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## Perceived Organizational Innovativeness and Work Engagement among Professionals in Select IT Organizations in India

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#### Abstract:

The purpose of this study is to assess the relationship and impact of perceived organizational innovativeness (POI) on work engagement (WE). Data from a cross-sectional study of 239 professionals serving in the ten largest IT companies in India were analysed. The participants completed the PORGI and UWES. The PORGI scale measures the perceived organizational innovativeness and UWES measures the work engagement among employees. Regression analysis showed that POI was positively associated with WE; and had a significant impact on WE. As mentioned earlier, this study is cross-sectional in nature. Further research with longitudinal and experimental studies needs to be carried out to support the results. Top management must create an innovative culture by positively reinforcing innovative work behaviour among employees through rewards, prizes, bonuses, special packages, promotions and incentives. Workplaces must be equipped with computers, software and internet in order to facilitate innovative work behaviour and training must be provided as and when need arises.

**Keywords:** Perceived organizational innovativeness, work engagement, it, employees, innovativeness, vigour, dedication, absorption

## 1. Introduction

Innovation is a major driver of economic growth and is the key to competitive advantage. Organizational innovativeness has immense influence on customer buying behaviour. Recently, it has been observed that innovativeness also has impact on a host of organizational variables such as success, employee creativity and leadership to name a few. In the era of globalisation, innovation is a critical factor for firm survival and performance excellence (Marinova, 2004). Research suggests that Innovative organizations spend more resources on motivating and engaging their employees.

Work engagement has become an important driver for achieving organizational success. Engaged employees are behind the success of the organization (Maniam Kaliannan and Samuel Narh Adjovu, 2014). A 10% increase in employee engagement can increase employee's effort level by 6%, which increases performance by 2%. Also it decreases turnover intention by 9%. Turnover is 87% lesser among engaged employees (Corporate Executive Board, 2004). Thus, both innovation and work engagement are crucial for performance excellence.

There is a lack of empirical studies in the Indian context that have studied the relationship between perceived organizational innovativeness and work engagement. This study aims to investigate the relationship between perceived organizational innovativeness and work engagement among employees serving in the largest IT companies in India. In addition, this study compares the male and female respondents with regard to perceived organizational innovativeness and work engagement.

## 1.1. Statement of the Problem

The present study focuses on the relationship between perceived organizational innovativeness and work engagement among employees in select IT organizations in India.

#### 1.2. Significance of the Research

This study contributes toward the knowledge on perceived organizational innovativeness and work engagement. The present study also contributes to the knowledge by adding literature on perceived organizational innovativeness and work engagement and their correlation. This issue is essential to be studied since it can contribute to a more comprehensive understanding of perceived organizational innovativeness and work engagement. The study contributes to the knowledge by adding literature on the Indian studies

as well as IT industry. Since India is emerging as a global IT hotspot, IT companies will benefit by knowing how perceived organizational innovativeness affects work engagement.

#### 1.3. Research Questions

There are several research questions that will be asked in addressing the problem statement. The research questions are:

- Does perceived organizational innovativeness correlate with work engagement?
- Do male and female respondents differ with regard to their perception of organizational innovativeness and level of work engagement?

## 1.4. Conceptual and Operational Definition

Organizational Innovativeness: a firm's capacity to introduce new processes, products or ideas in the organization. (Hult et al., 2004) Operational definition: Individual perception on organization's willingness to change using the self-rating Perceived Organizational Innovativeness (PORGI) scale established by Hurt and Teigen (1977) comprising 25 items.

Work Engagement: a positive and fulfilling work related state of mind (Schaufeli, Salanova, González-Romá& Bakker, 2002).

Operational definition: It is measured using the 9-item Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006) comprising three subscales namely, vigour, dedication and absorption.

#### 2. Literature Review

This section discusses previous literature in perceived organizational innovativeness and work engagement.

