

INDIVIDUAL LEVEL ABSORPTIVE CAPACITY AND INNOVATIVE WORK BEHAVIOR: A MODERATED MEDIATION MODEL

Hazrat Jan*

Faculty of Management Sciences, International Islamic University Islamabad

Dr. Kausar Fiaz Khawaja

Assistant Professor, Faculty of Management Sciences, International Islamic
University Islamabad

Henna Gul Nisar

Lecturer, IBMS, FMCS, The University of Agriculture, Peshawar

ABSTRACT

In today's highly challenging and dynamic business environment, organizational survival has become very difficult without continuous growth, which can only be achieved through employees' collective creativity and innovative work behaviour. The aim of this study is to analyze the relationship between individuals' potential absorptive capacity and innovative work behaviour, with individual realized absorptive capacity as mediator in the relationship. Job autonomy was hypothesized to moderate the relationship. To test these hypotheses empirical data from 200 employees of different software houses was collected and Partial Least Squares (PLS), a structural equation modelling (SEM) approach along with mediation and moderation was applied for analysis. Results of this study show that the effect of individuals potential absorptive capacity on innovative work behaviour is fully mediated by the individuals realized absorptive capacity has indirect relationship through realized absorptive capacity. This study provides novel insights into the multidimensional nature of absorptive capacity at individual level.

Keywords: Individual Absorptive Capacity; Innovative Work Behaviour; Creativity; Job Autonomy; Potential Absorptive Capacity; Realized Absorptive Capacity; Individuals; Organization.

INTRODUCTION

Today's business world is facing diverse challenges due to continuous changes in social, political, economic and technological landscapes (Ravichandran, 2017). According to Khan et al. (2020) that due to rapid changes in global economic situation and the dynamics of emerging technologies and information the working environment in organizations has changed. These changes continuously influence individuals' preferences and buying behaviour which exert continuous pressure on organizations to timely respond. To address changing customers' preferences and choices effectively, continuous innovation has become inevitable for organizations. According to resource based view (Barney, 1986, 1991)

employees are the most important resource of the organizations (Ismail et al., 2012). Organizations are increasingly dependent on employees to innovate the process, products, services and operations which ultimately determines organizational survival and success (Ahmad et al., 2013; Prahalad & Krishnan, 2008; Ramamoorthy et al., 2005; Yuan & Woodman, 2010). Employees Innovative work behavior (IWB) is essential for organizations to be innovative in responding changing customers' preferences and industrial dynamics (De Jong and Den Hartog 2007; Janssen 2000; Shanker et al., 2017). IWB is operationalized by scholars as a set of complex behaviours and is defined as "the intentional behaviour of an individual to introduce and/or apply new ideas, products, processes, and procedures to his or her work role, unit, or organization" (De Jong, 2007). Yuan and Woodman (2010) defined IWB as "development, adoption and implementation of new ideas for products and work methods". According to Mura et al. (2012), IWB is "individuals' behavior aiming at introducing new and useful ideas, processes and products in their work environment".

Extant literature shows different factors at micro, meso and macro level that trigger employees innovative work behaviour and these studies have discussed innovation from individual, contextual and organizational perspectives focusing on the factors that potentially promote innovative work behavior (e.g. Ferreras-Méndez et al., 2016; Heil and Enkel, 2015; Janssen, 2000; Janssen, 2004; Ritala & Laukkanen, 2013). However, meta-analysis by Hammond et al. (2011) found that most of these antecedents are not specific to innovative work behavior and considered this a limitation in the existing literature and emphasized to explore more innovative work behavior specific antecedents. Shafie, et al. (2014) argue that despite of recognized importance of IWB and growing interest of academicians and researchers to understand the individual and organizational variables that underlie the employees' innovative work behavior, our knowledge about IWB is still limited. Anderson et al. (2018) also recommended further research to enhance our understanding about individuals' innovative work behavior.

Employees can't be innovative without acquiring continuous knowledge. According to Lane et al. (2006), every individual within organization brings knowledge, scans the environment and assimilates knowledge to foster new ideas and innovations. This ability of employees to acquire knowledge is termed as individual absorptive capacity (AbCap) and defined as "individual's ability to identify, assimilate and utilize new external knowledge" (Lewin et al., 2011). Huang et al. (2015) argued that individuals are deemed as the center of absorptive capacity. Absorptive capacity facilitates the adoption and use of new knowledge (Cohen and Levinthal 1990). It has the potential to trigger innovative work behavior (Kang and Lee, 2017). However, role of individual level AbCap is understudied (Tortoriello, 2015). According to Volberda et al. (2010), further research should focus on impact of individual level AbCap on innovative work behavior.

