

Intrapreneurial behaviour: the role of organizational commitment

The role of
organizational
commitment

243

Muhammad Farrukh

*Institute of Graduate Studies, SEGi University Kota Damansara,
Petaling Jaya, Malaysia*

Wei Ying Chong

*Graduate School of Business, SEGi University Kota Damansara,
Petaling Jaya, Malaysia*

Shaheen Mansori

*INTI International University and Colleges,
Nilai, Malaysia, and*

Sara Ravan Ramzani

*Limkokwing University of Creative Technology,
Seri Kembangan, Malaysia*

Abstract

Purpose – The purpose of this paper is to shed light on the impact of organizational commitment (OC) on the intrapreneurial behaviour of the employees in higher educational institutes (HEIs) of Pakistan.

Design/methodology/approach – This paper opted the empirical study using the survey approach. Structural equation modelling was used to analyse the questionnaires completed by the Deans/Head of Schools, professors and associate professors of the 20 public HEIs of Pakistan located in the capital city, Islamabad. In total, 500 structured questionnaires were sent to the Deans/Head of Schools, professors and associate professors. A total of 306 responses were received.

Findings – Affective commitment (AC) and normative commitment (NC) has a positive and significant impact on the intrapreneurial behaviour while continuance commitment (CC) is negatively associated with the same behaviour.

Originality/value – This empirical study will contribute to the theoretical knowledge on intrapreneurship and OC in the public sector HEIs, which has been neglected in entrepreneurship research.

Keywords Affective commitment, Normative commitment, Continuance commitment, Intrapreneurial behaviour

Paper type Research paper

Introduction

In this dynamic and complex business era, organizations are facing immense competition because of trade liberalization, extensive foreign direct investment, acquisitions, mergers, advancement in technology, free trade agreements and open economy. These complex changes in market places have led the organizations to reconfigure their strategic approach and organizational philosophy to gain and maintain competitive edge. To cope up the rapidly changing environment, organizations need to be more entrepreneurial in their business processes and day to day ongoing operations. These dynamic conditions forced the researchers to focus on intrapreneurship, which helps in creating entrepreneurial culture and enhances organizational performance (Castrogiovanni *et al.*, 2011). This content is in line with many other researches which advocate that corporate entrepreneurship (CE) continuously seeks new opportunities by exploring and digging the resources (Angeles and Soriano, 2011).

Literature shows that there are many factors which can be helpful for nurturing the entrepreneurial environments in an organization. In considering intrapreneurship, organizations are required to capitalize on employees' innovative and risk taking behaviour.



This happens to be an interesting subject and has been considered by both the practitioner and the researchers. By the same token, the competitive business environment(s) leads organizations to rely on human capital. With regards to employees, organizations need to consider fundamental matters, such as commitment. Committed employees are a vital and fundamental resource to the success and performance of business organizations. There is a growing area of literature on intrapreneurial behaviour regarding the important role of entrepreneurial behaviour in the success of organizations. Moreover, promoting and fostering entrepreneurial behaviour among employees is one of the serious challenges faced by managers, particularly of human resources. Researchers and practitioners therefore seek a clear understanding of the antecedents of entrepreneurial behaviour. A large number of studies on organizational commitment (OC) have investigated the antecedents and consequences of commitment. The three forms of commitment – affective, continuance and normative – have been examined in previous research (Meyer and Allen, 1991). The literature indicated the role of each form of commitment in performance of organizations and employees. There is abundant material available on each area of OC, as well as on entrepreneurial behaviour, in previous literature, but there is a lack of research on the relationship between components of commitment and employees' entrepreneurial behaviour within Pakistan context especially for higher educational institutes (HEIs).

Research issue

The capability and effectiveness of the performance of HEIs in Pakistan has been the longstanding issue for last five decades. This persistent issue of low performance of the state owned HEIs has made the organizations' environment more threatening and turbulent to adapt to the changing needs of twenty-first century and globalization. This deficiency in performance demands the HEIs to be more responsive to the stakeholder of the institutes. Therefore, the conventional systems of HEIs require some flexibility to undertake some entrepreneurial models to fill the void of the lack of performance.

The previous models have indicated that there are mainly two groups of factors that play a significant role as entrepreneurial antecedents in organizations. These groups of factors are related to organizational and individual characteristics.

The first dimension of research concerns to the relationship between organizational factors and CE/intrapreneurship. This field has been the subject of considerable interest in the literature. Many organizational factors seem to be instrumental in the creation of entrepreneurial organizational behaviour (Goodale *et al.*, 2011; Sinha and Srivastava, 2013; Yildiz *et al.*, 2004; Zahra, 1993, 1995).

The second dimension of research discerns individual antecedents of entrepreneurship and focusses on investigating that why do some people among all, become entrepreneurs or recognize and fonder opportunities. Initial efforts to answer this question have focussed mainly on the individual traits that distinguish entrepreneurs from the rest of the population (Farrukh *et al.*, 2016; Fini *et al.*, 2012; Rutherford and Holt, 2007; Zhao *et al.*, 2010).