## 2.1. Perceived Organizational Innovativeness

Innovativeness is one of the most critical components in any firm's success and performance. Organizational Innovativeness refers to a firm's capacity to introduce new ideas, processes or products. Hurley & Hult (1998) defined organizational innovativeness as a firm's innovative culture that encourages its employees to develop new ideas and to identify and resolve ideas in new ways.

Innovativeness greatly determines business performance (Burns & Stalker, 1961; Hurley, Hult & Tomas, 1998; Porter, 1990; Schumpeter, 1934). Hence, most organizations lay great emphasis on innovation and reward creativity. Innovativeness is influenced by organizational learning orientation and the orientation towards learning (Calanstone, Cavusgi 1& Zhao, 2002; Hurley & Hult, 1998). As compared to less innovative organizations, innovative firms invest more resources in new product development, personal selling, sales training for employees, supervision of sales personnel, customer education, market research, computerized information systems (McDaniel &Kolari, 1987) and spend more on product R&D (Hambrick, 1983). It has also been noted that innovative firms spend more resources on educating, informing and motivating their employees (Hambrick, 1983). Innovation enhances organizational performance (Bobillo et al., 2006; Bowen et al., 2010; Cainelli et al., 2004; 2006; Cefis & Ciccarelli, 2005; Danneels, 2002; Erdil et al., 2004; Hult et al., 2004; Ilker Murat, 2012; Siqueira & Cosh, 2008). Valencia et al., (2010) observed that innovativeness is positively associated with adhocracy culture characterized by creativity, empowerment, freedom, autonomy and risk taking and negatively associated with hierarchical cultures. Busra Muceldili, Haldun Turan and OyaErdil (2013) using a sample of 142 employees serving in manufacturing and service firms in Turkey found that employees' creativity mediates the relation between authentic leadership and innovativeness.

## 2.2. Work Engagement

Work engagement refers to the "the harnessing of organizational members' selves to their work roles" (Kahn, 1990). Kahn notes that people who are engaged withdraw and defend themselves physically, cognitively and emotionally during role performances. There are several definitions of work engagement. The most widely accepted definition is "a positive, fulfilling and work-related psychological state in which an individual finds himself absorbed and immersed in work" (Schaufeli, Salanova, González-Romá& Bakker, 2002). It refers to a persistent cognitive state not focused on any particular object, event, individual or behaviour. Work engagement is characterized by vigour, dedication and absorption. Vigour refers to high levels of energy while working. Dedication refers to enthusiasm and pride associated with work. Absorption refers to the state of being engrossed and immersed in one's work. It is also defined as the state of emotional and intellectual involvement that motivates employees to do their best work.

Numerous studies on work engagement have been conducted. Burnout and work engagement are opposite sides of the same coin and represent opposite ends of an underlying continuum (González-Romá, Schaufeli, Bakker, &Lloret, 2006). A transformational leader enhances work engagement among employees (Izlem Gözükaraa and Omer Faruk Simsek, 2015; Tims, Bakker and Xanthopoulou, 2011; Zhu, Avolio and Walumbwa, 2009). Job resources (i.e. high autonomy, social support from organization and supervisor) and challenging demands enhance work engagement. Kahn observed that engagement is related to meaningfulness, safety and availability. Work engagement is positively associated with job satisfaction, job involvement and organizational citizenship behaviour (Blau, 1964). Work engagement correlates positively with leader-member exchange, innovative work behaviour and negatively with turnover intention (Upasna A. Agarwal, SumitaDatta, Stacy Blake-Beard and Shivganesh Bhargava, 2012). Trust mediates the relation between procedural justice, interactional justice, psychological contract fulfilment and work engagement (Upasna A. Agarwal, 2014).