Individuals as of knowledge employees are particularly known for recognizing external knowledge, by the methods of knowledge integration and sharing and perform as the carters of knowledge, innovation and creation (Fernandes, Ferreira, & Peris, 2019; Pérez et al., 2019). According to (Dahlander et al., 2016; Li et al., 2013) organizations depends on individual employees to identify and learn from external sources of knowledge. Similarly,

Simon (1991, p. 125) highlights that “all learning takes place inside individual human heads”. This notion is also discussed by Cohen and Levinthal in the concept of absorptive capacity such that “organization’s absorptive capacity will depend on the absorptive capacities of its individual members”(Cohen and Levinthal, 1990, p. 131). Researcher mostly studied absorptive capacity at organizational level or team level e.g., Lane et al., 2001; Lane et al., 2006; Volberda et al., 2010); or rarely the alliance level (e.g., Lane and Lubatkin, 1998; Lane et al., 2001) or the business unit level (e.g., Jansen et al., 2005; Tsai, 2001), but neglecting absorptive capacity at individual level. However, the researchers also stated that Innovative work behavior (IWB) has a positive impact on the individual absorptive capacity (Pérez et al., 2019). However, several scholars have discussed that “there should be more individual level foundation studies for absorptive capacity” (Volberda et al., 2010, p. 945). Recently scholars begun to focus on the nature and sources of absorptive capacity by studying its micro-level foundations (Colombo et al., 2013; Lowik et al., 2012; TerWal et al., 2017; Tortoriello, 2014). Absorptive capacity is identified as key dynamic capability that facilitate innovative behavior (Kang & Lee, 2017). In spite of studies focused on traditional and innovation specific antecedents of employees’ innovative work behavior (e.g., Da Silva and Davis 2011), further exploring interrelationship among these antecedents will be an interesting endeavour (Kang and Lee, 2017). Thus, this study strives to validate and explore further the relationship between the dimensions of individual level absorptive capacity and IWB.

According to Schweisfurth and Raasch (2018) it is necessary to understand the impact of contextual factors on the relationship between absorptive capacity and employees’ innovativeness at individual level. Employees need resources and demands additionally during involvement in innovation development activities such as innovative work behavior (Palonen et al., 2018), these demands may include facilities such as job factors (e.g., job autonomy), individual factors (e.g., individual motivation) and contextual factors (e.g., social support) (Hammond et al., 2011). Autonomy in work place is specifically significant for innovative work behavior because studies on creativity and innovation has revealed (Amabile et al., 1996), when individuals perceive that they have choices about how to accomplish assigned task they produce more creative work. Allowing the employees to share and pursue their creative ideas with colleagues during working hours is essential for innovativeness (Deschamps, 2009). In accordance with earlier findings (Janssen and Van Yperen, 2004) that when employees are encouraged for their creative ideas they are likely to continue ideas generation and even commence inventions in extra time (Davis et al., 2013). Since autonomy in work place provides empower employees to be innovative and explore new opportunities. Job autonomy therefore, provides essential freedom to employees to make decisions, form the intrinsic motivational state that is pre-requisite for creativity and innovative work behavior (Alpkan et al., 2010). Creativity and innovations involves trial and error technique and success and failure, job autonomy allows employees to work on ‘trial and error’ basis and perform the assigned task in more efficient and effective ways to accomplish the wok. Thus job autonomy gives employees to work an innovative way and apply new ideas even in the face of failure (Ramamoorthy and Flood, 2005). A job without autonomy will hinder the employees to think creatively and thus prevent trying new thing out. Based on the existing studies present study has taken into account employees’ job autonomy as a moderating

variable which may enhance the influence of employees' absorptive capacity on innovative work behavior.

LITERATURE REVIEW

INNOVATIVE WORK BEHAVIOR (IWB)

Farr and Ford (1990) defined innovative work behavior (IWB) as “an individual’s behavior that aims to achieve the initiation and intentional introduction (within a work role, group or organization) of new and useful ideas, processes, products or procedures”. Similarly, Yuan & Woodman (2010) define IWB as “development, adoption and implementation of new ideas for products and work methods”, and De Spiegelaere et al. (2014) defined IWB as “employee behavior oriented to generation, introduction and application (within a role, group or organization) of ideas, processes, products or procedures, new and intended to benefit the relevant adoption”. Torres et al. (2017) noticed that all these definitions of IWB are quite similar and researchers ‘consensus is that the concept is involved in the employees’ outcomes through a set of intentional behaviors.

The room for innovation is wide-ranging, it ranges from a small change in daily routine to a complete new and effective idea that may have an influence on product, processes, theories and practices prevailing within the organization (Janssen, 2004). Hence, the concept of innovation is not only related to products and services but it also includes the generation of process and practices in the organization to benefit customers (Shin and Zhou, 2003). Hurt et al. (1977) argued that innovative is the degree to which employees in organization involve in the action of adopting something novel to solve any type of problems that faced in the work system. Innovative work behavior is one’s psychological empowerment to think creatively while seeing a situation or solution in the work area (Scott and Bruce, 1994).

INDIVIDUAL ABSORPTIVE CAPACITY

Over the last two decades, absorptive capacity (AbCap) has remain the area of interest of a number of researchers (Lane et al., 2006) and was coined originally in macroeconomics, where Adler (1965) referred it as “ability of an economy to utilize and absorb external information (i.e., knowledge) and resources” (Tua et al., 2006). Later, Cohen and Levinthal (1989; 1990) adjusted this macroeconomic concept to organizations and defined as “the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends”.