However, much light has not been shed upon the individual factors which are affecting the entrepreneurial behaviour in organizations. OC is among the main factors which may affect the behaviour of individuals to become intrapreneur. The dimensions of intrapreneurship are innovativeness and risk taking. They belong to individuals (De Jong *et al.*, 2011) and knowing the antecedents of human behaviour has become one of the tinted areas of research.

This study aims to overcome this lack by examining the aforementioned relationship among employees of HEIs of Pakistan. The study is designed to answer the research question:

- RQ1.* What is the impact of affective commitment (AC), continuance commitment (CC) and normative commitment (NC) on intrapreneurial behaviour of employees of HEIs of Pakistan?

This study is divided into three parts in the first part we briefly discuss about the idea of OC, intrapreneurship and hypothesis development while in the second part we share that we conducted an empirical analysis to test the hypothesis, and in the third part we have discussed the results and jotted down limitations and contribution.

OC

Concept of OC has been defined and described in many ways. Meyer and Allen (1991) defined OC as “a psychological link between the employee and organization that makes it less likely that the employee will voluntarily leave the organization”.

In general terms, OC refers to an employee's belief in the organization's vision and value, and why he/she would like to remain faithful to organization (Hackett *et al.*, 2001). OC is comprised of three dimensions: NC, AC and CC (Allen *et al.*, 1990; Crow *et al.*, 2012; Syed *et al.*, 2015). AC is an emotional link of employee with his/her organization, NC is the commitment based on sense of obligation towards organization and basis of CC links to cost and benefits linked to stay in the organization.

Intrapreneurship

Intrapreneurship or CE is concept used for the entrepreneurial activities within the boundaries of the existing organization (Sharma and Chrisman, 1999). There is no universally accepted definition of intrapreneurship available; however, the focus of intrapreneurship is the innovativeness and risk taking attitude in the existing organization. This study will utilize the definition of Covin and Slevin (1991) by using the two dimension of CE namely, innovativeness and risk taking. Here it is imperative to mention that the literature review showed that most of the prior studies have focussed on the organization level factors for nurturing the entrepreneurial activities in the existing organization, however there is a very little research focussed on the individual level antecedents of intrapreneurship. Intrapreneurial behaviour is a risky attitude, which is often initiated by the employees who are committed to the organization. Keeping in mind the importance of OC, we endeavoured to study the impact of each dimension of OC on intrapreneurial behaviour, which is a missing link in the literature. In the following section we will focus on the two dimensions of intrapreneurship, namely innovativeness and risk taking, and on the basis of literature hypothesis for the OC and IB will be postulated.

Innovativeness

Plethora of studies had been conducted on the innovativeness by many researchers from different study cultures. Innovativeness is the generation and implementation of the new ideas (Hakimian *et al.*, 2016). A number of studies have been conducted to know the antecedent of innovative behaviour, for example, supervisor-worker relationship (Janseen and Yperen, 2004), organizational climate and culture (Scott and Bruce, 1994) individual difference (Bunce and West, 1995), and OC (Hakimian *et al.*, 2016; Jafri, 2010; Xerri and Brunetto, 2013). The innovativeness of the employees is dependent on the resources and knowledge possessed by the employees (Åmo and Kolvereid, 2005) as well as their commitment to the organization (Jafri, 2010).

Risk taking

Risk taking has been viewed as a fundamental element of entrepreneurship since Cantillon (1734) defined an entrepreneur as a person who bears risk of profit or loss (Antoncic and Hisrich, 2001). Previous researches have shown that risk taking is considered as a distinctive dimension of entrepreneurship within organizations (Covin and Slevin, 1991; Lumpkin and Dess, 1996). It relates to intrapreneurship in the sense of the considerable risk that comes

along with intrapreneurial activities as effort and resources must be invested before the distribution of their return is known (Bosma *et al.*, 2010). In this study we utilized the risk taking at individual level, in the context of this study, risk taking behaviour is the tendency of the employees to take risk in order to look at the broader benefits of the organization.

Theory and hypothesis development

The foundation of this study is based on the social exchange theory (SET). The literature on social exchange was initiated by the seminal work of Blau (1964) who built Norms Reciprocity Theory. SET states that employee in an organization can feel gratified and obliged to supervisor, colleagues or to organization if they have had support and have benefitted from the exchange with the organization (Blau, 1964). SET can be utilized as a lens to identify the potential results when the ideal workplace relationships are entrenched in the working environment. Under the ideal work environment employees would expect high level of support from the firm, as a result of which they would exhibit the positive thoughts and actions towards organization (Brunetto *et al.*, 2008). This is evident in the form of higher level of commitment to the organization and under taking of activities even that are not covered by the scope of the job. These kinds of activities may be evident from the way employees in HEIs help other colleagues and students. On the basis of SET, it is in the benefit of organization to implant effective workplace process to ensure that an environment develops which up brings employees that are committed to the organizations. This commitment is later used to enhance the performance of the employees both at the organizational and the individual levels.

Employees with high level of OC have more tendencies of hard work rather than those with low level of commitment. Their commitment level increases their level of willingness to indulge more efforts in attaining the organizational goal. Organizational performance is reflected through its innovation. As the level of OC increases the level of organizational innovation also increases. In this section we would be able to develop the hypothesis with the two dimension of the intrapreneurship and three types of OC based on Meyer and Allen (1991).

