Pakistan Journal of Commerce and Social Sciences 2017, Vol. 11 (3), 814-832 Pak J Commer Soc Sci

# **Enhancing Employee Innovative Behavior: The Moderating Effects of Organizational Tenure**

Muhammad Anwar ul Haq (Corresponding author) Department of Management Sciences, University of Gujrat, Pakistan Email: anwar.haq@uog.edu.pk

Muhammad Usman Department of Management Studies, University of Malakand, Pakistan Email: mohdusman1@hotmial.com

Jawad Hussain Department of Management Studies, University of Malakand, Pakistan Email: jawadhussain79@hotmail.com

# Abstract

The purpose of this study is to find out that how the innovative behavior of employees can be enhanced and whether it remains same as the organizational tenure of employees increases. We propose that innovativeness among employees may be enhanced through four factors which include perceived failure tolerance, communication openness, work discretion, and reward fairness. Further, we assume that the effect of predictors will be moderated by the organizational tenure of the employees. Data were collected from 381 employees from the telecommunication sector in Pakistan. The application of two step structural equations modeling shows that all the antecedents have positive effect on employee innovativeness. Further, organizational tenure moderates this effect negatively. Employees with lesser organizational tenure were found to be more innovative. We recommend that organizations must establish a culture based on failure tolerance, open communication, work discretion, and fairness in order to cultivate innovative behaviors among employee. Furthermore, special refresher trainings, and lucrative incentives should be given to employees with higher organizational tenure in order to benefit their innovative potential.

**Keywords:** innovative behavior, perceived failure tolerance, communication openness, work discretion, reward fairness, organizational tenure.

## **1. Introduction**

Contemporary organizations are looking forward to capitalize on the innovative potential of their employees in order to become innovative and competitive in the marketplace. Employees can help their organization improve through their novel ideas. Innovative ideas of employees turn into better products, innovative services and efficient work processes (De Jong & Den Hartog, 2007). It has been held in literature that employee innovativeness is related with the success of an organization (Axtell et al., 2000). However, innovations

should be introduced on a continuous basis for which employees must always be willing and ready to offer their innovative ideas (De Jong & Den Hartog, 2007). In this context, it becomes imperative to uncover what influences employees to innovate and whether their innovative potential remain similar over time.

Employee innovative behavior is a deliberate behavior of an employee in the workplace to offer new ideas, develop new services/products, and establish new processes and procedure in his/her own unit, or in the whole organization (West & Farr, 1990). According to Scott and Bruce (1994), innovativeness is the exploration of opportunities, generation, promotion, and implementation of ideas in the workplace. Innovators are onlookers of opportunities to crave for their creative appetite. They come up with new solution. They promote their ideas and try to gain the support and develop teams. The process completes with the implementation of ideas after testing, modification, and commercialization (Dörner, 2012). According to Åmo (2006), innovativeness is everything from the modification of routines or using fresh remedies, to the simplification of work, and to the service improvement to end user. Scott and Bruce (1994) observe that innovative employees engage in any or a combination of these activities at any given time.

All the definitions of innovativeness include the element of "newness". Yuan (2012) describes that newness does not necessarily mean that the idea should be new to the world. In terms of employee innovativeness, it refers to anything that is new to the particular context of the organization. However, Axtell et al. (2000) believes that employee innovativeness may range from incremental to radical innovations, and from administrative to technical innovations (Van de Ven, 1986), and from soft innovations to hard innovations. Whichever the aspect of innovativeness employees engages in, the problem arises that how the innovativeness among employees may be enhanced.

In the aspect of enhancing employee innovativeness, there is a dearth of studies. Among the fewer available evidence, the emphasis has been on the influence of leadership styles on employee creativity and innovativeness (De Jong & Den Hartog, 2007; Sharifirad, 2013; Yoshida et al., 2014). Janssen (2005) studied the impact of supervisor supportiveness on employee innovativeness. Wallace et al. (2016) investigated the effects of regulatory focus, thriving and employee innovativeness. Kang et al. (2016) probed into the influence of innovative, risk taking and proactive organizational climate on innovative behavior of employees and highlighted the importance of a supportive organizational ecosystem. Similarly, Hsu and Chen (2017) concluded that organizational innovation climate has positive implications for innovative behavior with the mediating effects of psychological capital. Garg and Dhar (2017) studied the innovative behavior through the lens of leadermember exchange perspective. This shows that there is a gap in literature in terms of the factors which potentially enhance employee innovative behavior. Specifically, we did not find any study which explores the influence of factors such as failure tolerance, communication openness, work discretion, and perceived reward fairness.

Hence, the objective of present study is to understand the role of four factors in influencing innovative behavior: perceive failure tolerance, communication openness, work discretion, and perceived reward fairness. The second objective of this study is to find out whether the

influence of these predictors remain similar with the passage of employee tenure. This will fill an important void in the literature which has been left unaddressed earlier. In the next section, we will theorize how each predictor relates with innovative behavior.

## 2. Literature Review

## 2.1 Perceived Failure Tolerance and Innovative Behavior

Failure may be defined as non-conformance to the expected and desired outcomes (Cannon & Edmondson, 2005). Failures are not always bad. Some authors highlight the brighter side of failures also. Peters et al. (2004) observe that failures may guide on the adoption of new technology or to explore new opportunities. By allowing failures, the organizations may identify "innovators" or "champions" among organizational members (Peters et al., 2004).