Scholars (e.g., Jansen et al., 2005; Volberda et al., 2010; Zahra and George, 2002) have long debated that in order to understand absorptive capacity of organization, it is important to examine the absorptive capacity of its employees. Organizations depends on its employees to identify and acquire new knowledge from external sources (Dahlander et al., 2016). According to Cohen and Levinthal (1990) “organization’s absorptive capacity depends on the absorptive capacities of its individual members”. Individual AbCap is defined as “individual's ability to identify, assimilate and utilize new external knowledge” (Lewin et al., 2011). Individual AbCap is the root of organizational level AbCap (Cohen and Levinthal,

1990) as “all learning takes place inside individual huheads” (Simon, 1991). According to Axelrod, (1973) individuals absorb and assess new knowledge based on their past knowledge, which helps them in assessment of novelty and quality of the newly absorbed knowledge, recognize the context in which the new knowledge is embedded (Parker and Axtell, 2001) and exploit the enhanced knowledge for innovation (Lane et al., 2006).

After a decade Zahra and George (2002) re-conceptualized AbCap and defined it as “a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge”. Zahra and George, (2002) proposed two dimensions of AbCap as potential and realized absorptive capacity. Potential absorptive capacity (PAbCap) comprises of knowledge acquisition and assimilation capabilities to value and acquired external knowledge and realized absorptive capacity (RAbCap) centres on knowledge transformation and exploitation capability to leverage the absorbed knowledge. Studies (e.g., Jansen et al., 2005; Cepeda-Carrion et al., 2012; Rakthin et al., 2016; Yao and Chang, 2017) suggested that these dimensions are theoretically and empirically distinguishable. According to Zahra and George, (2002) the effect of PAbCap and RAbCapis complementary not mutually exclusive and they must exist simultaneously in order to accomplish optimal performance outcomes. This study examine the outcomes of individual AbCap by examining its effect on employees innovative work behavior and the role of realized AbCap as a mediator in the employee potential AC-IWB relationship.

JOB AUTONOMY

Autonomy is one of the central characteristics of job as it provides opportunity to the employees to apply different work methods in the workplace (Sönmez and Yildirim, 2019). Lin and Ping, (2016) stated that job autonomy is one of the other important job conditions that is part of the Hackman and Oldham’s (1976) “job characteristics model” and supposed to have influence on employee’s reactions to job in the workplace. Job autonomy is defined by Dodd and Ganster, (1996) and Hackman & Oldham, (1976) as “the freedom, independence and discretion of employees in schedule the work, determining work method and work criteria to accomplish their job and responsibilities”. Breugh (1985) discussed that job autonomy consists of work method autonomy, work scheduling and work criteria autonomy; work method autonomy means the discretion that one could choose the procedure or method to perform the task, work scheduling autonomy means that one could have control on the sequencing and timing of task and work criteria autonomy means the discretion that one can change indicators/standards of evaluation criteria of his/her own performance. Increase job autonomy is considered as favorable condition that permits employees to use their decision making skills to perform task in the workplace (Lin and Ping, 2016). In high level job autonomy employees can disrupt the routine work procedure and apply new methods in work place (Dhar, 2016). According to Hornung and Rousseau (2007) “Autonomy on the job is perhaps the central work characteristic in shaping worker attitudes, motivation and behavior”