## 2.3. Innovativeness and Work Engagement

Studies on the relation between perceived organizational innovativeness and work engagement constitute a major research gap in the domain of organizational behaviour. However, a few studies have been conducted regarding the relationship between innovative work behaviour and work engagement. Innovative work behaviour refers to the creation of something new or different by employees. There exists a positive correlation between work engagement and innovative work behaviour (Upasna A. Agarwal et al., 2012). It has also been established that work engagement mediates the relationship between learning organization and innovative work behaviour (Yu Kyoung Park, JiHoon Song, Seung Won Yoon and Jungwoo Kim, 2013). Jari J. Hakanen, Riku Perhoniemi and SallaToppinen-Tanner (2008) conducted a study using a 3 year panel data of 2555 Finnish dentists and observed that job resources lead to work engagement and work engagement leads to personal initiative which positively influences work-unit innovativeness. The reciprocal was also found to be true, i.e. work unit-innovativeness positively influences personal initiative which enhances work engagement finally predicting job resources. It can be deduced that the perception of innovativeness in the organization could also be significantly associated with engagement.

## 2.4. Conceptual Framework

Literature review has found a relationship between innovativeness and work engagement (Jari J. Hakanen et al., 2008). However, there are negligible studies that have reported the correlation between perceived organizational innovativeness and work engagement. Thus, a hypothesis has been formulated to this effect testing the relation between innovativeness and work engagement. Figure 1 below depicts the research model for this study that seeks to explore the relationship between perceived organizational innovativeness and work engagement.

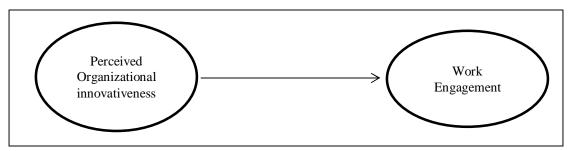


Figure 1: Research Model for this study

#### 2.5. Hypotheses

Based on the literature review, the present research investigates the relationship among perceived organizational innovativeness and work engagement. The differences between male and female employees with regard to perception of organizational innovativeness and work engagement have also been studied. The following are the main hypotheses of the present study.

- 1. Perceived organizational innovativeness positively correlates with work engagement.
- 2. Male and female employees differ with regard to their perception of organizational innovativeness (2.1) and level of work engagement (2.2).

## 3. Method

#### 3.1. Sample

A cross-sectional survey design was used to test the proposed hypotheses. This study used the snowball sampling method because of time limitation. The respondents for this study comprised professionals serving in the largest IT companies in the north Indian states. Ten IT companies in Industrial estates in Delhi NCR, Mohali & Chandigarh (Punjab), Panchkula& Gurgaon (Haryana) were visited for the purpose of data collection. Number of respondents is 239comprising155 males and 84 females.

## 3.2. Perceived Organizational Innovativeness

Perceived Organizational Innovativeness Scale (PORGI) designed by Hurt and Teigen (1977) was used to measure Perceived Organizational Innovativeness. It measures the employees' perception of the organizations' willingness to change as is related to employee participation in all stages of the innovation-decision process. PORGI comprises 25 items in the five point likert rating scale ranging from 1 for 'strongly disagree' to 5 for 'strongly agree'. Its reliability is high with 0.91 cronbach alpha. Some examples are "My organization is very cautious about accepting new ideas", "My organization is very inventive."

## 3.3. Work Engagement

Work Engagement is measured using the 9-item version of Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006). It has three subscales namely, vigour, dedication and absorption. Vigour refers to the energy, zest and stamina experienced while working. Dedication means deriving a sense of significance from one's work and feeling proud of one's job and inspired by it. Absorption means being totally and happily immersed in one's work and being unable to detach oneself from it. Respondents were asked to rate

their agreement with each statement on a scale from 1 = 'strongly disagree' to 5 = 'strongly agree'. The internal consistency reliability of this scale is high with  $\alpha$  ranging from 0.80 to 0.90. Example of Vigour: "At my work, I feel bursting with energy". Example of Dedication: "My job inspires me". Example of Absorption: "I am immersed in my work".

#### 3.4. Procedure

The questionnaire was administered to respondents at their workplace. The duration for questionnaire completion is 8 to 10 minutes. 270 questionnaires were distributed of which 248 were returned. 9 questionnaires were rejected as they were partially filled. 239 questionnaires were finally selected for the analysis. Employees of all age groups from 20 to 60 years were surveyed.