Burns (2008) believes that failure is an integral part of the innovation process. Organization should be ready to face failure in order to gain competitive edge through innovation. A positive outlook towards failure may breed a culture of adaptation, learning, and innovation. The success is promised in tolerating the failures. Timmons and Spinelli (2009) contend that failure are likely to occur in the innovation process. Therefore, Morris and Jones (1999) suggest that management should indicate the tolerance of failures for the sake of innovativeness and creativity. The employees' belief about failure tolerance established in this way becomes an important ingredient of innovative culture. Employees' trust may lead them to innovate without fearing the failure (Menzel et al., 2008). Similarly, Hornsby et al. (2002) holds that a tolerant and kind orientation of management towards employees is pre-requisite of innovativeness.

Cannon and Edmondson (2005) note the consequences of intolerant cultures of organizations. Employees avoid highlighting the failures they face or observe. The failures which remain concealed are never analyzed and may reoccur in future. Furthermore, employees in such environment will not make new experiments in which results are not definite. Kriegesmann et al. (2005) also invite attention towards intolerance in organizations. Failure intolerance imbues risk avoidance and endorses reliance on established methods and recourse towards customary ways and methods of doing things. The behavior of managers exhibits the organizational tolerance or intolerance. Gupta et al. (2004) warn that conservative and risk averse behavior of managers lowers the confidence of employee and shatter their spirit. Employees feel frustrated and lose their innovative potential. Ackoff (2006) also believes that situations where employees fear failure restrict them to assume novel ways. Similarly, Hisrich and Peters (2002) hold that organizations which accuse their employees of their failures hinder employees' innovativeness. The organizations also lose the chance to learn from errors which are essential for success (Turner, 2002), as mistakes are also a source of knowledge (Dawes, 2007). Finally, as Scheepers et al. (2008) also expect that tolerance of failure enhances innovativeness. Hence, the following hypothesis is proposed:

H<sub>1</sub>: Perceived tolerance for failure higher will be positively related with employee innovative behavior.

#### 2.2 Communication Openness and Innovative Behavior

For Rogers (1987), "communication openness is the free flow of information, including point of views and opinions among people". Ayoko (2007) regards openness of communication as the ease in conversing with others. Another aspect of communication openness is the quality and the amount of information shared among organizational members (Antoncic, 2007). The information sharing occurs in many forms such as formal and information discussions, newsletters, and bulletins etc.

Communication openness is an important antecedent of innovativeness. It enables idea exchange, and information sharing. Innovation also stems from such exchanges of ideas (Hülsheger et al., 2009). Damanpour (1991) concluded that innovativeness is positively influenced by communication openness. The innovative endeavors of employees only succeed when the organizations provide deliberation space among the members of organization. Ahmed (1998) recommends that new ideas engender only when there exists an open communication climate. A climate which supports openness and sharing and is based on trust promotes creativity and innovativeness. Martins and Terblanche (2003) believe that when people tolerate the differences, open communication is promoted in the organization. Through open communication mutual monitoring, feedback, and backing up among organizational members is facilitated. Hence, the openness of communication not only ease ideas generation but also implementation of ideas (Hülsheger et al., 2009). Further, Stull (2004) argues that if employees are able to voice and raise their apprehensions, complaints, or ideas to the upper management, they will surely be able to initiate innovations in the organizations. Hence, we propose the following hypothesis:

H2: Openness of communication will be positively related with employee innovative behavior.

#### 2.3 Work Discretion and Innovative Behavior

"Work discretion is the level to which a job provides independence, freedom, and discretion to make use of preferred work methods, to make decisions, and to schedule work" (Humphrey et al., 2007). Work discretion has been a center of attention of organizational researchers over the past few years. Humphrey et al. (2007), in a recent meta-analysis of 259 studies on job autonomy, reported a positive effect on performance, satisfaction, commitment, and employee motivation. Similarly, employees having higher levels of autonomy have lower levels of turnover intentions, absenteeism, and burnout (Humphrey et al., 2007).

Morgeson et al. (2005) give opinion that work discretion brings breadth of role for employees. Parker (1998) describes that work discretion enhances employee ownership of problems. It gives employees a recognition of the skills and knowledge required for doing a particular job. Work discretion by giving control over the job motivates employee to try out new ways of working. This elaborates that workers integrate novel methods into their traditional roles and hence broaden their job (Parker, 1998).

Empowered employees always come up with novel ideas. Discretion permits employees to engage in "trial-and-error". Innovation also needs trial-and-error, success and failure

(Ramamoorthy et al., 2005). Empowered employees experiment unique methods and approaches. They may follow novel ways of doing work which later on may turn out into innovations (De Spiegelaere, Van Gyes, et al., 2014). Shalley and Gilson (2004) have shown that novel methods that employees use at work lead to individual innovative behavior. Autonomy while bringing freedom to work organization inspires employees to contribute original ideas to work (De Spiegelaere, Gyes, et al., 2014). Cabrera et al. (2006) establish that employees with more autonomous responsibilities share knowledge among them. Consequently, innovative behavior is stimulated (Axtell et al., 2000). Roberg (2007) empirically shows that empowerment has positive relationship with innovative behavior in the workplace. Based on the above discussion, following hypothesis is proposed:

H<sub>3</sub>: Work discretion/autonomy will be positively related with employee innovative behavior.

