critical predictor (Ng et al., 2005) of subjective career success manifested through workforces' affective attitude towards their job (Gattiker & Larwood, 1988). Professionals with higher CA can approach certain aspects of their occupation more positively—for instance, by appraising their job challenges as opportunities, instead of threats, thereby causing the development of extra skills—that might result in a high level of carrier satisfaction.

Studies on worldwide IT professionals showed a variety of internal and external parameters of CS. Personality attributes such as extraversion, openness, emotional resilience, and assertiveness were a few of the internal factors (Lounsbury et al., 2007). Professional development, organizational skills and knowledge, supportive supervisors, and career anchors were external factors (Wickramasinghe & Jayaweera, 2010; Mahatanankoon, 2007). In the context of the Indian IT sector, CS may relate with work-life balance (Rani et al., 2011), perceived organization support (Johri, 2015), and constant training, development, and learning (Manjula & Balachandra, 2017).

### **2.4. Job Performance**

Researchers generally acknowledge that positive career adaptive resources are associated with job performance (JP) (Wright, 2003; Luthans, 2002; Cameron and Caza, 2004). Employees having a positive outlook tend to acknowledge their identities and to create a more constructive image of themselves and this consequently converts into higher JP. Similarly, life satisfaction (Wright and Cropanzano, 2000; DeLuga and Mason, 2000), as well as optimism (Luthans et al., 2007; Kluemper et al., 2009), are connected with higher JP through the development of tolerance to resiliency, helpfulness, and anxiety.

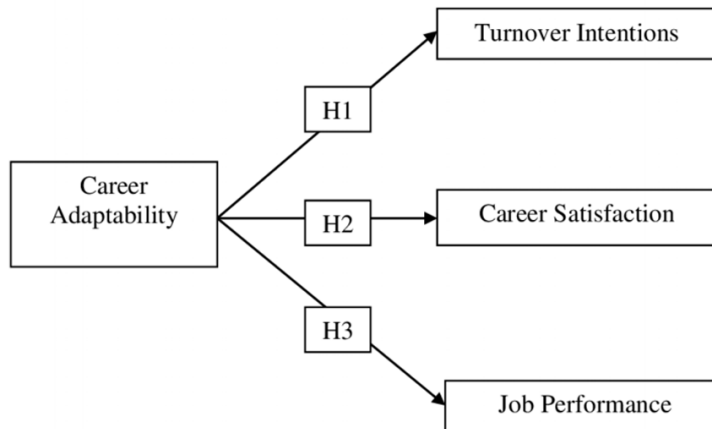
## **3. CONCEPTUAL BACKGROUND AND DEVELOPMENT OF HYPOTHESES**

Career construction theory (CCT) is the foundation of this study. CCT theory states that employees construct their careers from occupational demeanor (Savickas, 2005). Consistent with CCT, recognizing actions essential to make suitable preferences, and effectively surviving occupational transformations, is critical to prolonging a professional career (Savickas, 2002; 2005). According to CCT (Savickas, 2013), CA is an adaptability resource that might affect constructs regarding adapting responses along with results of adaptation (Johnston, 2018; Rudolph et al., 2017). CA findings earlier were related to work and career success; for instance, intentions to leave and job satisfaction (Chan & Mai, 2015).

One of the postulates of the CCT was that adaptation responses could act as a mediator in the association of CA with the constructs that fall under adapting results like TOI (Rudolph et al., 2017). CA implies the deliberation of a transformation. CA might be self-starting in response to dissatisfaction in employment. Thus, employees frequently search for changing several facets of their present state of affairs, and involvement in CA is essential in this process. Any change in an organization entails an alteration for the workforce in terms of career transition. Consequently, career transitions arguably prompt employees' CA, futuristic career behaviors focused on managing internal as well as external career requirements that aid employees become self-sufficient career makers. This presumption, though, has not been examined empirically yet. This study hypothesizes that a threatening career

changeover, prompts an individual's career-adaptive reaction, and this reaction comes back at an individual's workplace in the form of turnover intentions (Figure I). Fig. I depicts the proposed model.

Figure 1. Proposed model



Literature makes it quite evident that IT professionals' TOI is a major challenge in human capital management. Moreover, the international presence of India has been highlighted through IT professionals, hence focusing on their CA, CS, TOI, and JP can provide useful occupational information. Consequently, based on the theoretical background, we propose our model to inspect how CA is connected with IT professionals' occupational aspects of CS, TOI, and JP.

### 3.1. Career Adaptability and Turnover Intentions

Several empirical research works have presented the association of CA with lower TOI (Guan et al., 2015). Regarding TOI, literature demonstrated that CA displayed positive as well as negative relationships. On one hand, Chan and Mai (2015) pointed out that the CA of junior personnel in China negatively predicted their TOI. In a research conducted in Malaysia, results demonstrated that CA reduced TOI in Information and Communication Technology employees. One study's findings revealed that a high level of CA (in particular curiosity) predicted a high level of TOI and contemplate other job options by Brazilian employees. CA resources (4Cs) were also found to have negative relationships with TOI among the Chinese workforce (Guan et al., 2015). For this research, the appraisal of the factors leading to TOI is within the domain of the IT industry.