AC and innovativeness

AC has been studied the most out of the other types of commitment (Hakimian *et al.*, 2016). It is defined as emotional attachment of the individuals with their organization, which means the employees are affectionately attached to the organizations and they want to stay in organization (Xerri and Brunetto, 2013). Employees who are emotionally attached to their organizations are more likely to share knowledge and bring innovative ideas (Thompson and Heron, 2006) Chughtai (2013) studied the AC in another direction and found that employees' commitment to supervisor may enhance the innovativeness, learning and work engagement. Emotional responsibility which is identified with individual quality, convictions and wishes aid enhance his state of mind towards organizational advancement and steps forward the organizational development. It was concluded by Eisenberger *et al.* (1990) that the level of commitment of employees' emotions with the organization influences the level of willingness of employees to adapt innovation and change.

The impact of organizational innovation is nullified by the loss of key employees. High level of AC reduces the probability of employees of leaving the organization, which guarantees the uninterrupted organizational innovation. According to Liu *et al.* (2011) a productive and positive interaction among the employees may enhance the commitment which in turn results in innovative output (Liu *et al.*, 2011). On the basis of the past literature we can expect that innovative behaviour requires the commitment of employees.

CC and innovativeness

Meyer and Allen (1991) defined CC as “an awareness of the costs associated with leaving the organization” and is based on a “need” to remain with an organization. This type of commitment is more linked to the cost calculations. Meyer and Allen (1991) postulated that the employee with CC may not put their full efforts to contribute in organization. The CC of employees who are continuing their job depends upon the cost they have to bear on leaving the organization. The employee with such sort of commitment will evaluate that either they have to bear high cost in staying in the organization or leaving it. The person bearing high cost in staying with his organization will have high readiness of leaving the job. Employee opportunism has an effect on the learning environment of the organization. Although organization as a whole is much less prone to that effect, however considering employee a building block in the organization, there is definitely some effect. The level of organizational innovation is positively and quite significantly dependent on the learning ability of the organization (Chen and Francesco, 2003), because employees’ stay in the organization is only because of high cost of leaving. Many previous studies have found a negative association between CC and job performance. In a more recent study (Hakimian *et al.*, 2016) found a negative link between innovative behaviour and CC.

NC and innovativeness

The third dimension of OC proposed by Allen and Mayer is NC. It is “an obligation to remain with an organization” (Allen *et al.*, 1990). Wasti and Can (2008) is of the opinion that the feeling of obligation to remain in the organization may results from the internalization of normative pressures exerted on individual prior to entry into organization or after entering the organization (organizational socialization). Employees stay committed to an organization because they feel it is the “right” and “moral” thing to do (Martin and Roodt, 2008). NC as defined by Felfe and Yan (2009) refers to the degree to which an individual is psychologically attached to the employing organization through the internalization of its goals, values and missions. It is different from ACs as it reflects a sense of obligation and duty but not an emotional attachment. It is also different from CC, as it does not necessarily fluctuate with the costs and benefits (Felfe *et al.*, 2008). While the loyalty and the employee’s sense of responsibility is being emphasized by NC. Chen and Francesco (2003) instituted that the strong NC of the employee reinforces his willingness to work hard and tend to be a good organizational citizen, which would directly influence his or her performance positively.

Past literature showed a positive relationship between NC and job-related behaviour (Ozag, 2006; Powell *et al.*, 2006). Since the employee with NC are committed to organization because they think its “right” to stay with organization, so this sense of obligation may lead them to be more innovative.

The extensive paper work and the study of the literature revealed that studies on NC and innovative behaviour is limited, therefore a very few empirical evidence could be found. In one of the recent studies (Hakimian *et al.*, 2016) it was found that a positive association between innovative behaviour of employee and NC. On the basis of above explanation we also expect a positive association between NC and innovativeness of employees.

Risk taking behaviour and OC

In discussing the importance of OC, Meyer and Allen (1991) believed that committed employees would be an advantage to the organization because of their loyalty and willingness, and at the same time adhere to organization strategy (Currie and Dollery, 2007; Shirbagi, 2007; Turner Parish *et al.*, 2008). The role of employee commitment with organization is very vital in risk taking within in the confined limits of the organization. It is also vital in ensuring the successful implementation of risk management in the organization (Ismail *et al.*, 2012).

Employees' participation or contribution is vital for risk management; there is a need to examine the role of OC as a factor that contributes to employee's participation in risky behaviour process and perceived effective enterprise risk management. The discussion rests upon how OC could influence employee's willingness towards put their effort in understanding and participating in the enterprise risk management. Theoretically, higher OC will lead to better employee participation due to the sense of obligation that the employee had towards the organization success (Gellatly *et al.*, 2006). Meyer and Allen (1991) stated that if an employee possessed stronger AC, he/she is emotionally attached with the organization that indirectly motivates him/her with the desire to contribute meaningfully to the organization. In other word, the sense of belonging to the organization will actually enhance their effort and compliance for the well-being of their organization and may lead their agreement to the organization policies or strategy (Ismail *et al.*, 2012).