## 2.4 Perceived Rewards Fairness and Innovative Behavior

The benefits, either financial or non-financial, received as a result of employment relationship with an organization are called rewards (Malhotra et al., 2007). Employers may use rewards to align organizational and employees' goals (McKenzie & Lee, 1998). According to Williamson et al. (2009), rewards may be categorized as: intrinsic, extrinsic, and social rewards. The value of rewards is hidden in their fair distribution. Extrinsic rewards have a visible value. Such rewards include pay and benefits (Williamson et al., 2009). Deci et al. (2001) observe that tangible rewards inspire people to engage in such tasks/behaviors in which they otherwise would not participate. Intrinsic rewards are the psychological pleasures which employees draw by involving in a particular job. Such rewards are internally satisfying and are consequent of decision authority which a job brings for employees in the workplace (Hackman & Oldham, 1976). Social rewards arise by interaction of employees with each other in the work place. The pleasing interpersonal relations in the workplace make it conducive to work in. Fischer and Smith (2003) recommend that the organizations must reward employees in an equitable and fair manner in order to fully benefit the reward outcomes. Appelbaum et al. (2011) believe that a fair and effective system of rewards enhances the morale of employees and is an indication of equal treatment of employees.

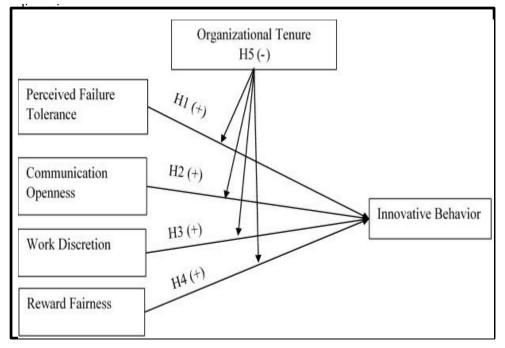
Amabile et al. (1996) give opinion that rewards enhance the innovative activities of employees. They suggest that organizations may also follow performance management systems to influence employees to innovate. Shane (2003) and Schoemaker (1993) have found a positive association between rewards and innovative behavior. Zhou and Shalley (2003) believe that the presence of a fair reward system in an organization influences employees to believe that their organization encourages innovation as a norm and they are expected to engage in innovative behavior. Baumann (2011) cautions that rewards must be presented consistently in an equitable manner in order to gain meaningful involvement from employees. Unfair and inconsistent rewards will lead to distrust among employees. Likewise, Janssen (2000) argues that innovative behavior is a function of the fair perception of effort and rewards. If employees perceive rewards to be unfair, they do not take part in innovative activities. Stull (2004). Based on the above discussion, we postulate the following hypotheses:

H4: Reward fairness perception will be positively related with employee innovative behavior.

# 2.5 Moderating Role of Organizational Tenure

Organizational tenure means the time which an employee has spent with an organization. No empirical studies have been reported about the moderating effects of tenure on innovative behavior. Sturman (2003) holds that the as time spent in an organization increases, employees socialize with the environment. High tenured employees have already established connections, and know how to operate in the organizational environment. Alternatively, employees who are newer in the organization are faced with a lot of expectations. They are exposed to a set of norms. Any favor received in terms of failure tolerance, communication openness, work discretion, and/or reward fairness will obligate them to contribute towards organizational goals. They will tend to do something extra and new for their organization in order to meet those expectations (Zampetakis et al., 2009). Hence, tenure will interact with the antecedent conditions to influence the job outcomes. We therefore postulate the following hypothesis.

H5: As the tenure increases, the strength of relationship will be negatively affected between antecedent factors (perceived failure tolerance, communication openness, work discretion, reward fairness) and innovative behavior.



The following schema (see Error! Reference source not found.) summarizes the above

Figure 1: Conceptual Framework

#### **3. Methods and Procedure**

#### 3.1 Participants

The managerial level employees employed in the telecommunication sector of Pakistan were the target population. Questionnaires were randomly distributed among the target respondents. We approached the main offices and service centers of major telecom companies located in Lahore, Islamabad, Gujranwala, Rawalpindi, and Faisalabad. More than 900 questionnaires were distributed. The usable sample for this study consisted of 381 employees with a response rate of 47%. In sample, there were 60.2% males, 31.8% were females. The mean age of sample was 31 years with an experience of 6.3 years on average. The average employee tenure was 5.4 years. Sample was also representative of all the departments (marketing=18.9% human finance=15%, sale =14.4%, resources department=16.5%, and technical department=32%)

#### 3.2 Measures

#### 3.2.1 Innovativeness

The items measuring innovativeness were taken from Scott and Bruce (1994) and De Jong and Den Hartog (2010). The employee innovativeness was assessed on behavioral frequency scale (1=never, 2=often).

*Perceived Failure tolerance* The measure for perceived organizational tolerance was developed after an extensive review of literature and expert evaluation. Items were taken from corporate entrepreneurship assessment instrument (CEAI) inventory (Hornsby et al., 2002), perceived organizational support (POS) instrument (Eisenberger et al., 1986), and intrapreneurial assessment instrument (IAI) (Kuratko et al., 1990).