Moreover, CA creates cognizance in human capital regarding their occupational decisions (Bimrose & Brown, 2015). Therefore, in the prevalent dynamic environment, IT professionals in India perhaps contemplate staying in the same job as a cogent step. Furthermore, IT firms in India have been engaged in maximizing workforce competencies to organize the modern changing business requirements (Kumar, 2015). It might inspire IT professionals to work in the same company as a way to grow in their careers. Hence, this study assumes that the adaptable behavior of Indian IT professionals might curb their intention to leave. Similar results have been reported in various nations in Asia too (Omar, 2018; Omar & Tajudeen, 2020; Chan & Mai, 2015). Thus, this study examines the affiliation of CA with TOI in the IT sector context:

H1: CA is negatively associated with TOI.

### 3.2. Career Adaptability and Career Satisfaction

Rossier et al. (2012) combined 4 elements related to CAAS (Career Adapt-Abilities Scale) into a solo construct. CA has been conceptualized in the form of a solitary construct in the literature and it was reported that a superior CA score is linked to increased levels of career satisfaction (Fiori et al., 2015). A small number of studies related CA with job and CS. Career success has characteristically incorporated subjective versus objective career success (Ng et al., 2005). Explicitly, subjective success describes employees' personal opinions concerning professional achievement, like career satisfaction (Greenhaus et al., 1990).

Amid socio-political, economical, and technological uncertainties, IT professionals in India have to prove their worth to stay employable and design a flourishing career graph. According to CCT, such efforts become obvious through CA which makes employees flexible and competent in achieving professional development. These facets are evident by the reports from media which reveal Indian IT professionals' positive attitude along with their initiatives for tackling future computerization, digitalization, and other work-related issues (Malik & Garg, 2018). Such futuristic and independent moves for going up in the hierarchy might suggest career adaptability, enhancing performance, in this manner escalating career satisfaction. Previous researches have shown that CA is positively associated with CS (Chan & Mai, 2015,). Therefore, this study anticipates that overall CA in Indian IT human capital enhances their CS. Previous researches demonstrated that CA is positively associated with CS (Chan & Mai, 2015). Therefore, we propose:

H2: CA is positively related to CS.

### 3.3. Career Adaptability and Job Performance

The link between CA and JP has seldom been examined in prior studies (Fugate et al., 2004). Few studies related CA with positive outcomes e.g., job performance. Also a small number of researches linked CA with loyalty and higher job search behaviors (Klehe et al., 2011); lower work stress; salary (Guan et al., 2015); happiness (Guan et al., 2013). CA is central to human resources (Savickas & Porfeli, 2012); crucially encouraging for the attainment of job objectives. CA facilitates the workforce to acquire individual accountability for their growth and development by demonstrating self-control. Additionally, adaptive individuals are likely to think that they can convert their career aspirations into reality, effectively resolve their issues, and conquer challenges (Savickas & Porfeli, 2012). Moreover, resource theory described CA in the form of the main instrument for accomplishing organizational performance. Therefore, individuals with higher CA are competent and motivated in existing and upcoming tasks and accomplish a higher level of job performance. CA is the crucial aspect for organizational adaptability as well as individual adaptive behavior that might enhance workplace performance (Jundt et al., 2015). Accordingly, we hypothesize:

H3: CA is positively associated with JP.

## 4. RESEARCH METHODS

### 4.1. Sample

A web-based questionnaire was sent to the IT professionals working in India for conducting the survey. Voluntary participation was sought. Survey data was gathered during March-April 2021. For data acquisition, 737 IT professionals were approached and 401 usable responses were received. Thus, the effective response rate was 54.4%. To ensure that the questions asked in the survey were understandable and clear to the respondents, the questionnaire was pilot-tested on 52 IT professionals. The responses from pilot testing were not included in the final data analysis.

## 4.2. Measures

For all the measures, participants provided their ratings against each item on a Likert scale with 5 points ranging from —‘strongly agree’ = 5 to ‘strongly disagree’ = 1.

### 4.2.1. Turnover Intentions

TOI was assessed through a 4-item scale (O’Reilly et al., 1991).” It measures a professional’s intent to leave the current job/employer. An example question is: “I will search for job opportunities to work for a different organization next year.” The reliability of the overall scale in this study was 0.91.

### 4.2.2. Career Satisfaction

Greenhaus et al. (1990) constructed a standard 5-item scale and it was employed to assess CS for this research. It is very reliable and measures CS. An example item includes: “I am satisfied with the improvements made for achieving my objectives for advancement”. The reliability of the overall scale in this study was 0.87.