NC is the obligatory attachment of the individual with the organizations, this sense of obligation comes through the organizational socialization process, which helps the individuals to recognize the strategies and policies of the organization. Committed employee will tend to contribute towards the organizational goal, and considering risk taking as one of the policy at individual level, we can expect that individuals with high NC will display more risk taking behaviour. While in terms of CC, individuals are merely committed to organizations because of their own benefits of staying in the organizations, the individuals who are more concerned towards their own benefits usually show a lack of interest in the organizational goals, thus we can postulate that individuals who are committed to the organizations only because of cost and benefits attached to stay in organization will less likely to be involved in risk taking.

On the basis of the discussion and some empirical findings of the prior researches, we postulate the following hypothesis:

H1. AC is positively linked to intrapreneurial behaviour.

H2. NC is positively linked to intrapreneurial behaviour.

H3. CC is negatively linked to intrapreneurial behaviour.

Methods and measure

OC was measured through the three component model, adopted from Meyer and Allen (1991). This model was intended to measure three forms of commitment – affective, normative and continuance. Each item was scored on a five-point Likert scale, with “1” being “strongly disagreed” and “5” being “strongly agreed”. The sample questions for each component were: “I would be very happy to spend the rest of my career with this organization”, “It would be very hard for me to leave this organization right now, even if I wanted to”, and “Even if it were to my advantage, I do not feel it would be right to leave this organization now”. The dependent variable of this study is employees intrapreneurial behaviour. Two dimensions of IB were measured by adopting risk taking and innovativeness measure from Dutta (2013).

Data collection

The performance of the HEIs of Pakistan has been a longstanding issue. Pakistan has been ranked 50th out of 50 countries, with an overall score of 9.2 by Quacquarelli Symonds (QS), a British ranking agency. Despite the government's claims to have invested billions in the country's education system, Pakistan secured the lowest ranking of the 50 countries included in the list (Universities, 2016). OC plays a vital role in performance of the individual which ultimately results in organizational performance at a large, therefore in this study we made an effort to investigate the impact of OC on IB of HEIs, this could give sound

underpinning for understanding the performance issues of HEIs. This paper opted the empirical study using the survey approach by sending 500 structured questionnaires to the Deans/Head of Schools, professors and associate professors of the 20 public HEIs of Pakistan. A total 306 responses were received.

Analysis

The current study utilized structural equation modelling. The research used the partial least square (PLS-SEM) tool for the assessments of measurement and structural model with the help of SmartPLS2.0 software (Ringle *et al.*, 2005). Intrapreneurial behaviour was operationalized as reflective-reflective second order construct while the dimensions of OC were formulated as first order reflective constructs.

Model evaluation by SmartPLS is twostep process, in the first step the quality criteria of measurement model is assessed, which includes composite reliability (CR), According to Höck and Ringle (2006),accepted value of CR is 0.60 or greater. Average variance extracted (AVE) is another criterion for the assessment of the measurement model and accepted value of AVE is 0.5 or greater.

Subsequently, a third quality criterion, discriminant validity was examined to indicate whether the latent variable measures the variance of its own indicators better than the variance of other latent variables (Fornell and Larcker, 1981). Also, this study compared the square root values of AVE with the correlations between the latent constructs. The quality criteria given in Table I shows that all the required values were achieved, thus, our measurement model is fit for further processing.

Structural model

The assessment of the structural model includes the check for multicollinearity the significance of path coefficients (bootstrapping) and R^2 (Hair and Hult, 2013).

2nd order	1st order	Items	Loadings	AVE	CR	Cronbach's α
IB		rsk1	0.7583	0.551 0.5746	0.7823 0.7532	0.812 0.7138
		rsk2	0.7662			
		rsk3	0.7424			
		rsk4	0.6995			
		Inno1	0.7211			
		Inno2	0.8196	0.5649	0.8353	0.7481
		Inno3	0.7858			
		Inno4	0.7735			
		Inno5	0.7229			
		Affective commitment	ac1			
	ac2		0.7797			
	ac3		0.7775			
	ac4		0.8471			
	ac5		0.7117			
	ac6		0.6825			
	Normative commitment	nc1	0.7859	0.5847	0.8073	0.6663
		nc2	0.8299			
		nc3	0.6691			
	Continuance commitment	cc1	0.704	0.5398	0.8229	0.7208
		cc2	0.7967			
cc3		0.6255				
Cc4		0.7984				

Table I.
Quality criteria of measurement model

Multicollinearity assessment

In order to check the multicollinearity issue among the variable of the study we imported latent variable scores to IBM SPSS 22. The levels of collinearity are assessed by tolerance and variance inflation factor (VIF) values. A tolerance value of 0.20 or lower and VIF value of 5 and higher indicate a potential collinearity problem (Hair and Hult, 2013). The values on the Table II indicated no multicollinearity issue.

R²

After checking the collinearity issues the R² values for the endogenous (dependent) variables were checked. The R² value depicts the predictive capability of the model. R² value for the endogenous constructs (IB) is found as 0.43.

Hypothesis testing

The relationship of structural model is determined by the path coefficient among the construct of the study (Hair and Hult, 2013). Critical values for two tailed and one tailed are 1.96 and 1.65, respectively. By the use of bootstrapping function of SmartPLS 2 we calculated the t statistics with 5,000 re-sampling as suggested by Hair and Hult (2013) Table III.