## 3.2.2 Communication Openness

Communication openness was measured using a scale consisting of 7 items. Two items were taken from McDonald (2002) for which the reliability coefficient was 0.89. One item was adapted from Narver and Slater (1990), which was decomposed into two items for this scale. Three items were self-developed.

## 3.2.3 Work Discretion

Work discretion was measured using the items from corporate entrepreneurship assessment inventory (CEAI) developed by Hornsby et al. (2002). A sample statement reads,

#### 3.2.4 Reward Fairness

For measuring reward fairness, items form perceived organizational support (POS) instrument (Eisenberger et al., 1986), and CEAI instrument (Hornsby et al., 2002) were adapted.

## 3.2.5 Demographic Information

Data on demographic variables gender, age, experience, tenure, qualification, and position in hierarchy was also collected.

# 3.3 Data Collection Procedure

Data were collected from telecom professionals working in the telecommunication

Haq et al.

companies of Pakistan. Survey was conducted both physically and online. We distributed 900 questionnaires randomly using various channels. For the administration of physical survey, various branch offices were contacted at Lahore, Islamabad, Gujranwala, Rawalpindi, and Faisalabad. For online survey, we requested the email addresses of managerial employees from the HR offices of relevant companies by assuring the anonymity and voluntary participation. Out of total 900 distributed questionnaires, 423 were received back. Only 381 responses were usable.

# 4. Data Analyses and Results

## 4.1 Descriptive Results

Table 1 presents the descriptive results for innovative behavior, perceived failure tolerance, communication openness, work discretion, and perceived reward fairness. The correlations between constructs are significant. Innovative behavior is significantly correlated with perceived failure tolerance (0.426, p<.001), communication openness (0.578, p<.001), work discretion (0.455, p<.001), and reward (0.392, p<.001). Similarly, all antecedent variables also have significant intercorrelations (see Table 1). However, organizational tenure has negative correlations with other constructs.

	Mea n	S.D	1	2	3	4	5	6	7	8	9	10
Gender	N.A	N.A	1									
Age	31.8 3	4.74 3	.129*	1								
Experien ce	6.3	2.96 7	012	.491* *	1							
Qual.	N.A	N.A	.179* *	.149* *	.012	1						
Tenure	5.49	2.87 9	.110*	.048	.020	068	1					
IB	3.63	0.72 9	100	.071	.118*	.141*	011	1				
PFT	3.72	0.58 8	.002	070	030	.052	102*	0.426 ***	1			
СО	3.97	0.85 7	028	093	.014	084	050	0.578 ***	0.366 ***	1		
WD	3.7	0.82 5	.000	.026	.116*	.030	045	0.455 ***	0.350 ***	0.506 ***	1	
RF	3.84	0.88 1	.057	.037	.017	.032	083	0.392 ***	0.329 ***	0.416 ***	0.403 ***	1

**Table 1: Descriptive Statistics and Correlations** 

\*\*\*=p<.001, \*\*p<..01, \*\*=p<.05, Qual.=Qualification, IN=Innovative Behavior, PFT=Perceived Failure Tolerance, CO=Communication Openness, WD=Work Discretion, RF=Reward Fairness

4.2 Measurement Model Assessment

4.2.1 Assessment of Model Fit

In the factor model, all the constructs were first order. The factor solution was tested using 821

SPSS AMOS 20. In the first run, model fit was not achieved. The statements with loadings below .50 were removed. The items were dropped from failure tolerance, work discretion, and innovativeness. In order to further improve the model fit, based on modification indices, some error terms were also correlated. All the fit indices were within the threshold values (see Table 2). Following the suggestions of Shah and Goldstein (2006), in order to further assess the validity of factor model and search for a best fitting model, an alternative model was also tested. All the items were loaded on a single factor (Podsakoff et al., 2003). This model was not fit (see Table 2).

Model	CMIN/df	CFI	TLI	RMSEA		
Hypothesized model	1.864	.956	.944	.048		
Alternative model 4.736 .364 .327 .099						
Cut-off Values CMIN/df<3 CFI>.90 TLI>.90 RMSEA<.08						
CMIN/df = Normed Chi-Square, CFI = Comparative Fit index, TLI = Tucker-Lewis						
Index, RMSEA = Root Mean Square of Error Approximation						

**Table 2: Confirmatory Model Fit** 

## 4.2.2 Reliability and Validity Measures

The constructs established reliability. Reliabilities were calculated following the recommendations of Hair et al. (2010). All measures were reliable (see Table 3). Further, the constructs also established convergent and discriminant validity. The average variance extracted (AVE), an indicator of convergent validity (Hair et al., 2010), by all the constructs were well above 0.50. Similarly, the discriminant validities were assessed by comparing the variance extracted and shared variance (shared, and maximum). All the variables were able to establish their discriminant validity (Hair et al., 2010).