### 4.2.3. Job Performance

Motowidlo & Scotter (1994) constructed a 3-item scale which was employed to conduct supervisors’ survey for assessing IT professionals’ JP for this research. The supervisors appraised the JP of each IT professional who participated in the survey on a Likert scale with 5 points ranging from — ‘very low’ = 1 to ‘excellent’ = 5. Three items included: “contribution to unit effectiveness”, “compared with others of the same rank,” and “concerning standards for job performance.” The reliability of the overall scale in this study was 0.84.

### 4.2.4. Career Adaptability

24-item CAAS Scale (Savickas and Porfeli, 2012) has been employed for measuring CA for this research. This scale consisting of all 4 dimensions of confidence, curiosity, control, and concern has been validated in prior researches. Sample items for each dimension include: confidence — “I take care to do things well”, curiosity — “I explore my environment”, control — “I make decisions by myself”, and concern— “I think about my future”. The reliability of the overall scale in this study was 0.81.

## 5. DATA ANALYSES AND STUDY RESULTS

### 5.1. Descriptive Data and Correlations Analysis

Table I summarizes the descriptive figures along with correlations among variables. The average age of 401 IT professionals who participated in the survey was 31.5 years. Out of the sample of 401 IT professionals, 224 were males (55.9%) and 177 were females (44.1%). Mean tenure (in IT professionals’ present companies) was 1.91 years. Our data set was found to be in a normal distribution with kurtosis as well as skewness of each variable within the range of  $\pm 2$  (Kline, 2005). The correlation statistics illustrate initial support for the proposed hypotheses—i.e., CA was negatively related to TOI ( $r = -0.28$ , 1% significance level); positively related to CS ( $r = .44$ , 1% significance level). Likewise, CA related positively to JP ( $r = .38$ , 1% significance level).

Correspondingly, Table I illustrates that each of the AVE’s square root values is higher than the correlation coefficients among constructs employed for this research, thus implying superior discriminant validity.

### 5.2. Reliability and Validity Analysis

EFA was performed using SPSS. AMOS was employed for investigating the measurement model of constructs employing CFA. The data set was found to be in a normal distribution, in line with suppositions for EFA. The normality of data was evaluated by validating the normal distribution of each variable using the Kolmogorov-Smirnov test. A single-factor test of Harman was performed

**Table 1. Descriptive statistics (n = 401)**

Variables	Avg. (SD)	1	2	3	4	5	6	7	8
1. Sex	1.44 (0.39)								
2. Age	31.5 (4.69)	0.03	–						
3. Education	2.41 (0.45)	0.05	0.07	–					
4. Tenure	1.91 (0.25)	1	0.09	0.04	–				
5. Career Adaptability	3.66 (0.74)	0.09	–0.01	0.91	0.09	<b>0.74</b>			
6. Turnover intentions	2.82 (0.88)	0.17	–0.06	–0.21	0.15	–0.28**	<b>0.84</b>		
7. Career Satisfaction	3.05 (1.15)	0.04	0.04	0.17	0.08*	0.44**	0.03	<b>0.79</b>	
8. Job Performance	3.47 (0.70)	0.01	–0.06	0.42	0.19	0.38**	–0.22**	0.21**	<b>0.75</b>

Sex: 2=female, 1=male

Education: 1 = diploma/certificate, 2 = bachelor, 3 = master, 4 = PhD

Age figures are in number of years.

Tenure: 1 < 3 years, 2 >3 years

Significance level: \*p < .05 and \*\*p < .01

to ascertain that our data is free from common method variance and it reported the single factor explaining 19.77% of the total variance. So, common method variance was not found.

Discriminant validity is ascertained where the value of MSV, as well as, ASV is lower than the value of AVE, reliability is ascertained where CR exceeds 0.7, and convergent validity is ascertained where AVE value for every variable exceeds 0.5 (Hair et al., 2010). Table II demonstrates that each measure used is valid as well as reliable, e.g., the AVE value for each variable is greater than .5, displaying a good convergent validity; CR is higher than 0.7, displaying good reliability; and AVE is higher than MSV and ASV, implying good discriminant validity.

**Table 2. Reliability and validity (n = 401)**

Construct	CR	AVE	MSV	ASV	$\alpha$
Career adaptability	0.81	0.55	0.10	0.06	0.89
Career satisfaction	0.87	0.63	0.13	0.12	0.73
Turnover intentions	0.91	0.71	0.16	0.17	0.93
Job performance	0.84	0.57	0.14	0.09	0.70

### 5.3. Hypotheses Testing

Results specified that overall CA negatively and significantly predicted TOI ( $\beta = .38, p < .01$ ). CA was positively associated with CS ( $\beta = .41, 1\%$  significance level), and JP ( $\beta = .19, 5\%$  significance level). Above findings support Hypothesis 1, 2 and 3.

Structural model displayed a suitable fit to data with  $\chi^2/df = 3.73$ , RMSEA = 0.06, CFI = .92, and TLI = .91 (Table III). Furthermore, current research evaluated construct validity through CFA utilizing AMOS. For appraising the model's goodness of fit, we measured the following fit indices: CFI, TLI, RMSEA, and  $\chi^2/df$ . RMSEA score should be lower than 0.08 along with TLI and CFI scores exceeding 0.9 (Hair et al., 2010).