Proposed Theoretical Framework

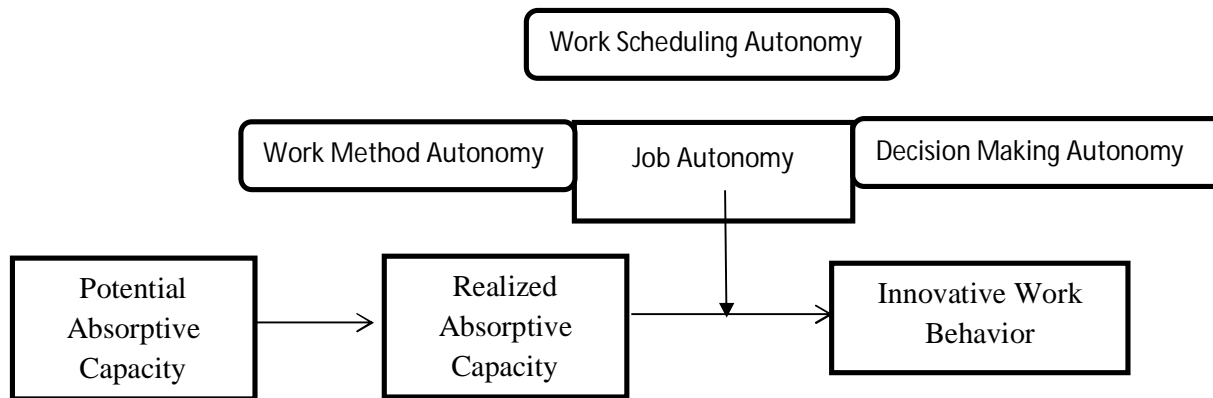


Figure 1, Proposed Research Model

HYPOTHESIS DEVELOPMENT

Individual level absorptive capacity and Innovative Work Behavior

Scholars in recent studies pointed out that the development of knowledge base of organization through external sources increases the innovativeness (West and Bogers, 2014; Leiponen and Helfat 2010; Cohen and Caner, 2016). According to March and Simon (1958 cited by Kang and Lee, 2017) in organizations most innovations results due to getting new ideas by employees from outside instead of inventing from inside. For example individual employees working in the organization scan the external environment bring knowledge inside and exploits that knowledge to execute innovative activity (Lane et al., 2006). Individuals' absorptive capacity facilitates the adoption and use of new knowledge (Cohen and Levinthal 1990) that can lead to innovative work behavior (Kang and Lee, 2017). Individuals are deemed as the center of absorptive capacity (Huang et al., 2015), further research to study the foundation of individual level AC and its influence on innovation is important (Volberda et al., 2010).

Most of the studies just examined the two dimensions of absorptive capacity chain (Volberda et al., 2010). However, according to Lane et al. (2006) empirically examining the relationship between the two dimensions potential AC and realized AC would provide base to important theoretical argument. The relationship of PAbCap and RAbCap helps in understanding the nature of optimal absorptive capacity (Volberda et al., 2010). The core logic of absorptive capacity model developed by Zahra and George (2000) is that PAbCap directly influences RAbCap. Studies discussed many factors that build PAC such as past experience and exposure to sources of external knowledge, job rotation, coordination and socialization capabilities (Zahra and George, 2002; Janssen, 2005). Malhotra et al. (2005) stated that acquisition of external knowledge rebuild base of the organization's knowledge, assimilated by PAbCap capabilities (Zahra and George, 2002). Organizations use their complementary capabilities to make valuable the assimilated knowledge (Roper et al., 2008). The acquired knowledge stock sets by PAbCap are logically leveraged by RAbCap (Seo et al., 2015). The cumulative character of absorptive capacity emphasized by Cohen and Levinthal, (1990)

show the relationship between PAbCap and RAbCap. The link of PAbCap and RAbCap is also supported by Zahra and George (2002) as they reported that without having previously acquired knowledge external knowledge cannot be exploited. Organization depends on employees to identify and learn from external sources of knowledge (Dahlander et al., 2016). As organizations involve in acquisition and assimilation of knowledge, members of organizations are possibly to develop new understandings during this process and are likely found them relevant during exploitation (Seo et al., 2015). Further states that PAbCap likely provide a base for increasing RAbCap. Hence, based on the literature we hypothesize that:

Hypothesis1: *Individuals potential absorptive capacity (PAbCap) is positively related to Individual realized absorptive capacity (RAbCap).*

Absorptive capacity itself is not an ultimate goal for an organization; but can lead to important outcomes (Escribano et al., 2009) such as innovation (Cohen and Levinthal, 1990). Amabile et al. (1996) also argued that the success of organization depends more on the knowledge, intelligence and innovation of the employees than its tangible resources. Focusing on the importance of knowledge, Lane et al., (2006) stated that every individual within the organization brings knowledge, scans the environment and assimilates knowledge to foster new ideas and innovations. Ahmed et al. (2013) believed that individuals with higher absorptive capacity usually tend to perform more innovative work behavior. They further explain that for innovative ideas individual must needs capability to acquire and absorb knowledge. Kang and Lee (2017) studied the relationship of both sub-dimensions of AC and IWB and found it significant and recommended that exploring the interrelationship among the traditional and innovation specific antecedents of innovative work behavior of employees will be a better future research efforts. Therefore, we hypothesize that:

Hypothesis2: *Individual realized absorptive capacity is positively related to innovative work behavior.*

THE MEDIATING ROLE OF REALIZED ABSORPTIVE CAPACITY (RABCAP)

The two dimensions of absorptive capacity identified by Zahra and George (2002), are PAbCap based on “knowledge acquisition and assimilation”, RAbCap based on “knowledge transformation and exploitation”. According to Ali et al. (2017), though PAbCap capture external knowledge but does not ensure the exploitation of the acquired knowledge while RAbCap reflects to leverage the acquired knowledge. The division of absorptive capacity in sub dimensions-potential and realized based in the underlined principal that potential capabilities are more significant when they are realized (Zahra and George, 2002). According to Lee and Wu (2010), “Knowledge alone is not enough. A firm needs to have tools to exploit and appropriate this knowledge embedded in new organizational innovations”. Similarly according to Axelrod, (1973) “individuals absorb and evaluate new knowledge based on their prior knowledge, which helps them in assessment of novelty and quality of the newly absorbed knowledge” (Parker and Axtell, 2001), and “exploit the enhanced knowledge for innovation” (Lane et al., 2006). Individual level AC has been studied and revealed to be based on previous knowledge and the diversity of external networks (Lowik et al., 2016; Jiménez-Castillo and Sánchez-Pérez, 2013) and to be linked to innovativeness (Lowik et al.,

2016; Tortoriello, 2015), task performance (Deng et al., 2008; Parker et al., 2006), knowledge creation (Matusik and Heeley, 2005). Considering all the arguments, we hypothesize that:

Hypothesis 3: Individual realized absorptive capacity mediates the relationship between Potential absorptive capacity and innovative work behavior.