Discussion

In this dynamic and competitive business world organizations are facing two major issues, – to survive and to gain competitive edge. Organizations are needed to be entrepreneurial in order to compete their competitors. Employee’ intrapreneurial behaviour may rely on different factors behavioural and psychological factors. Therefore, this study focussed on the OC and its effect on intrapreneurial behaviour of employees. The findings of this study showed a significant impact of OC on the intrapreneurial behaviour of the employees working in HEIs.

In the first hypothesis of this research we postulated a positive relationship on the basis of the literature. The results of statistical analysis revealed a positive association between the AC and IB. Employees having AC to their organizations enjoy staying in the organization, since they are emotionally attached to the organization. Consequently, this emotional commitment means a better attention to the organizational objectives and goals. Emotionally committed employee applies more efforts which lead them to display entrepreneurial behaviour in organization. AC to an organization might lead employees to keenly observe the work related issues and it may also encourage them to bring new ideas and take risk in order to solve organizational problems. According to Thompson and

Table II.
Collinearity
assessments in
structural model

Variables	Tolerance	Collinearity statistics	VIF
Normative	0.912		1.097
Continuance	0.657		1.522
Affective	0.678		1.091

Table III.
Hypothesis testing

Hypothesis	β	SE	T statistics	Decision
AC → IB	0.2461	0.0495	4.1125	Supported
CC → IB	-0.1961	0.0426	3.7357	Supported
NC → IB	0.1737	0.0476	3.2669	Supported

Heron (2006) employees who have AC, are more likely to share knowledge which may result in innovative behaviour, thus we can say AC may enhance intrapreneurial behaviour of employees.

In the second hypothesis of this study we hypothesized a positive relationship between NC and intrapreneurial behaviour. The statistical findings of the study demonstrated a positive association between IB and NC. NC is the obligatory attachment of the individual with the organizations, this sense of obligation comes through the organizational socialization process, which helps the individuals to recognize the strategies and policies of the organization, as mentioned above committed employee will tend to contribute towards the organizational goals and considering risk taking as one of the policy at individual level, furthermore, it also helps employees to be more accurate in their duties which may result also in new ideas and innovation (Hakimian *et al.*, 2016).

Overall, employees with affective and NC try their best to perform well, which leads to intrapreneurial behaviour. Therefore, organizations need to put more effort into sustaining or creating affective and NC among employees.

The third hypothesis was postulated as a negative relationship between the CC and intrapreneurial behaviour, findings of statistical analysis helped us to support the hypothesis. CC is linked to the cost and benefits of staying in the organizations. Individuals with the understanding of the concept and those who are in key positions in the entity should try and find out those who are only in the organization due to cost benefits.

Limitations

This research has some limitations; the first limitation is the target population, as the study focussed on the HEIs, which are quite different from the traditional business organizations, thus generalization of results is limited. It is strongly recommended for future research to incorporate other sectors of the market.

The second limitation of the study is linked to the choice of variables as the study is solely focussed on the direct relationship between OC and intrapreneurial behaviour and ignores the mediating or moderating effects of certain dispositional characteristics, therefore, we recommended a future research by incorporating few dispositional characteristics such as personality traits and gender.

Contribution

The study contributes to the limited literature on the organizational commitment and intrapreneurship. The findings of the study might also help the decision makers in HEIs who intend to foster intrapreneurship in HEIs.

References

- Allen, N.J., Allen, N.J., John, P.M. and John, P.M. (1990), "The measurement and antecedents of affective, continuance and normative commitment to the organization", *Journal of Occupational Psychology*, Vol. 63 No. 1, pp. 1-18, available at: <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Åmo, B.W. and Kolvereid, L. (2005), "Organizational strategy, individual personality and innovation behaviour", *Journal of Enterprising Culture*, Vol. 13 No. 1, pp. 7-19, available at: <https://doi.org/10.1142/S0218495805000033>
- Angeles, M.-S. and Soriano, D. (2011), "Article information: human resource management and corporate entrepreneurship", *International Journal of Manpower*, Vol. 32 No. 1, pp. 6-13.
- Antoncic, B. and Hisrich, R.D. (2001), "Intrapreneurship", *Journal of Business Venturing*, Vol. 16 No. 5, pp. 495-527, available at: [https://doi.org/10.1016/S0883-9026\(99\)00054-3](https://doi.org/10.1016/S0883-9026(99)00054-3)
- Blau, P.M. (1964), *Exchange and Power in Social Life*, Transaction Publishers.