## 3.5. Data Analysis

Simple regression analysis was used to test the significance of the relationship and impact of perceived organizational innovativeness on work engagement. In addition, T-test was used to examine the differences among employees with regard to perception of organizational innovativeness.

#### 4. Results

This section presents the results of various analyses in the study. These include the descriptive analyses, the t-test analyses between male and female employees and regression analyses.

#### 4.1. Demographic Characteristics of the Sample

The target respondents in this study are professionals serving in the IT industry. Total sample size is 239. Within the sample, 155 respondents (64.8%) are males, 80 respondents (33.5%) have tenure of 1 to 5 years and 45 respondents (18.8%) are under the age of 25 years.

	Variable	Frequency	Percentage
Condon	Male	155	64.8%
Gender	Female	84	35.2%
Tenure	Less than 1 year	56	23.4%
	1 to 5 years	80	33.5%
	5 to 10 years	50	20.9%
	10+ years	53	22.2%
Age	Under 25 years	45	18.8%%
	26 to 35 years	80	33.5%
	36 to 45 years	76	31.8%
	45 + years	38	15.9%

Table 1: Respondents' Characteristics (N=239)

#### 4.2. Descriptive Analyses

The mean score for Organizational Innovativeness as measured by the Perceived Organizational Innovativeness (PORGI) scale is 83.11 (S.D. = 8.55). This score indicates that most of the respondents in the IT companies under study perceive their organization as being "early majority" in adopting the latest practices.

Respectively, the analysis of the Work Engagement responses for all respondents indicates that the mean score of work engagement is 31.27 (S.D. = 6.75). This indicates that respondents' engagement with their work is moderately high.

Variable	Mean	SD
Perceived Organizational Innovativeness	83.11	8.55
Work Engagement	31.27	6.75

Table 2: Mean and Standard Deviation among the variables

#### 4.3. T-test Analyses

This study presents the t-test analyses between the male and female respondents with regard to their perception of organizational innovativeness and work engagement.

## 4.3.1. Perceived Organizational Innovativeness and Gender

Table 3 below shows the mean and SD values of male and female respondents. It was indicated that the differences between male and female respondents regarding perceived organizational innovativeness were significant. (t = 5.76, p < 0.05).

Gender	N	Mean	SD	T	P
Male	155	85.31	8.70	576	.000
Female	84	79.04	6.59	5.76	

Table 3: Mean of Perceived Organizational Innovativeness, SD, t and p values by Gender (N=239)

#### 4.3.2. Work Engagement and Gender

Table 4 below shows the mean and SD values of male and female respondents. It was indicated that the differences between male and female respondents regarding work engagement were not significant. (t = 0.685, p > 0.05).

Gender	N	Mean	SD	T	P	
Male	155	31.49	7.42	0.685	.494	
Female	84	30.86	5.32	0.063	.494	

*Table 4: Mean of Work Engagement, SD, t and p values by Gender (N=239)* 

## 4.4. Regression Analyses

This study presents the simple regression analysis to indicate that perceived organizational innovativeness is a predictor of work engagement.

#### 4.4.1. Perceived Organizational Innovativeness and Work Engagement

The regression analysis shows that work engagement is significantly predicted by perceived organizational innovativeness,  $\beta = 0.505$ ,  $S_{\beta} = 0.044$ , t = 9.018, p < 0.01. The data indicated that employees who perceive their organization as being innovative are more engaged. So, this finding supports the first hypothesis that there is a significant positive relationship between perceived organizational innovativeness and work engagement.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Dependent variable	Predictor variable	В	Std. Error	β		
Work Engagement	POI	0.399	0.044	0.505	9.018	.000
R = 0.505			$R^2 = 0.255$			

Table 5: Correlation coefficient, R square, Standardized Beta Coefficients, Standard Error and t for Paths from Perceived Organizational innovativeness to Work Engagement

#### 5. Discussion

The purposes of the present research were to explore the relationships among perceived organizational innovativeness and work engagement.