Table 3: Reliablity And Validity Measures

Constructs	CR	AVE	MSV	ASV				
IN	0.843	0.522	0.334	0.195				
PFT	0.872	0.538	0.181	0.122				
CO	0.902	0.574	0.334	0.203				
WD	WD 0.882 0.520 0.256 0.154							
RF	RF 0.891 0.545 0.173 0.139							
Cut off: CR>0.7; AVE>.50; AVE>MSV; AVE>ASV								
CR=Composite Reliability, AVE=Average Variance Extracted=AVE,								
MSV=Maximum Shared Variance, ASV=Average Shared Variance, FT=Perceived								
Failure Tolerance, WD=Work Discretion, CO=Communication Openness,								
RF=Reward Fair	RF=Reward Fairness, IN=Innovativeness							

4.2.3 Method Bias Assessment

As recommended by Podsakoff et al. (2003), the method bias was evaluated by common latent factor method. A latent factor was added to the factor model and all the observed variables were loaded on the single factor along with their parent constructs. The shared variance among the constructs were less than 20%. There were no indications of method

### variance.

## 4.3 Results of Structural Model

In the next step, structural model was assessed. The hypothesized structural model showed a good fit to the data (Table 4). All the fit indices were within the range of threshold values (CMIN/df=2.076, CFI=0.991, TLI=0.966, RMSEA=0.053). For testing the hypotheses, the effect of demographic variables was controlled statistically. The control variable model was also fit to the data (see Table 4). The model with control variables provided that the addition of covariates does not disturb the model, rather may provide an added explanation of our hypothesized structure while improving the validity of our model (CMIN/df=2.259, CFI=0.968, TLI=0.938, RMSEA=0.058). The is also in accordance with the recommendations of Shah and Goldstein (2006).

Table 4: Structural Regression Model Fit Indices	Table 4:	le 4: Structural	Regression	Model	<b>Fit Indices</b>
--	----------	------------------	------------	-------	--------------------

Model	CMIN/df	CFI	TLI	RMSEA		
Hypothesized	2.076	.991	.966	.053		
Control variable model	2.259	.968	.938	.058		
Cut-off Values CMIN/df<3 CFI>.90 TLI>.90 RMSEA<						
Control variables=age, gender, experience, qualification, CMIN/df = Normed Chi-						
Square, CFI = Comparative Fit index, TLI = Tucker-Lewis Index, RMSEA = Root						
Mean Square of Error Approximation						

The results provide support for hypothesis 1. Perceived failure tolerance predicts employee innovative behavior with a positive standardized direct effect ( $\beta$ =.194, p<.001). Likewise, the effect of communication openness on innovative behavior also found be significantly positive ( $\beta$ =.419, p<.001), providing support for hypothesis 2. The 3<sup>rd</sup> hypothesis, that there is a positive influence of work discretion on innovative behavior was also validated with significant results ( $\beta$ =.117, p<.01). Finally, the results also support the hypothesized relationship between perceived reward fairness and innovative behavior ( $\beta$ =.103, p<.05). Together all the variables explain 47.6% variance in innovative behavior (see Table 5).

Dependent Variables	Hypothesized Paths	Standardized Path Coefficients	p-Value	R <sup>2</sup>				
Innovative	Pft→Ib	.194	.001	.476				
Behavior	Co→Ib	.419	.001					
	Wd→Ib	.117	.01					
	Rf→Ib	.103	.05					
Ib = Innovative Behavior, Pft=Failure Tolerance, Co=Communication Openness,								
Wd=Work Discretion, Rf=Reward Fairness								
*P<.05, **P<.01, ***P<.001, R <sup>2</sup> =Squared Multiple Correlation								
1								

**Table 5: Hypotheses Results** 

#### 4.4 Moderation analysis

## 4.4.1 Interpreting interactions

The structural model for testing the interaction effects also showed a decent fit to the data (CMIN/df=1.247, CFI=.997, TLI=.993, RMSEA=.025). The results revealed that the interaction effects were negative (see Table 6). Tenure decreases the positive effect of predictor variables on the innovative behavior of employees.

Model	Unstandardized Coefficient	p-Value
Control Variables (Age,	N.S.	
Gender, Experience,		
Qualification)		
Main Effects		
Tenure	.121	*
Failure Tolerance	.241	*
Failure Tolerance × Tenure	228	**
Communication Openness	.557	***
Communication Openness ×		**
Tenure	238	
Work Discretion	.165	*
Work Discretion × Tenure	089	**
Reward Fairness	.102	**
Reward Fairness × Tenure	034	**

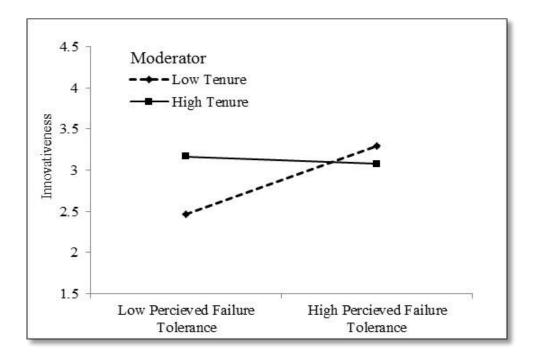
**Table 6: Moderating Effects of Tenure** 

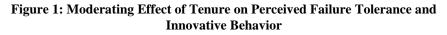
Note: n.s=not significant, \*=p<.05, \*\*=P<.01, \*\*\*=p<.001

#### 4.4.2 Probing Interactions

The relationship has further been probed in the graphs presented below. The figure shows employees with shorter tenure happen to be more innovative than those with higher tenure provided their mistakes are tolerated. A closer look into the graph reveals that at higher levels of failure tolerance, those with lower levels of tenure happen to be more innovative than those with higher tenure. Hence, higher tenure lowers the strength of relationship. There is a positive effect of communication openness on innovative behavior, however, this effect is negatively moderated by tenure. For employees with lower tenure, communication has strong effect on their innovativeness, whereas, innovativeness of older employees is not much influenced by communication openness (see Figure 2). Tenure also moderates the effect of work discretion on innovativeness. It shows that the effect of work discretion of innovativeness is stronger for newer employees in comparison to older employees (see Figure 3). Similar results are evident in the case of reward fairness and employees (see Figure 4).