Table 3. Results of hypotheses testings (n = 401)

Model	Hypothesis	Standard beta coefficient $\beta$	Standard error	Critical ratio	Model Fit				Decision
					$\chi^2/df$	CFI	TLI	RMSEA	
Model 1: Overall CA's impact on TI, CS and JP	H1: CA à TI (-)	0.38	0.07	6.69**					Support H1
	H2: CA à CS (+)	0.41	0.06	7.22**					Support H2
	H3: CA à JP (+)	0.19	0.09	2.87*					Support H3
					3.73	0.92	0.91	0.06	

Regression coefficients significant at \* $p < 0.05$ ; \*\* $p < 0.01$

## 6. DISCUSSION

To understand CA's role in reducing TOI of IT professionals in the dynamic environment of the Indian IT industry, a model that investigated the associations among four constructs: CA, TOI, CS, and JP was developed and tested. Although studies on CA are swiftly increasing, researches on such vital occupational element are inadequate in the context of the Indian IT industry characterized by instability and technological advancements. In the backdrop of such inevitable changes, CA plays a crucial role of a liberator. Consequently, the CA quotient of IT professionals in India is required to be determined, recognized, and developed. Hence, current research provides empirical evidence concerning the functioning of CA in Indian IT professionals' occupational domains. How CA might assist in predicting Indian IT professionals' TOI, CS and JP were investigated in the research.

The findings demonstrate a negative association of IT professionals' CA with TOI. This finding is similar to prior studies where CA was found to have a significant impact on TOI (Omar & Tajudeen, 2020; Omar, 2018; Chan & Mai, 2015). In agreement with prior researches (Shafique et al., 2018; Li et al., 2017; Boamah & Laschinger, 2016), CA significantly predicted TOI. So it can be inferred that an employee with a higher career adaptability level has a lower level of turnover intention.

In congruence with earlier studies, the current research revealed that adaptability was necessary for creating CS (Chan & Mai, 2015). CA relates positively to CS, this finding is also in line with CCT. It suggests that IT employees with higher CA might acquire higher psychological characteristics and competence to effectively adapt and control the varying professional challenges of the Indian IT sector. Overall, CA helps IT professionals get ready to handle upcoming challenges and changes leading to CS.

Probably aspiring to gain in the long run describes IT practitioners' expectation to maximize their skills and abilities, matching with quickly rising digital requirements and business challenges. This may, sequentially, enhance involvement in employee development programs that increases self-efficiency and self-conviction, thus strengthening self-reliance to survive unexpected occupational changes. Hence, participating in valuable activities concerning professional success might boost the CS of adaptable IT professionals.

IT professionals' CA fosters their accountability and resolve towards their careers, facilitate IT practitioners to achieve compatible professional objectives, and advances to obtain pertinent expertise. These factors may augment occupational performance, therefore creating career satisfaction.

The findings revealed that CA was positively related to supervisor-rated JP. CA as an individual capability was found to be predicting JP significantly. This is consistent with the research carried out on the Chinese workforce by Haibo et al. (2017).

Since CA helps IT professionals adapt to the dynamic environment of IT organizations and knowing the significance of CA for employees (Sony & Mekoth, 2016; Safavi & Karatepe, 2018; Karatepe & Olugbade, 2017), we anticipate that results can be generalized to IT organizations in other countries.

## 6.1 Implications

This research enriches the extant literature in the IT sector, by describing how CA forms the occupational outlook of IT professionals. Hence current study endeavors to gain the focus of researchers toward this significant event in the background of a dynamic environment with a large turnover rate in the IT sector. Recognizing the influence of CA on Indian IT practitioners' CS and TI reflects the distinctiveness of every resource as recommended by CCT. This investigation can direct researchers to understand the conceptualization of career construction and infer new knowledge into IT employees' professional development. In addition, early validation of the CAAS scale to measure CA prepares a roadmap for its execution in the context of the Indian IT sector. The findings could assist in comprehending and nurturing the skills of human capital in the IT sector in India.

CA positively predicted IT professionals' supervisor-rated JP. This finding has a crucial implication for institutional and employee career planning and management. For IT firms, this finding presents empirical proof regarding the importance of CA in enhancing IT professionals' JP. Professionals with high CA will probably have a high level of JP.

It is substantiated that CA generates a feeling of happiness and CS. In this concern, HR managers can take some initiatives to strengthen CA in IT professionals. In addition to resolving workforce issues and amplifying their beliefs, importance should be placed on enhancing CA, assimilating jointly to hasten IT employees' CS. As far as individual careers are concerned, CA promotes an employee's subjective career success in the form of CS. Thus, the CA is a critical determinant of CS of employees. Therefore, IT professionals need to focus on CA for accomplishing larger success in their career progression. Additionally, IT companies and individuals can construct career progression systems collectively based on CA in the promotion of CA-based development-oriented psychological contracts.