Hypothesis 1 stating that perceived organizational innovativeness would positively correlate with work engagement was supported by the findings. The results indicated that the higher one's perception that the organization is innovative, the more their engagement. This finding supported the argument by Jari J. Hakanen, Riku Perhoniemi and SallaToppinen-Tanner (2008) that employees who are more innovative are likely to be more engaged.

Consistent with hypothesis 2.1, male and female employees were found to differ significantly with regard to their perception of organizational innovativeness. It was found that male respondents perceived their organization to be more innovative than female respondents.

Hypothesis 2.2 stating that male and female employees would differ with regard to their level of work engagement was not supported by the findings.

#### 6. Implication of the Study

This study presents empirical findings on positive relationship between perceived organizational innovativeness and work engagement. There are several implications for this study. The first is, because perceived organizational innovativeness significantly contributes to work engagement, organization must promote activities that enhance innovativeness. Firstly, the top management must create an innovative culture by rewarding employees for their innovativeness and creativity. Positive reinforcement in the form of bonuses, incentives, rewards and prizes must be given to the innovative employees in order to motivate them. Performance based promotions rather than seniority based promotions could also be implemented. Secondly, management must encourage openness and communication among employees across various teams and functionalities to join hands and implement new ideas and projects. Thirdly, a low stress and optimistic attitude needs to be promoted where failures are not a cause for concern but an opportunity for improvement. Automobile firms like BMW practice the concept of 'rewarding failures' where 'Flop of the month' awards are given to excellent innovative ideas that failed during implementation stage. Such practices remove the fear of failures and could be successfully implemented in IT firms. Fourthly, it is crucial that the organization has all the resources required for the employees to innovate, thus the workplace must be equipped with latest computers, software, internet etc and when needed training be provided to employees.

#### 7. Limitations & Recommendations

There are several limitations as well as recommendations to this study. Firstly, the sample size is small. It is therefore suggested for future research to increase the number of respondents. Secondly, the sample of the present study includes only IT employees in north India, so the findings of the present study cannot be generalized to employees of other sectors and other geographical regions. It is recommended to conduct similar studies using data from various sectors such as telecommunications, media, banking, journalism, science, humanities and health care. Thirdly, this study employed, self-rating questionnaires as measurement tool. The drawback is that there is a great tendency among employees to give responses that are socially acceptable, thus genuine responses may not have been captured by these questionnaires. Hence, methods like 360 degree feedback would help to make the study more realistic. Fourthly, this study is cross-sectional in nature; hence further research through longitudinal studies needs to be conducted to confirm the results.

#### 8. Conclusion

In conclusion, the present study investigated the relationship between perceived organizational innovativeness and work engagement. The present study had showed that perceived organizational innovativeness significantly predicted work engagement. Therefore, it is important for every company to ensure that their employees be allowed to express their creativity through innovation. Employees who perceive their organizations as being innovative are more engaged. Therefore, policies and interventions that can enhance organizational innovativeness must be adopted to enhance work engagement. This study also conducted the inter-gender comparison between male and female employees in terms of perceived organizational innovativeness and work engagement. The results indicated that there was a significant difference between male and female employees with regard to perceived organizational innovativeness. However, there were found to be no significant differences with regard to the level of work engagement. It can be concluded that it is essential for IT companies to ensure that employees are innovative so that they are engaged and committed to the organization.