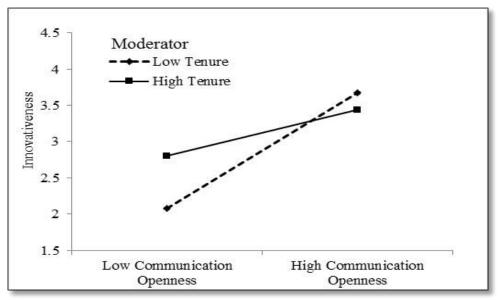


Figure 2: Moderating Effect of Tenure on Communication Openness and Innovative Behavior

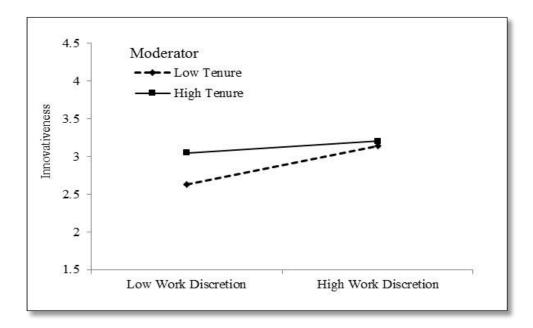


Figure 3: Moderating Effect of Tenure on Work Discretion and Innovative Behavior

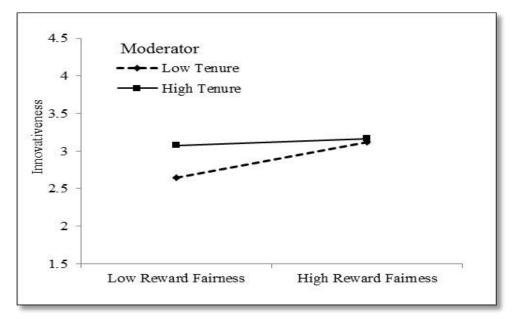


Figure 4: Moderating Effect of Tenure on Reward Fairness and Innovative Behavior

## 5. Discussion

The results showed a significant positive effect of failure tolerance on innovativeness. The findings are in line with the arguments of Timmons and Spinelli (2009) that failure are likely when employees make efforts to present and realize new ideas, hence, an environment which accepts failures enhances employee innovativeness (Kemelgor, 2002). Failure tolerance perception signals out to employees that innovativeness is encouraged (Morris & Jones, 1999). It is also logical to believe that experimentation have chances of failure, and where the failures are tolerated, innovations may occur. These are novel empirical findings which add to our understanding of individual innovation.

Communication openness also had positive significant effect on employee innovativeness. An important aspect of innovation climate is communication openness (Ahmed, 1998). We empirically prove the notion put forward by Hülsheger et al. (2009) that the free exchange of ideas among the members of an organization is related with employee innovativeness. From the results, we may infer that communication openness enhances the thought sphere of employees as a result of exchange of ideas which brings broader perspective in actions. Openness of communication enables employees to voice their ideas and concerns to their organization. Hence, in line with Stull (2004) we find that openness of communication is positively related with innovativeness.

The results support that work discretion is a significant predictor of innovative behavior. As highlighted earlier, for being innovative, experimentation is required. Discretion gives employees freedom to experiment their ideas for process improvement, and even for the development of new products (De Spiegelaere, Van Gyes, et al., 2014). Our results are consistent with Roberg (2007) who also reported similar findings. Why discretion affects innovativeness is mainly determined by the reason that employees can freely work on their original ideas.

Reward fairness also proved a significant and positive predictor of innovativeness. Our findings coincide with Zhou and Shalley (2003) who advocate the establishment of a reward system to enhance creativity and innovation among organizational members. Here, we point out that the establishment of a system of rewards is not enough until unless such system is based on fairness (Baumann, 2011). Janssen (2000) also reported similar findings and supported the establishment of fair reward system.

The moderating effects of organizational tenure also turned out as hypothesized. With increase in tenure, the effect of predictors lowered. The employees with low tenure were more innovative, whereas, employees with higher tenure were less innovative. It may be attributed that new employees are concerned about their impression in the organization, and hence, may opt innovativeness as a way of impression management.

# 6. Conclusion and Future Directions

Along with the theoretical contributions, this study has some practical implications also. The organizations should create a culture of failure tolerance, openness, work discretion and fairness. Organizations may use the people in lead roles to create such atmospheres because they serve as representatives of the organization. Such an environment is not only

an important antecedent of innovative behavior but has also influence on the in-role responsibilities of employees.

Since we followed cross-sectional design which is detrimental to the establishment of causality. We recommend that future researchers may follow a longitudinal design wherein the data on the antecedent conditions should be collected at one point while the data on the criterion variable may be collected at a later time point. It is also recommended that a mixed method approach may be followed while integrating the multiple level of analysis.