As Indian IT professionals symbolize a global identity, the current study can provide valuable information for managing human capital worldwide. It may aid Western managers to comprehend and administer cross-cultural groups encompassing Indian practitioners in better ways. Current research can assist the academicians particularly those associated with IT programs to incorporate adaptability competencies in their pedagogy for producing a human capital capable of adapting in their career.

## 6.2 Limitations and Recommendations

The first limitation is that the present research is cross-sectional. Hence it might not explain causal associations of CA with TOI, CA, JP. Therefore, future researchers are recommended to carry out longitudinal research for demonstrating causality. Second, the current study exhibits merely a straight association between CA and TOI, CS, JP. Resources of CA such as confidence, curiosity, control, and concern are not included in this study. Therefore, future researchers are recommended to explore the resources of CA to offer valuable insights for gaining a competitive advantage in the context of the IT workforce in India.

## 7. CONCLUSION

Establishing advanced goals, communicating feedback, articulating belief in their capabilities, encouraging independent thoughts and decision-making might inculcate CA in the Indian workforce. These dimensions probably enhance their job performance, amplify productivity, supplement CS and retention factors. Additionally, findings will assist human resource management of IT institutions as well as autonomous career professionals to augment the vocational success of their organizational

members and clients confronting with dissatisfaction in their careers. Similarly, when firms develop counseling and training programs, more emphasis should be placed on advancing individuals' CA to enhance the value of such programs.

This is one of the few studies describing how career adaptability forms the occupational outlook of IT professionals. Current research expands the literature on the IT workforce by demonstrating how CA predicts TOI, CS, and JP. Results have established that CA enhances CS and JP. Results of the present study are invaluable to organizations and professionals by rendering a realistic comprehension of CA to determine the professional outlook of Indian IT professionals, who are the prospective propeller of the nation's development, further than tackling recurrent career instability in constantly changing Indian IT sector.

## **FUNDING AGENCY**

The publisher has waived the Open Access Processing fee for this article.

## REFERENCES

- Azjen, I., Czasch, C., & Flood, M. G. (2009). From intentions to behavior: Implementation intention, commitment, and conscientiousness. *Journal of Applied Social Psychology*, 39(6), 1356–1372.
- Bimrose, J., & Brown, A. (2015). Career decision making and career adaptability. In K. Maree & A. D. Fabio (Eds.), *Exploring new horizons in career counselling* (pp. 249–261). Sense. doi:10.1007/978-94-6300-154-0\_15
- Bimrose, J., & Hearne, L. (2012). Resilience and career adaptability: Qualitative studies of adult career counseling. *Journal of Vocational Behavior*, 81(3), 338–344. doi:10.1016/j.jvb.2012.08.002
- Boamah, S. A., & Laschinger, H. (2016). The influence of areas of work-life fit and work-life interference on burnout and turnover intentions among new graduate nurses. *Journal of Nursing Management*, 24(2), E164–E174. doi:10.1111/jonm.12318 PMID:26122304
- Cameron, K. S., Bright, D., & Caza, A. (2004). Exploring the Relationships between Organizational Virtuousness and Performance. *The American Behavioral Scientist*, 47(6), 766–790. doi:10.1177/0002764203260209
- Carmen, C., Fernández-Sanz, L., & Misra, S. (2013). Featuring CIO: Roles, Skills and Soft Skills. *International Journal of Human Capital and Information Technology Professionals*, 4(1), 22–33. doi:10.4018/jhcitp.2013010103
- Chan, S. H. J., & Mai, X. (2015). The relation of career adaptability to satisfaction and turnover intentions. *Journal of Vocational Behavior*, 89, 130–139. doi:10.1016/j.jvb.2015.05.005
- Cho, V., & Huang, X. (2012). Professional commitment, organizational commitment, and the intention to leave for professional advancement: An empirical study on IT professionals. *Information Technology & People*, 25(1), 31–54. doi:10.1108/09593841211204335
- DeLuga, R. J., & Mason, S. (2000). Relationship of resident assistant conscientiousness, extraversion, and positive affect with rated performance. *Journal of Research in Personality*, 34(2), 225–235. doi:10.1006/jrpe.1999.2272
- Fernández-Sanz, L., Gómez-Pérez, J., Díez-Folledo, Teresa, I., & Misra, S. (2016). Researching human and organizational factors impact for decisions on software quality. *Proceedings of the 11<sup>th</sup> International Conference on Software Engineering and Applications*.
- Fernández-Sanz, L., Villaba M. T., Medina, J. A., & Misra, S. (2017). A study on the key soft skills for successful participation of students in multinational engineering education. *International Journal of Engineering Education*, 33(6), 2061–2070.
- Fiori, M., Bollman, G., & Rossier, J. (2015). Exploring the path through which career adaptability increases job satisfaction and lowers job stress: The role of affect. *Journal of Vocational Behavior*, 91, 113–121. doi:10.1016/j.jvb.2015.08.010
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1), 14–38. doi:10.1016/j.jvb.2003.10.005
- Gattiker, U. E., & Larwood, L. (1988). Predictors for managers' career mobility, success, and satisfaction. *Human Relations*, 41(8), 569–591. doi:10.1177/001872678804100801
- Ghapanchi, A. H., & Aurum, A. (2011). Antecedents to IT personnel's intentions to leave: A systematic literature review. *Journal of Systems and Software*, 84(2), 238–249. doi:10.1016/j.jss.2010.09.022
- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33(1), 64–86.
- Guan, Y., Deng, H., Sun, J., Wang, Y., Cai, Z., Ye, L., & Li, Y. (2013). Career adaptability, job search self-efficacy and outcomes: A three-wave investigation among Chinese university graduates. *Journal of Vocational Behavior*, 83(3), 561–570. doi:10.1016/j.jvb.2013.09.003
- Guan, Y., Zhou, W., Ye, L., Jiang, P., & Zhou, Y. (2015). Perceived organizational career management and career adaptability as predictors of success and turnover intention among Chinese employees. *Journal of Vocational Behavior*, 88, 230–237. doi:10.1016/j.jvb.2015.04.002
- Gupta, K., & Raman, T. V. (2021). Influence of Intellectual Capital on Performance: An Analysis of IT and Pharmaceutical Firms. *International Journal of Human Capital and Information Technology Professionals*, 12(2), 53–71. Advance online publication. doi:10.4018/IJHCITP.2021040104
- Haibo, Y., Xiaoyu, G., Xiaoming, Z., & Zhijin, H. (2017). Career Adaptability With or Without Career Identity: How Career Adaptability Leads to Organizational Success and Individual Career Success? *Journal of Career Assessment*. Advance online publication. doi:10.1177/1069072717727454

- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2010). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall.
- Imran, M., Salisu, I., Aslam, H., Iqbal, J., & Hameed, I. (2019). *Resource and Information Access for SME Sustainability in the Era of IR 4.0: The Mediating and Moderating Roles of Innovation Capability and Management Commitment*. Academic Press.
- Jha, S. (2009). Determinants of employee turnover intention: A review. *Management Today*, 9(2), 26–33.
- Johnston, C. S. (2018). A Systematic Review of the Career Adaptability Literature and Future Outlook. *Journal of Career Assessment*, 26(1), 3–30. doi:10.1177/1069072716679921
- Johnston, C. S., Luciano, E. C., Maggiori, C., Ruch, W., & Rossier, J. (2013). Validation of the German version of the career adapt-abilities scale and its relation to orientations to happiness. *Journal of Vocational Behavior*, 83(3), 295–304. doi:10.1016/j.jvb.2013.06.002
- Johri, R. (2015). *Effect of self-efficacy and perceived organizational support on employee work passion and career satisfaction* (Doctoral dissertation). Jaypee Institute of Information Technology.
- Joseph, D., Ng, K. Y., Koh, C., & Ang, S. (2007). Turnover of information technology professionals: A narrative review, meta-analytic structural equation modeling, and model development. *Management Information Systems Quarterly*, 31(3), 547–577. doi:10.2307/25148807
- Jundt, D. K., Shoss, M. K., & Huang, J. L. (2015). Individual adaptive performance in organizations: A review. *Journal of Organizational Behavior*, 36(S1), 53–71. doi:10.1002/job.1955
- Karatepe, O. M., & Olugbade, O. A. (2017). The effects of work social support and career adaptability on career satisfaction and turnover intentions. *Journal of Management & Organization*, 23(3), 337–355. doi:10.1017/jmo.2016.12
- Khatri, Y. (2017). Upskilling could help techies survive layoffs: 5 case studies tell you how. *The Economic Times*. Retrieved on June 3, 2017 from <https://economictimes.indiatimes.com/wealth/earn/upskilling-could-help-techies-survivelayoffs-5-cases-studies-tell-you-how/articleshow/58820553.cms>
- Klehe, U.-C., Zikic, J., Vianen, V., Annelies, E. M., & De Pater, I. E. (2011). Career adaptability, turnover and loyalty during organizational downsizing. *Journal of Vocational Behavior*, 79(1), 217–229. doi:10.1016/j.jvb.2011.01.004
- Kline, R. B. (2005). *Principles and practices of structural equation modeling* (2nd ed.). Guilford Press.
- Kluemper, D. H., Little, L. M., & DeGroot, T. (2009). State or trait: Effects of state optimism on job-related outcomes. *Journal of Organizational Behavior*, 30(2), 209–231. Advance online publication. doi:10.1002/job.591
- Kumar, K. (2015). Why IT professionals constantly need to upskill. *The Financial Express*. Retrieved on October 1, 2015 from <https://www.financialexpress.com/jobs/why-it-professionals-constantly-need-to-upskill/135157/>
- Kumari, K. T. (2021). Effect of Career Determinants on Employee Engagement in the Indian IT Sector: Gender as a Moderator. *International Journal of Human Capital and Information Technology Professionals*, 12(4), 18–30. Advance online publication. doi:10.4018/IJHCITP.2021100102
- Li, J. J., Kim, W. G., & Zhao, X. R. (2017). Multilevel model of management support and casino employee turnover intention. *Tourism Management*, 59, 193–204. doi:10.1016/j.tourman.2016.08.006
- Lounsbury, J. W., Moffitt, L., Gibson, L. W., Drost, A. W., & Stevens, M. (2007). An investigation of personality traits in relation to job and career satisfaction of information technology professionals. *Journal of Information Technology*, 22(2), 174–183. doi:10.1057/palgrave.jit.2000094
- Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *The Academy of Management Perspectives*, 16(1), 57–72. Advance online publication. doi:10.5465/ame.2002.6640181
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction. *Personnel Psychology*, 60(3), 541–572. Advance online publication. doi:10.1111/j.1744-6570.2007.00083.x
- Mahatanankoon, P. (2007). The effects of post-educational professional development activities on promotion and career satisfaction of IT professionals. In D. Lending & C. Vician (Eds.), *The global information technology workforce: Proceedings of the 2007 ACM SIGMIS CPR conference on Computer personnel research* (pp. 9–14). ACM. doi:10.1145/1235000.1235003
- Malik, P., & Garg, P. (2018). Psychometric testing of the resilience at work scale using Indian sample. *Vikalpa*, 43(2), 77–91. doi:10.1177/0256090918773922