MODERATING ROLE OF JOB AUTONOMY (JA)

A positive correlation has been found between JA and IWB in many past researches (Parzafall et al., 2008; Sönmez and Yildirim, 2014). According to De Spiegelare et al. (2014) autonomy is considered an important determinant of IWB. Sönmez and Yildirim, (2018) also state that autonomy influences IWB in workplace. Job autonomy provides a feeling of freedom and empowerment to employees that create an intrinsic motivational state required for creativity and innovative work behavior (Hennessey and Amabile, 2010; Shalley et al., 2000). Bysted, (2013), considers job autonomy necessary liberty for employees to explore new opportunities and a prerequisite for generation of innovative ideas.

Increase in job autonomy helps employees to perform their tasks according to their well (Mueller and Osinsky, 2000). However, we expect that JA may influence the relationship of realized absorptive capacity and innovative work behavior such that when proactive employees work in an environment where they have a low level of freedom their innovative thinking will be automatically restricted. In an environment where employees have a high level of JA, they feel free to decide how to execute their tasks in a new and better way. Thus, we predict that job autonomy has moderating effects on the relationship between realized absorptive capacity and innovative work behavior such that a low level of job autonomy compared to a high level of job autonomy intensifies this relation. Employees cannot be innovative in a job design with no autonomy as this hinders the employees in being innovative and provides no room for trying innovative things out (Bysted, 2013). According to Janssen and Van Yperen (2004), job autonomy is an essential part of an innovative environment. Thus, it is hypothesized that:

Hypothesis 4: Job autonomy moderates the relationship between Individual realized absorptive capacity and innovative work behavior, such that the relationship will be stronger for individuals with increased job autonomy.

METHODOLOGY

SAMPLING AND DATA COLLECTION PROCEDURE

This study adopted a cross-sectional research where quantitative data was collected at a one point in time. The unit of analysis was individuals (employees) working in software houses. Studies from employees' perspective have also been supported by Bangash et al. (2020) in their article. Participants were middle-level managers, and keeping in view time and other resource limitations a self-administered questionnaire was developed as a tool of data collection from respondents. Each questionnaire was accompanied by a Cover Letter describing the purpose of the research; and respondents were assured that the provided information would be confidential and only aggregate results would be mentioned. A total of 200 questionnaires

were administered to randomly sampled subjects from whom 152 responses were received. After eliminating incomplete questionnaires a total of 133 questionnaires left with an overall response rate of 77% used for the analysis purpose.

Out of the total respondents more than 28 per cent were female and 72 per cent were male, while 54 per cent of the respondents were young between 25 and 35 years old and above 56 per cent were 2 per cent. Similarly, 43 % respondents were graduate and 17 % were PhD degree holders. Most of the respondents had relatively less experience such that 34 per cent of the respondents had 1-8 years of experience and only 4 per cent respondents had above 25 years of experience.

MEASURES

Five-point liker type scale (1 = strongly disagree, 3= neutral and 5= strongly agree) was used to measure the constructs. Innovative work behaviour was measured using the scale developed by (Janssen, 2000) consisting of 9-items. Individual Level Absorptive Capacity was measured using the 14-item scale developed by (Lowik et al., 2016). Job autonomy was measured using the 9-item scale developed by (Breugh, 1985).

CONTROL VARIABLES

Study included a number of demographic characteristics as controlled variable such as gender, age, experience, education and hierarchical position considering their probable associations with workplace innovation. (DiTomaso and Farris, 1992; Janssen, 2000; Ng and Feldman, 2013; Amabile 1983; Scott and Bruce 1994; Shanker et al., 2017)

RESULTS

PLS-structural equation modeling (PLS-SEM) was used to assess the model. According to Hair et al. (2014) as compare to covariance based SEM, PLS-SEM provides high level of statistical power with small sample size. PLS-SEM is easy to handle and mostly used in the existing studies. Two step approach of Anderson and Gerbing's (1988) was adopted for the four latent variables in confirmatory factor analysis such that first the measurement was evaluated and second the structural model was validated.

THE MEASUREMENT MODEL

CR value should be fall between the ranges of 0 to 1 while CR's value near one indicates the higher level of composite reliability (Hair et al., 2014). Whereas, Hair and his colleagues (2014), discussed that, AVE value must be above than .50 while AVE's value which is above than .40 is also acceptable. However, it is all depending upon the loading of the items against measured construct. Similarly, the Cronbach alpha value should not be greater less than .70 to ensure the internal consistency of the items. In addition, some researchers suggest that it could also be acceptable above than .60.