#### REFERENCES

Ackoff, R. L. (2006). A major mistake that managers make. *Handbook of Business Strategy*, 7(1), 225-227.

Ahmed, P. K. (1998). Culture and climate for innovation. *European Journal of Innovation Management*, *1*(1), 30-43.

Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, *39*(5), 1154-1184.

Åmo, B. (2006). Employee innovation behaviour in health care: the influence from management and colleagues. *International Nursing Review*, 53(3), 231-237.

Antoncic, B. (2007). Intrapreneurship: a comparative structural equation modeling study. *Industrial Management & Data Systems*, 107(3), 309-325.

Appelbaum, S. H., Roy, M., & Gilliland, T. (2011). Globalization of performance appraisals: theory and applications. *Management Decision*, 49(4), 570-585.

Axtell, C. M., Holman, D. J., Unsworth, K. L., Wall, T. D., Waterson, P. E., & Harrington, E. (2000). Shopfloor innovation: Facilitating the suggestion and implementation of ideas. *Journal of Occupational and Organizational Psychology*, *73*(3), 265-285.

Ayoko, O. B. (2007). Communication openness, conflict events and reactions to conflict in culturally diverse workgroups. *Cross Cultural Management: An International Journal,* 14(2), 105-124.

Baumann, P. K. (2011). *The Relationship Between Individual and Organizational Characteristics and Nurse Innovation Behavior*. Indiana University, Indiana.

Burns, P. (2008). *Corporate entrepreneurship: building the entrepreneurial organization*. New York: Palgrave Macmillan.

Cabrera, A., Collins, W. C., & Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management*, 17(2), 245-264.

Cannon, M. D., & Edmondson, A. C. (2005). Failing to Learn and Learning to Fail (Intelligently): How Great Organizations Put Failure to Work to Innovate and Improve. *Long Range Planning*, *38*(3), 299-319.

Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, *34*(3), 555-590.

Haq et al.

Dawes, G. (2007). Mistakes-how can we learn from them? *Development and Learning in Organizations*, 21(2), 20-22.

De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity* and *Innovation Management*, 19(1), 23-36.

De Jong, J. P., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, 10(1), 41-64.

De Spiegelaere, S., Gyes, G. V., & Hootegem, G. V. (2014). *Different dimensions of Job Autonomy and Their Relation with Work Engagement & Innovative Work Behaviour: The More the Merrier*? Paper presented at the EURAM 2014, Valencia.

De Spiegelaere, S., Van Gyes, G., De Witte, H., Niesen, W., & Van Hootegem, G. (2014). On the Relation of Job Insecurity, Job Autonomy, Innovative Work Behaviour and the Mediating Effect of Work Engagement. *Creativity and Innovation Management*, 23(3), 318-330.

Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research*, 71(1), 1-27.

Dörner, N. (2012). Innovative Work Behavior: The Roles of Employee Expectations and Effects on Job Performance. University of St.Gallen, Bamberg

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507.

Fischer, R., & Smith, P. B. (2003). Reward Allocation and Culture: A Meta-Analysis. *Journal of Cross-Cultural Psychology*, *34*(3), 251-268.

Garg, S., & Dhar, R. (2017). Employee service innovative behavior. *International Journal of Manpower*, *38*(2), 242-258.

Gupta, V., MacMillan, I. C., & Surie, G. (2004). Entrepreneurial leadership: developing and measuring a cross-cultural construct. *Journal of Business Venturing*, *19*(2), 241-260.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, *16*(2), 250-279.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*. Upper Saddle River, NJ: Pearson.

Hisrich, R. D., & Peters, M. P. (2002). *Entrepreneurship* (5th ed.). India: Tata Mc Graw-Hill.

Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of Business Venturing*, *17*(3), 253-273.

Hsu, M. L. A., & Chen, F. H. (2017). The Cross-Level Mediating Effect of Psychological Capital on the Organizational Innovation Climate-Employee Innovative Behavior Relationship. *The Journal of Creative Behavior*, *51*(2), 128-139.

Hülsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: a comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, *94*(5), 1128-1145.

Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, *92*(5), 1332-1356.

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational And Organizational Psychology*, 73(3), 287-302.

Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organizational Psychology*, 78(4), 573-579.

Kang, J. H., Matusik, J. G., Kim, T.-Y., & Phillips, J. M. (2016). Interactive effects of multiple organizational climates on employee innovative behavior in entrepreneurial firms: A cross-level investigation. *Journal of Business Venturing*, *31*(6), 628-642.

Kemelgor, B. H. (2002). A comparative analysis of corporate entrepreneurial orientation between selected firms in the Netherlands and the USA. *Entrepreneurship & Regional Development*, *14*(1), 67-87.

Kriegesmann, B., Kley, T., & Schwering, M. G. (2005). Creative errors and heroic failures: capturing their innovative potential. *Journal of Business Strategy*, *26*(3), 57-64.

Kuratko, D. F., Montagno, R. V., & Hornsby, J. S. (1990). Developing an Intrapreneurial Assessment Instrument for an Effective Corporate Entrepreneurial Environment. *Strategic Management Journal*, *11*(Special Issue Summer), 49-58.