- Manjula, P., & Balachandra, P. (2017). A study on various training programmes and their effects offered by the IT firms. In S. C. Satapathy, V. Bhatega, S. K. Udgata, & P. K. Pattnaik (Eds.), *Proceedings of the 5th International Conference on Frontiers in intelligent computing: Theory and applications* (pp. 455–463). Springer. doi:10.1007/978-981-10-3153-3\_45
- McLaughlin, S., Sherry, M., Carcary, M., O'Brien, C., Fanning, F., Teodorakis, D., & Farren, N. (2012). *E-Skills and ICT Professionalism: Fostering The ICT Profession In Europe*. Retrieved From <http://www.ictprof.eu>
- Merino-Tejedor, E., Hontangas, P. M., & Boada-Grau, J. (2016). Career adaptability and its relation to self regulation, career construction, and academic engagement among Spanish university students. *Journal of Vocational Behavior*, 93, 92–102. doi:10.1016/j.jvb.2016.01.005
- Misra, S. (2021). A step by step guide for choosing project topics and writing research papers in ICT related disciplines. In *Communications in Computer and Information Science* (vol. 1350). Springer. 10.1007/978-3-030-69143-1\_55
- Motowidlo, D. J., & Scotter, J. R. V. (1994). Evidence that task performance should be distinguished from contextual performance. *The Journal of Applied Psychology*, 79(4), 475–480. doi:10.1037/0021-9010.79.4.475
- NASSCOM. (2020). *National Association of Software and Services Companies (NASSCOM)*. Retrieved on December 26, 2020 from <https://nasscom.in/knowledge-centre/newsline>
- Ng, T. W., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58(2), 367–408. doi:10.1111/j.1744-6570.2005.00515.x
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3), 487–516.
- Omar, S. (2018). The Influence of Career Adaptability and Work Happiness on ICT Professionals' Intention to Leave. *International Journal of Human Capital and Information Technology Professionals*, 9(1), 23–36. doi:10.4018/IJHCITP.2018010102
- Omar, S., & Tajudeen, F. P. (2020). The Influence of Career Adaptability and Career Commitment to Minimize Intention to Leave Among ICT Professionals. *International Journal of Human Capital and Information Technology Professionals*, 11(2), 23–38. doi:10.4018/IJHCITP.2020040102
- Porfeli, E. J., & Savickas, M. L. (2012). The Career Adapt-Abilities Scale: Construction, reliability, and initial validity of the USA form. *Journal of Vocational Behavior*, 80, 748–753. doi:10.1016/j.jvb.2012.01.009
- Ramasamy, K., & Reddy, L. S. (2018). A Study on the Lack of Job Creation in the Indian it Industry. *Indore Management Journal*, 10(1). <https://ssrn.com/abstract=3494152>
- Rani, S., Kamalanabhan, T. J., & Selvarani, M. (2011). Work/life balance reflections on employee satisfaction. *Serbian Journal of Management*, 6(1), 85–96. doi:10.5937/sjm1101085R
- Rossier, J., Zecca, G., Stauffer, S. D., Maggiori, C., & Dauwalder, J. P. (2012). Career adapt-abilities scale in a French-speaking Swiss sample: Psychometric properties and relationships to personality and work engagement. *Journal of Vocational Behavior*, 80(3), 734–743. doi:10.1016/j.jvb.2012.01.004
- Rudolph, C., Lavigne, K. N., & Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. *Journal of Vocational Behavior*, 98, 17–34. doi:10.1016/j.jvb.2016.09.002
- Safavi, H. P., & Karatepe, O. M. (2018). High-performance work practices and hotel employee outcomes: The mediating role of career adaptability. *International Journal of Contemporary Hospitality Management*, 30(2), 1112–1133. doi:10.1108/IJCHM-07-2016-0367
- Samgnanakkan, S. (2010). Mediating Role Of Organizational Commitment On HR Practices And Turnover Intention Among ICT Professionals. *Journal of Management Research*, 101, 39–61.
- Savickas, M. L. (2002). Career construction: A developmental theory of vocational behavior. In D. Brown (Ed.), *Career choice and development* (4th ed., pp. 149–205). Jossey Bass.
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 40–70). Wiley.
- Savickas, M. L. (2011). *Career counseling*. American Psychological Association.
- Savickas, M. L. (2013). Career construction theory and practice. In R. W. Lent & S. D. Brown (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 147–183). John Wiley & Sons.