Table 1*Item loadings, reliability and convergent validity values*

First Order	Second Order	Items	Loadings	CR	AVE	Cronbach's alpha					
PabCap	Uni-Dimensional	PabCap 2	.61	.80	.50	.67					
		PabCap 3	.77								
		PabCap 4	.75								
		PabCap 6	.68								
RabCap	Uni-Dimensional	RabCap1	.66	.85	.54	.78					
		RabCap2	.70								
		RabCap3	.79								
		RabCap4	.80								
		RabCap5	.72								
IWB	Uni-Dimensional	IWB2	.60	.85	.50	.79					
		IWB3	.65								
		IWB5	.73								
		IWB7	.76								
		IWB8	.76								
		IWB9	.71								
		WMA					WMA1	.66	.736	.583	
							WMA2	.77			
							WSA	WSA1			
	WSA2			.81							
	DMA		DMA1	.74	.785	.648					
			DMA2	.63							

Note: PabCap=potential absorptive capacity, RabCap= Realized absorptive capacity IWB= Innovative work behavior, JA=job autonomy, WMA= Work method autonomy, WSA= Work

schedule autonomy, DMA=decision making autonomy, CR= Composite reliability, AVE= average variance extracted

Table 1 explicitly highlight that all items are highly loaded to each respected construct. For instance. Hair et al. (2017) the best way to present the discriminant validity is through Farnell-Larcker(Fornell and Larcker, 1981) criteria. Hence, in this study, we had also used this criterion to check the discriminant validity.

Table 2: *Discriminant validity*

Variables	PabCap	RabCap	IWB	JA
PabCap	.71			
RabCap	.633	.74		
IWB	.537	.631	.71	
JA	.072	.025	.071	

Note: PabCap=potential absorptive capacity, RabCap= Realized absorptive capacity IWB= Innovative work behavior, JA=job autonomy

Hence, Table 2 explicitly reflect that discriminant value of each latent variable is higher than the value of any single variable with other variables which reflect that all variables are individually important and all constructs are discriminately valid.

THE STRUCTURAL MODEL

By following the suggestions of Hair and his colleagues (2017), first of all we perform algorithm to analyses if there is any problem of multicollinearity. Hence, we found that the values of VIF and tolerance are less than 10 and greater than .1, respectively. So, there is no problem with multicollinearity as. In addition to it, predictive relevance (Q^2), coefficient of determination (R^2), the significance of the coefficient, the effect size (f^2), are the fundamental criteria to analyse the structural model. So in our study we analyse that R^2 value is .42 which means that 42% variation of the dependent variable has been explained by all independent and control variables. Similarly, the value of Q^2 and f^2 are above that 0 which reflect that our dependent variable could predict appropriately along with the effective effect of independent variables.

Figure 1

PLS-SEM "Algorithm" (For Direct paths)

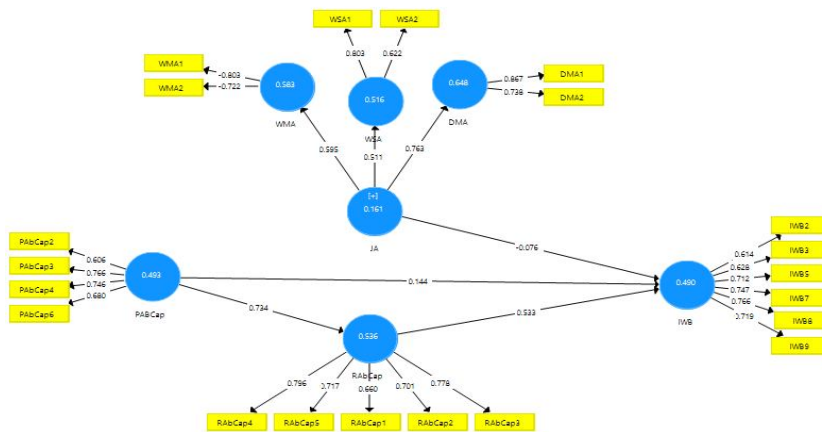
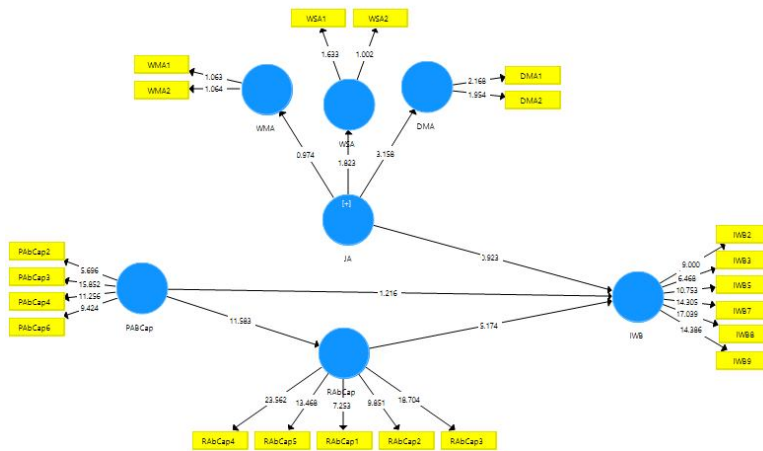


Figure 2

PLS-SEM "bootstrapping" (For Direct and mediation paths)



Concerning to the path 1, results show that potential absorptive capacity (PabCap) has a positive and significant effect on Realized absorptive capacity as (b=.734; t=12.82; P<.01). Hence H1a has accepted.