- Bosma, N., Stam, E. and Zoetermeer, S.W. (2010), "Intrapreneurship – an international study", *Scientific Analysis of Entrepreneurship and SMEs*, Vol. 12 No. 1, pp. 1-29, available at: <https://doi.org/10.1.1.333.6885>
- Brunetto, Y., Farr-Wharton, R., Nelson, S. and Shacklock, K. (2008), "The impact of LMX on nurses' perceptions of well-being: a social exchange theory perspective", paper presented to the British Academy of Management 2008 Annual Conference, the Academy Goes Real, Harrogate, 9-11 September.
- Bunce, D. and West, M.A. (1995), "Self-perceptions and perceptions of group climate as predictors of individual innovation at work", *Applied Psychology*, Vol. 44 No. 3, pp. 199-215, available at: <https://doi.org/10.1111/j.1464-0597.1995.tb01076.x>
- Castrogiovanni, G.J., Urbano, D. and Loras, J. (2011), "Linking corporate entrepreneurship and human resource management in SMEs", *International Journal of Manpower*, Vol. 32 No. 1, pp. 34-47, available at: <https://doi.org/10.1108/01437721111121215>
- Chen, Z.X. and Francesco, A.M. (2003), "The relationship between the three components of commitment and employee performance in China", *Journal of Vocational Behaviour*, Vol. 62 No. 3, pp. 490-510, available at: [https://doi.org/10.1016/S0001-8791\(02\)00064-7](https://doi.org/10.1016/S0001-8791(02)00064-7)
- Chughtai, A.A. (2013), "Linking affective commitment to supervisor to work outcomes", *Journal of Managerial Psychology*, Vol. 28 No. 6, pp. 606-627, available at: <https://doi.org/10.1108/JMP-09-2011-0050>
- Covin, J.G. and Slevin, D.P. (1991), "A conceptual model of entrepreneurship as firm behavior", *Entrepreneurship Theory and Practice*, Fall, pp. 7-25.
- Crow, M.M., Lee, C.-B. and Joo, J.-J. (2012), "Organizational justice and organizational commitment among South Korean police officers: an investigation of job satisfaction as a mediator", *Policing: An International Journal of Police Strategies & Management*, Vol. 35 No. 2, pp. 402-423, available at: <https://doi.org/10.1108/13639511211230156>
- Currie, P. and Dollery, B. (2007), "Policing: an international journal of police strategies and management article information", *An International Journal of Police Strategies & Management*, Vol. 29 No. 4, pp. 741-756.
- De Jong, J.P.J., Parker, S.K., Wennekers, S. and Wu, C. (2011), "Corporate entrepreneurship at the individual level: measurement and determinants", EIM Research Reports, EIM, Zoetermeer.
- Dutta, S. (2013), *An Interactive Model of Employee Intrapreneurial Behaviour*, Central Michigan University Mount Pleasant, MI, available at: <https://scholarly.veridiansoftware.com/cgi-bin/cmuscholarly?a=d&d=CMUGR2013-39.1.163&e=——en-10-1-txt-txIN%7CtxAUF%7CtXTI->
- Eisenberger, R., Fasolo, P. and Davis-LaMastro, V. (1990), "Perceived organizational support and employee diligence, commitment, and innovation", *Journal of Applied Psychology*, Vol. 75 No. 1, pp. 51-59, available at: <https://doi.org/10.1037/0021-9010.75.1.51>
- Farrukh, M., Ying, C. and Mansori, S. (2016), "Intrapreneurial behaviour: an empirical investigation of personality traits research issue", *Management & Marketing. Challenges for the Knowledge Society*, Vol. 11 No. 4, pp. 597-609, available at: <https://doi.org/10.1515/mmcks-2016-0018.Introduction>
- Felfe, J. and Yan, W.H. (2009), "The impact of workgroup commitment on organizational citizenship behaviour, absenteeism and turnover intention: the case of Germany and China", *Asia Pacific Business Review*, Vol. 15 No. 3, pp. 433-450.
- Felfe, J., Yan, W. and Six, B. (2008), "The impact of individual collectivism on commitment and its influence on organizational citizenship behaviour and turnover in three countries", *International Journal of Cross Cultural Management*, Vol. 8 No. 2, pp. 211-237, available at: <https://doi.org/10.1177/1470595808091790>
- Fini, R., Grimaldi, R., Marzocchi, G.L. and Sobrero, M. (2012), "The determinants of corporate entrepreneurial intention within small and newly established firms", *Entrepreneurship: Theory and Practice*, Vol. 36 No. 2, pp. 387-414, available at: <https://doi.org/10.1111/j.1540-6520.2010.00411.x>
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, pp. 382-388.