- Savickas, M. L. (2013). The 2012 Leona Tyler Award Address: Constructing Careers—Actors, Agents, and Authors  $\Psi$ . *The Counseling Psychologist*, 41(4), 648–662. doi:10.1177/0011000012468339
- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661–673. doi:10.1016/j.jvb.2012.01.011
- Shafique, I. N., Kalyar, M., & Ahmad, B. (2018). The nexus of ethical leadership, job performance, and turnover intention: The mediating role of job satisfaction. *Interdisciplinary Description of Complex Systems: INDECS*, 16(1), 71–87. doi:10.7906/indcs.16.1.5
- Sommer, L., & Haug, M. (2011). Intention as a Cognitive Antecedent to International Entrepreneurship—Understanding the Moderating Roles of Knowledge and Experience. *The International Entrepreneurship and Management Journal*, 7(1), 111–142. doi:10.1007/s11365-010-0162-z
- Sony, M., & Mekoth, N. (2016). The relationship between emotional intelligence, frontline employee adaptability, job satisfaction and job performance. *Journal of Retailing and Consumer Services*, 30, 20–32. doi:10.1016/j.jretconser.2015.12.003
- Statista. (2021). *Share of voluntary staff turnover among companies across India in FY 2018 by industry*. Statista Research Department. Accessed on May 20, 2021. <https://www.statista.com/statistics/737996/average-voluntary-staff-turnover-by-industry-india/>
- The Hindu. (2017). *Adaptability key to survival of IT entities, say experts*. Retrieved on August 1, 2017 from <http://www.thehindu.com/news/cities/Thiruvananthapuram/adaptability-key-to-survival-of-it-entities-say-experts/article19236222.ece>
- Tinypulse. (2016). *2016 Tech Industry Reports: Increased Turnover Risk & Other Trends In Workplace Engagement*. Retrieved from <https://www.Tinypulse.Com/2016-Tech-Industry-Report>
- Today, I. (2018). *Re-skill or don't complain if you are fired, IT leaders concur as they forecast job boom in India*. Retrieved on Feb 12, 2018 from <https://www.indiatoday.in/india-today-conclave-south-2018/story/india-todayconclave-south-2018-it-edge-job-cognizant-satyam-jabong-nestaway-1148825-2018-01-18>
- Upadhyia, C. (2008). Rewriting the code: Software professionals and the reconstitution of Indian middle class identity. In C. Jaffrelot & P. van der Veer (Eds.), *Patterns of middle class consumption in India and China* (pp. 55–87). SAGE Publications.
- Verma, P., & Agarwal, S. (2017). Bleak future ahead for sacked IT employees: Experts. *The Economic Times*. Retrieved on May 19, 2017 from <http://economictimes.indiatimes.com/tech/ites/bleak-future-ahead-for-sacked-itemployees-experts/articleshow/58688660.cms>
- Wickramasinghe, V., & Jayaweera, M. (2010). Impact of career plateau and supervisory support on career satisfaction: A study in offshore outsourced IT firms in Sri Lanka. *Career Development International*, 15(6), 544–561. doi:10.1108/13620431011084402
- Wright, P. M., Gardner, T. M., & Moynihan, L. M. (2003). The impact of HR practices on the performance of business units. *Human Resource Management Journal*, 13(3), 21–36. doi:10.1111/j.1748-8583.2003.tb00096.x
- Wright, T. A., & Cropanzano, R. (2000). Psychological Well-Being and Job Satisfaction as Predictors of Job Performance. *Journal of Occupational Health Psychology*, 5(1), 84–94. doi:10.1037/1076-8998.5.1.84 PMID:10658888

*Vikram Singh Chouhan is PhD, MBA, B.E. with 15 years of teaching experience. He is currently working as Assistant Professor in the Department of Humanities & Social Sciences at Jaypee University of Engineering and Technology, Guna. He writes and presents widely on issues of Human Resource Management, Organizational Behavior, Employee Training and Development.*