Table 1: Direct and mediation hypotheses results:

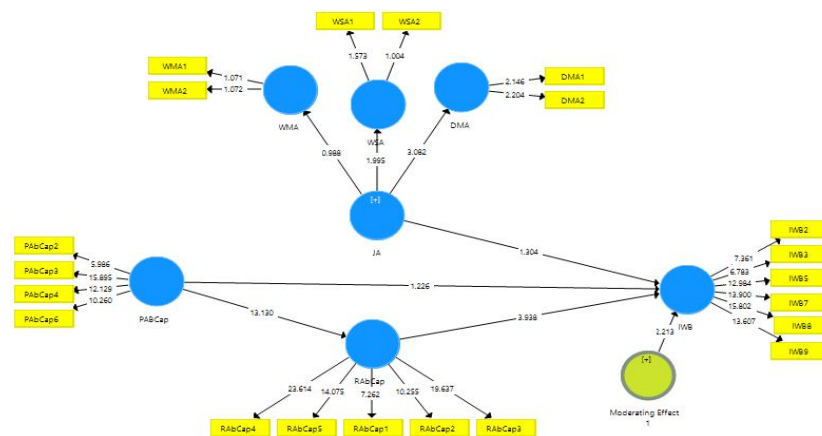
Paths			T		P		Decision	VIF	F ²	Effect	Q ²	R ²
	β	S.E	Value	value								
PabCap→RabCap	.734	.057	12.82	.000	Supported	1.00	1.16	Large				
RabCap→IWB	.533	.04	7.52	.000	Supported	2.19	0.24	Large				
PabCap→RabCap→IWB	.391	.083	4.73	.000	Supported			Medium			.17	.42

Note: PabCap=potential absorptive capacity, RabCap= Realized absorptive capacity IWB= Innovative work behavior, JA=job autonomy

However, results in a highlight that Realized absorptive capacity has a positive and significant effect on Innovative work behavior ($b=.533$; $t=7.52$; $P<.01$). So, H2 has also accepted. As far as H3 concerns, our results depict that realized absorptive capacity mediates the relationship between potential absorptive capacity and innovative work behaviour as ($b=.391$; $t=4.73$; $P<.01$).

Figure 3

PLS-SEM "bootstrapping" (moderation)



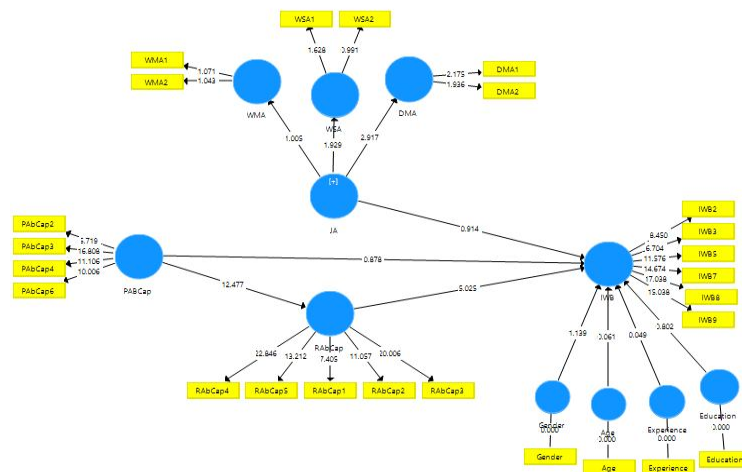
Hair and his colleagues (2017) argue that a moderation test has been conducted using a bootstrapping approach. Hence, our moderation hypothesis has assessed whether the prediction of Innovative work behavior through Realized absorptive capacity improved or not after moderator variable become significant through moderation test.

Table 2: Hypotheses results (Moderation)

Paths	Direct effect	β	S.E	t-value	Sig	F ²	Decision
Independent variable	RabCap:→IWB	.734	.057	12.84	.000		
Moderator variable	JA:→IWB	-.102	-.074	1.38	.084		
Interaction effect	RabCap*JA→IWB	.400	.224	1.88	.037	.268	Supported

Note: PabCap=potential absorptive capacity, RabCap= Realized absorptive capacity IWB= Innovative work behavior, JA=job autonomy

Hence, after inclusion, the moderator variable (i.e., Job Autonomy) as an independent variable on innovative work behavior with the interaction of Realized absorptive capacity we can see the results of bootstrapping in above table which depicts that job autonomy positively moderates the relationship of Realized absorptive capacity and Innovative work behavior as (b=.400; t=1.88; P<.05). Hence our moderation hypothesis has accepted with the interaction effect of .268.