Malhotra, N., Budhwar, P., & Prowse, P. (2007). Linking rewards to commitment: an empirical investigation of four UK call centres. *The International Journal of Human Resource Management*, 18(12), 2095-2128.

Martins, E., & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European Journal of Innovation Management*, 6(1), 64-74.

McDonald, R. E. (2002). *Knowledge Entrepreneurship: Linking Organizational Learning and Innovation*. (Ph.D), University of Connecticut, Connecticut.

McKenzie, R. B., & Lee, D. R. (1998). Managing Throuhg Incentives. New York: OUP.

Menzel, H., Krauss, R., Ulijn, J., & Weggeman, M. (2008). Developing characteristics of an intrapreneurship-supportive culture. In A. Fayolle & P. Kyrö (Eds.), *The Dynamics between Entrepreneurship, Environment and Education* (pp. 77-102). Cheltenham, UK: Edward Elgar.

Morgeson, F. P., Delaney-Klinger, K., & Hemingway, M. A. (2005). The importance of job autonomy, cognitive ability, and job-related skill for predicting role breadth and job performance. *Journal of Applied Psychology*, *90*(2), 399.

Morris, M. H., & Jones, F. F. (1999). Entrepreneurship in established organizations: The case of the public sector. *Entrepreneurship Theory and Practice*, 24(1), 71-91.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *The Journal of Marketing*, 54(4), 20-35.

Parker, S. (1998). Role breadth self-efficacy: Relationship with work enrichment and other organizational practices. *Journal of Applied Psychology*, *83*(6), 835-852.

Peters, T. J., Waterman, R. H., & Jones, I. (2004). *In search of excellence: Lessons from America's best-run companies*: Harper Collins.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.

Ramamoorthy, N., Flood, P. C., Slattery, T., & Sardessai, R. (2005). Determinants of innovative work behaviour: Development and test of an integrated model. *Creativity and Innovation Management*, *14*(2), 142-150.

Roberg, L. C. (2007). Organizational empowerment and hardiness as predictors of innovativeness. (Master's Thesis), San Jose State University, San Jose. (3436)

Rogers, D. P. (1987). The development of a measure of perceived communication openness. *Journal of Business Communication*, 24(4), 53-61.

Scheepers, M., Hough, J., & Bloom, J. (2008). Nurturing the corporate entrepreneurship capability. *Southern African Business Review*, *12*(3), 50-74.

Schoemaker, P. J. H. (1993). Strategic decisions in organizations: Rational and Behavioural views. *Journal of Management Studies*, 30(1), 107-129.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, *37*(3), 580-607.

Shah, R., & Goldstein, S. M. (2006). Use of structural equation modeling in operations management research: Looking back and forward. *Journal of Operations Management*, 24(2), 148-169.

Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, *15*(1), 33-53.

Shane, S. A. (2003). A general theory of entrepreneurship: The individual-opportunity nexus. Cheltenham, UK: Edward Elgar Publishing.

Sharifirad, M. (2013). Transformational leadership, innovative work behavior, and employee well-being. *Global Business Perspectives*, 1(3), 198-225.

Stull, M. G. (2004). Exploring the factors that promote risk taking, innovativeness, and proactiveness among managers and employees: The influence of trust, motivational, and enabling mechanisms. [Online] Available at: http://digitalcase.case.edu:9000/fedora/get/ksl:weaedm194\_(February 27<sup>th</sup>, 2016).

Sturman, M. C. (2003). Searching for the Inverted U-Shaped Relationship Between Time and Performance: Meta-Analyses of the Experience/Performance, Tenure/Performance, and Age/Performance Relationships. *Journal of Management*, *29*(5), 609-640.

Timmons, J. A., & Spinelli, S. (2009). *New venture creation: Entrepreneurship for the 21st century*. Irwin: Boston.

Turner, C. (2002). *Lead to succeed: Creating entrepreneurial organisations*. London Cengage Learning.

Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management Science*, 32(5), 590-607.

Wallace, J. C., Butts, M. M., Johnson, P. D., Stevens, F., G., & Smith, M., B. (2016). A Multilevel Model of Employee Innovation: Understanding the Effects of Regulatory Focus, Thriving, and Employee Involvement Climate. *Journal of Management*, 42(4), 982-1004.

West, M. A., & Farr, J. L. (1990). Innovation and creativity at work: Psychological and organizational strategies: John Wiley & Sons.

Williamson, I. O., Burnett, M. F., & Bartol, K. M. (2009). The interactive effect of collectivism and organizational rewards on affective organizational commitment. *Cross Cultural Management: An International Journal*, *16*(1), 28-43.

Yoshida, D. T., Sendjaya, S., Hirst, G., & Cooper, B. (2014). Does servant leadership foster creativity and innovation? A multi-level mediation study of identification and prototypicality. *Journal of Business Research*, 67(7), 1395-1404.

Yuan, F. (2012). Individual innovation in the workplace: The role of performance and image outcome expectations. Texas A&M University.

Zampetakis, L. A., Beldekos, P., & Moustakis, V. S. (2009). "Day-to-day" entrepreneurship within organisations: The role of trait Emotional Intelligence and Perceived Organisational Support. *European Management Journal*, 27(3), 165-175.

Zhou, J., & Shalley, C. E. (2003). Research on employee creativity: A critical review and directions for future research. *Research in Personnel and Human Resources Management*, 22, 165-217.