- Gellatly, I.R., Meyer, J.P. and Luchak, A.A. (2006), "Combined effects of the three commitment components on focal and discretionary behaviours: a test of Meyer and Herscovitch's propositions", *Journal of Vocational Behaviour*, Vol. 69 No. 2, pp. 331-345.
- Goodale, J.C., Kuratko, D.F., Hornsby, J.S. and Covin, J.G. (2011), "Operations management and corporate entrepreneurship: the moderating effect of operations control on the antecedents of corporate entrepreneurial activity in relation to innovation performance", *Journal of Operations Management*, Vol. 29 Nos 1/2, pp. 116-127, available at: <https://doi.org/10.1016/j.jom.2010.07.005>
- Hackett, R.D., Lapierre, L.M. and Hausdorf, P.A. (2001), "Understanding the links between work commitment constructs", *Journal of Vocational Behaviour*, Vol. 58 No. 3, pp. 392-413, available at: <https://doi.org/10.1006/jvbe.2000.1776>
- Hair, J.F. Jr and Hult, G.T.M. (2013), "A primer on partial least squares structural equation modeling (PLS-SEM)", Sage Publications.
- Hakimian, F., Farid, H., Ismail, M.N. and Nair, P.K. (2016), "Importance of commitment in encouraging employees' innovative behaviour", *Asia-Pacific Journal of Business Administration*, Vol. 8 No. 1, pp. 70-83.
- Höck, M. and Ringle, C.M. (2006), "Strategic networks in the software industry: an empirical analysis of the value continuum", *IFSAM VIIIth World Congress*, Vol. 28, p. 2010.
- Universities, Q.T. (2016), "QS higher education system strength rankings (HESS)", Top Universities, available at: www.topuniversities.com/system-strength-rankings/2016#sorting=rank+custom=rank+order=desc+search= (accessed January 23, 2017).
- Ismail, I., Nik Abd Rahman, N.M., Abdul Hamid, M. and Idris, F. (2012), "Assessing employee affective commitment as a mediator on the relationship between risk assessment and effective enterprise risk management (ERM)", *Journal of Business and Policy Research*, Vol. 7 No. 3, pp. 60-77.
- Jafri, M.H. (2010), "Organizational commitment and employee's innovative behaviour a study in retail sector", *Journal of Management Research*, Vol. 10 No. 1, pp. 62-68, available at: www.indianjournals.com/ijor.aspx?target=ijor:jmr&volume=10&issue=1&article=005
- Janseen, O. and Yperen, N. (2004), "Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction", *Academy of Management Journal*, Vol. 47 No. 3, pp. 368-384.
- Liu, Y., Keller, R.T. and Shih, H.A. (2011), "The impact of team-member exchange, differentiation, team commitment, and knowledge sharing on R&D project team performance.", *R and D Management*, Vol. 41 No. 3, pp. 274-287, available at: <https://doi.org/10.1111/j.1467-9310.2011.00636.x>
- Lumpkin, G.T. and Dess, G.G. (1996), "The entrepreneurial clarifying it construct and linking orientation", *Academy of Management Review*, Vol. 21 No. 1, pp. 135-172, available at: <https://doi.org/10.2307/258632>
- Martin, A. and Roodt, G. (2008), "Perception of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution", *SA Journal of Industrial Psychology*, Vol. 34 No. 1, pp. 23-31, available at: <https://doi.org/10.4102/sajip.v34i1.415>
- Meyer, J.P. and Allen, N.J. (1991), "A three-component model conceptualization of organizational commitment", *Human Resource Management Review*, Vol. 1 No. 1, pp. 61-89, available at: [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Ozag, D. (2006), "The relationship between the trust, hope, and normative and continuance commitment of merger survivors", *Journal of Management Development*, Vol. 25 No. 9, pp. 870-883, available at: <https://doi.org/10.1108/02621710610692070>
- Powell, A., Galvin, J. and Piccoli, G. (2006), "Antecedents to team member commitment from near and far: a comparison between collocated and virtual teams", *Information Technology & People*, Vol. 19 No. 4, pp. 299-322, available at: <https://doi.org/10.1108/09593840610718018>
- Ringle, C., Wende, S. and Will, A. (2005), *Smart-PLS Version 2.0 M3*, University of Hamburg.
- Rutherford, M.W. and Holt, D.T. (2007), "Corporate entrepreneurship: an empirical look at the innovativeness dimension and its antecedents", *Journal of Organizational Change Management*, Vol. 20 No. 3, pp. 429-446, available at: <https://doi.org/10.1108/09534810710740227>

- Scott, S. and Bruce, R. (1994), "Determinants of innovative behaviour: a path model of individual innovation in the workplace", *Academy of Management Journal*, Vol. 37 No. 3, pp. 580-607, available at: <https://doi.org/10.2307/256701>
- Sharma, P. and Chrisman, S.J.J. (1999), "Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship", *Entrepreneurship Theory and Perspective*, Vol. 23 No. 3, pp. 11-27, available at: https://doi.org/10.1007/978-3-540-48543-8_4
- Shirbagi, N. (2007), "Exploring organizational commitment and leadership frames organizational commitment", *Education*, Vol. 29 No. 1, pp. 17-32.
- Sinha, N. and Srivastava, K.B.L. (2013), "Association of personality, work values and socio-cultural factors with intrapreneurial orientation", *Journal of Entrepreneurship*, Vol. 22 No. 1, pp. 97-113, available at: <https://doi.org/10.1177/0971355712469186>
- Syed, N., Saeed, A. and Farrukh, M. (2015), "Organization commitment and five factor model of personality: theory recapitulation", *Journal of Asian Business Strategy*, Vol. 5 No. 8, pp. 183-190.
- Thompson, M. and Heron, P. (2006), "Relational quality and innovative performance in R&D based science and technology firms", *Human Resource Management Journal*, Vol. 16 No. 1, pp. 28-47, available at: <https://doi.org/10.1111/j.1748-8583.2006.00003.x>
- Turner Parish, J., Cadwallader, S. and Busch, P. (2008), "Want to, need to, ought to: employee commitment to organizational change", *Journal of Organizational Change Management*, Vol. 21 No. 1, pp. 32-52, available at: <https://doi.org/10.1108/09534810810847020>
- Wasti, S.A. and Can, Ö. (2008), "Affective and normative commitment to organization, supervisor, and coworkers: do collectivist values matter?", *Journal of Vocational Behavior*, Vol. 73 No. 3, pp. 404-413.
- Xerri, M.J. and Brunetto, Y. (2013), "Fostering innovative behaviour: the importance of employee commitment and organisational citizenship behaviour", *The International Journal of Human Resource Management*, Vol. 24 No. 16, pp. 3163-3177, available at: <https://doi.org/10.1080/09585192.2013.775033>
- Yildiz, M.L., Namik, R. and Sokak, I. (2004), "The effects of organizational culture on corporate entrepreneurship", *Internation Journal of Business and Social Science*, Vol. 5 No. 5, pp. 35-45.
- Zahra, S.A. (1993), "Environment, corporate entrepreneurship, and financial performance: a taxonomic approach", *Journal of Business Venturing*, Vol. 8 No. 4, pp. 319-340, available at: [https://doi.org/10.1016/0883-9026\(93\)90003-N](https://doi.org/10.1016/0883-9026(93)90003-N)
- Zahra, S.A. (1995), "Corporate entrepreneurship and financial performance: the case of management leveraged buyouts", *Journal of Business Venturing*, Vol. 10 No. 3, pp. 225-247, available at: [https://doi.org/10.1016/0883-9026\(94\)00024-O](https://doi.org/10.1016/0883-9026(94)00024-O)
- Zhao, H., Seibert, S. and Lumpkin, G.T. (2010), "Journal of management", *Journal of Management*, Vol. 36 No. 2, pp. 381-404, available at: <https://doi.org/10.1177/0149206309335187>