Figure 4**PLS-SEM "bootstrapping" (Control variables)**

In addition to the above, researchers argue that, in every relationship of independent, mediator, moderator and dependent variable, there are always some variables who can influence the relationship among variables. Hence, Hair and his colleague (2017), suggest that by controlling the effect of these variables we can highlight the significance of independent variables. Hence, in this research gender, age, experience and education are our control variables. However, our results show that all control variables remain insignificant in main analysis.

Discussion

Researchers have frequently asked for further clarification on AbCap at individual level (Lane et al., 2006; Hart et al., 2016; Tian and Soo, 2018) and employees' creativity and job performance. Based on the existing literature and Cohen and Levinthal's (1990) conceptualization of AbCap, the present study explains the research model relating to the role of individual level variables such as individual level absorptive capacity, innovative work behavior and job autonomy was developed and validated in order to better understand the outcome of individual AbCap. Data has been collected to confirm proposed hypothesis of the study; that may contribute in the existing body of knowledge and resolve the conflicting opinion about the relationship between AbCap and IWB. The study focuses on the sub-dimensions of AbCap and examined the mediating effect of realized absorptive capacity in the relationship between employees' potential absorptive capacity and their innovative work behavior. Potential absorptive capacity (PAbCap) was suggested to effect realize absorptive capacity (RAbCap) of individuals which was expected to affect innovative work behavior of employees. Basically, the acquisition of external knowledge and exploitation of the existing knowledge of employees provides opportunities to employees to perform innovative work behaviour in the workplace. Thus, PAbCap indirectly influences innovative work behavior through RAbCap and realized absorptive capacity plays a mediating role between potential absorptive capacity and innovative work behaviour. For example Zahra and George, (2002) also suggests that potential absorptive capacity precedes realized absorptive capacity and explain that without acquisition of knowledge it cannot be exploited. The results of our study is consistent with the finding of existing studies (e.g., Albor-Morant et al., 2018 and Zahra and George, 2002). Studies (e.g., Cepeda-Carrion et al., 2012; Leal-Rodríguez et al., 2013) also confirmed that experiencing potential absorptive capacity prior to realized absorptive capacity is important. In addition, job autonomy was found to moderate the relationship of realized absorptive capacity and innovative work behavior such that increase level of job autonomy enhance realized absorptive capacity had a significant positive influence on the innovative work behavior of employee while the relationship is not significant.

Managerial Implications

Findings of this study provide several insights to the organizations intending to enhance innovative work behavior of their employees. In addition to theoretical contribution, this research has several managerial implications: First this study suggests that how managers in organizations could facilitate employees to acquire knowledge from outside the firm that is to develop their potential absorptive capacity of individuals and transform and exploit their employees' knowledge into actions that use it for commercialization. This type of action of successful knowledge transfer is more important for technology transfer among firms. Consequently, the recipient organization gain more benefits by mastering product designs and manufacturing processes. According to Mendonça et al., (2017), it is necessary for managers to give more attention to the beneficial employees and organizational outcomes that originates as a result of innovative usage. Manager should create awareness in their

employees to recognize the usefulness of new external knowledge, benefits of sharing their experience and grasping opportunities for their organization. Second the potential absorptive capacity of employees must exploit so that to benefit from the creative ability of employee and to engage them in innovative work behavior and involve them in decision making with confidence, which ultimately helps organizations to realize benefits of innovative work behavior, because the knowledge acquisition and sharing enhance overall capacity of organizations.

Third, the result of this study shows that job autonomy serve as major trigger for innovative work behavior of employees, thus employees may be given a degree of freedom over their job to take decisions regarding workplace innovation to develop their absorptive capacity and as result encouraging them to bring innovativeness in their work.

Conclusion and Future Direction

The main purpose of conducting this study is to provide insight into how to create an environment to encourage employees to engage in innovative work behavior in work context and actively participate in development process of organization in broad perspective. In present study we develop a model of individual level factors in the workplace. The model was tested using primary data collected through survey. PLS-SEM was used to investigate that how the absorptive capacity at individual level could influence the innovative work behavior of employees in the workplace by giving specific attention to the role of job autonomy. All the hypothesized links are supported. Finding of the study suggests that individuals who acquire more knowledge from outside of the organizations enhances the absorptive capacity would be able to perform better innovative behavior in the workplace. The study also confirmed that the realized absorptive capacity play a mediating role in the relationship between potential absorptive capacity and innovative work behavior. There are many limitations of this study such that it was conducted in a specific industry of information technology specific in a particular cultural context. Therefore, findings of this study may not be generalized. It is recommended that future studies may be conducted in other sectors; so that the results could be generalized. Second limitation is the use of cross-sectional design and data is collected at one specific point in time. Consequently, the author cannot establish strong causal relations in the hypothesized model. Future research should use longitudinal data to investigate the relationships. Other factors such as organizational culture and personality characteristics may be included in the present study in future investigation for more results.

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