#### 9. References

- i. Augusto, M. and Coelho, F. (2009). Market orientation and new-to-the-world products: Exploring the moderating effects of innovativeness, competitive strength, and environmental forces. Industrial Marketing Management, 38(1), 94-108.
- ii. Blau, P.M. (1964). Exchange and power in social life. New York: John Wiley & Sons
- iii. Bobillo, A.M., Rodriguez Sanz, J.A. and Tejerina Gaite, F. (2006).Innovation investment, competitiveness, and performance in industrial firms. Thunderbird International Business Review, 48(6), 867 890.doi: 10.1002/tie.20126.
- iv. Bowen, F.E., Rostami, M. and Steel, P (2010). Timing is everything: A meta-analysis of the relationships between organizational performance and innovation, Journal of Business Research, 63(11), 1179-1185.
- v. Burns T & Stalker G M (1966). The Management of Innovation. 2nd edition London Tavistock Publications
- vi. BusraMuceldili, HaldunTuran and OyaErdil (2013). The Influence of Authentic Leadership on Creativity and Innovativeness, 9<sup>th</sup> International Strategic Management Conference, Procedia Social and Behavioural Sciences, 99, 673-681 doi: 10.1016/j.sbspro.2013.10.538
- vii. Cainelli, G., Evangelista, R. and Savona, M. (2006). Innovation and economic performance in services: A firm-level analysis. Cambridge Journal of Economics, 30(3), 435-458.
- viii. Cainelli, G., Evangelista, R. and Savona, M. (2004). The impact of innovation on economic performance in services. Service Industries Journal, 24(1), 116-130.
- ix. Calantone, Roger J., Tamer Cavusgil, S., & Zhao, Yushan (2002). Learning orientation, firm innovation capability, and firm performance. Industrial Marketing Management, 31, 515–524.
- x. Cefis, E. and Ciccarelli, M. (2005). Profit differentials and innovation. Economics of Innovation and New Technology, 14(1 2), 43-61.
- xi. Cook, J. & Wall, T. (1980). New work attitude measure of trust, organisational commitment and personal need non-fulfilment. Journal of Occupational Psychology, 53, 39-52.
- xii. Corporate Executive Board, (2004).Driving Performance and Retention through Employee Engagement.Corporate Executive Board, Washington, DC.
- xiii. Danneels, E. (2002). The dynamics of product innovation and firm competences. Strategic Management Journal, 23(12), 1095-1121. doi: 10.1002/smj.275.
- xiv. ErdilS., Erdil O., Keskin H., (2004). The relationship between market orientation, firm innovativeness and innovation performance, Journal of Global Business and Technology
- xv. González-Romá, V., Schaufeli, W. B., Bakker, A. B. and Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? Journal of Vocational Behaviour, 68, 65-174.
- xvi. Hambrick, Donald C. (1983). Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types. Academy of Management Journal, 26(1), 5–26.
- xvii. Hult, G. T., Hurley, R.F., and Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. Industrial Marketing Management, 33, 429-438
- xviii. Hurley, Robert F. and Hult, G. Tomas M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. Journal of Marketing, 62(3), 42-54.