Appendix 1

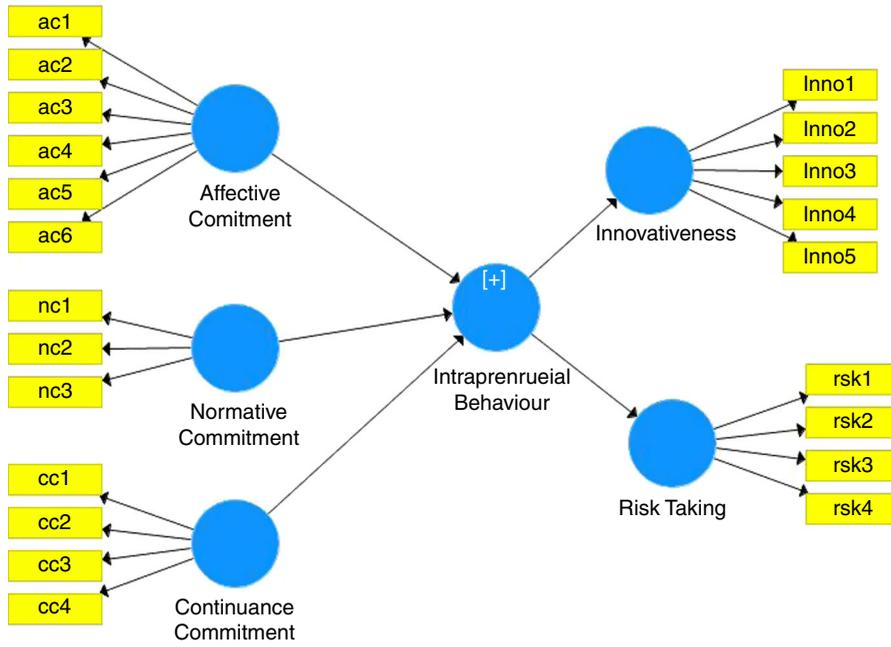


Figure A1. Model of the study

Appendix 2. Survey questionnaire items

Affective commitment

- I would be very happy to spend the rest of my career with this organization.
- I really feel as if this organization's problems are my own.
- I do not feel like "part of the family" at my organization.
- I do not feel "emotionally attached" to this organization.
- This organization has a great deal of personal meaning for me.
- I do not feel a strong sense of belonging to this organization.

Normative commitment

- Even if it were to my advantage, I do not feel it would be right to leave this organization now.
- This organization deserves my loyalty.
- I owe a great deal to this organization.

Continuance commitment

- It would be very hard for me to leave this organization right now, even if I wanted to.
- Right now staying with this organization is a matter of necessity as much as desire.
- One of the few serious consequences of leaving this organization would be the scarcity of available alternatives.
- One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice – another organization may not match the overall benefits that I have here.

Intrapreneurial behaviour

Intrapreneurial behaviour was measured by the two dimensions, innovativeness and risk taking; questionnaire items related to these two dimensions are given under.

Innovativeness

I attempt to convince people to support an innovative idea.

I visualize concrete steps for action when I consider ways to make a new idea happen.

I am particularly good at realizing ideas at work.

In the course of my work, I develop new processes, services or products.

Risk taking

I boldly move ahead with a promising new approach when others might be more cautious.

I will be willing to give up some salary in exchange for the chance to try out my business idea if the rewards for success were adequate.

In the course of my work, I will take calculated risks despite the possibility of failure.

If large interests are at stake, I regularly go for the big win even when things could go seriously wrong.

Corresponding author

Muhammad Farrukh can be contacted at: mfarrukhiqbal@hotmail.com