- xix. Hurt, H. T., Joseph, K., and Cook, C. D. (1977). Scales for the measurement of innovativeness. Human Communication Research, 4, 58-65.
- xx. Hurt, H. T., and Teigen, C. W. (1977). The development of a measure of perceived organizational innovativeness. In B. R. Ruben (Ed.), Communication Yearbook I, 377-385. New Brunswick, NJ: Transaction Books.
- xxi. Ilker Murat, A. (2012). The Impact of Green Product Innovation on Firm Performance and Competitive Capability: The Moderating Role of Managerial Environmental Concern, Procedia Social and Behavioral Sciences, 62, 854-864.
- xxii. IzlemGözükaraa and Omer Faruk Simsek, (2015). Linking Transformational Leadership to Work Engagement and the Mediator Effect of Job Autonomy: A Study in a Turkish Private Non-Profit University. Paper presented at World Conference on Technology, Innovation and Entrepreneurship. Procedia Social and Behavioural Sciences doi:10.1016/j.sbspro.2015.06.274
- xxiii. Jari J. Hakanen; Riku Perhoniemi; SallaToppinen-Tanner (2008). Positive gain spirals at work: from job resources to work engagement, personal initiative and work-unit innovativeness. Journal of Vocational Behaviour, 73(1), 78-91
- xxiv. Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692-724
- xxv. Lovelace, K., Shapiro, D., and Weingart, L. R. (2001). Maximizing cross-functional new product teams innovativeness and constraint adherence: A conflict communications perspective. Academy of Management Journal, 44(4), 779-783
- xxvi. Maniam Kaliannan and Samuel Narh Adjovu (2014). Effective employee engagement and organizational success: a case study. Paper presented in Global Conference on Business & Social Science-2014, GCBSS-2014, 15<sup>th</sup> and 16<sup>th</sup> December, Kuala Lumpur doi: 10.1016/j.sbspro.2015.01.350
- xxvii. Marinova, Detelina (2004). Actualizing innovation effort: The impact of market knowledge diffusion in a dynamic system of competition. Journal of Marketing, 68(3), 1–20
- xxviii. McDaniel, Stephan W., & James Kolari, W. (1987). Marketing strategy implications of the miles and snow strategic typology. Journal of Marketing, 51(4), 19–30
- xxix. Menguc, B., &Auh, S. (2006). Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness. Journal of the Academy of Marketing Science, 34(1), 63-73
- xxx. Porter M. E. (1990). The Competitive Advantage of Nations. New York, Free Press, 780
- xxxi. Schaufeli, W. B., & Bakker, A. B. (2003). Test manual for the Utrecht Work Engagement Scale. Unpublished manuscript, Utrecht University, the Netherlands. Retrieved from http://www.schaufeli.com
- xxxii. Schaufeli, W.B., Bakker, A.B., and Salanova, M. (2006). The Measurement of Work Engagement with a short questionnaire: A Cross-National Study. Educational and Psychological Measurement, 66(4), 701-716 doi: 10.1177/0013164405282471
- xxxiii. Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V., Bakker, A.B., (2002). The measurement of engagement and burnout: a two simple confirmatory factor analytic approach. Journal of Happiness Studies, 3, 71–92
- xxxiv. Schumpeter, J. A. (1934, 1980). The Theory of Economic Development. Oxford University Press: London
- xxxv. Scott, S.G., Bruce, R.A. (1994).Determinants of Innovative Behaviour: A Path Model of individual innovation in the workplace. Academic Management Journal, 37, 580–607
- xxxvi. Siqueira, A.C.O. and Cosh, A.D. (2008). Effects of product innovation and organisational capabilities on competitive advantage: Evidence from UK small and medium manufacturing enterprises. International Journal of Innovation Management, 12(2), 113 137
- xxxvii. Tajeddini, K. and Trueman, M. (2008). Effect of customer orientation and innovativeness on business performance: A study of small-sized service retailers. International Journal of Entrepreneurship and Small Business, 6(2), 280-295.
- xxxviii. Tims, M., Bakker, A. B., and Xanthopoulou, D. (2011). Do transformational leader enhance their followers' daily work engagement? The Leadership Quarterly, 22, 121–131
- xxxix. Upasna A. Agarwal (2014). Linking justice, trust and innovative work behaviour to work engagement. Personnel Review, 43(1), 41-73
  - xl. Upasna A. Agarwal, Sumita Datta, Stacy Blake-Beard and Shivganesh Bhargava, (2012). Linking LMX, innovative work behaviour and turnover intentions: The mediating role of work engagement, Career Development International, 17(3), 208–230 doi:10.1108/13620431211241063
  - xli. Valencia, J. C. N., Valle, R.S. and Jimenez, D.J. (2010). Organizational Culture as Determinant of Product Innovation, European Journal of Innovation Management, 13(4), 446-480
  - xlii. Yu Kyoung Park, JiHoon Song, Seung Won Yoon, Jungwoo Kim, (2014). Learning organization and innovative behavior: The mediating effect of work engagement. European Journal of Training and Development, 38(1/2), 75–94 doi: 10.1108/EJTD-04-2013-0040
  - xliii. Zhu, W., Avolio, B.J., & Walumbwa, F.O. (2009). Moderating role of follower characteristics with transformational leadership and follower work engagement. Group & Organization Management, 34(5), 590-619