

EXAMINING THE RELATIONSHIP BETWEEN SME'S ORGANIZATIONAL FACTORS AND EMPLOYEE CREATIVITY

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ABSTRACT

Organizations with proper Human Resource (HR) practices play an exemplary role in developing their employees' innovation. Though there is extensive literature on managing organizational innovation, even in today's scenario some organizations barricade employees' growth and innovation at the workplace. This study aimed to holistically explore the organizational factors affecting employee innovation using Principal Component Analysis (PCA) for factorizing sub-items and understand the relationship between various organizational factors and employee innovation using correlation analysis. The study executed a survey questionnaire and collected useful data from two hundred and fifty (250) respondents of various Saudi SME companies. The study developed sub-items and evolved into nine major organizational factors influencing employee innovation namely corporate structure, corporate culture and environment, organization strategy, innovation, employee, technology, resources, knowledge management, and management support. The hypotheses developed were tested with the collected data. The study found all the factors except corporate strategy and corporate culture and environment demonstrated a significant positive relation with employee innovation. The study recommended that any firm must focus on these factors to encourage employee innovation leading to overall organizational success. It also provides broad implications to HR managers, firm policymakers and top management to reassess and formulate the best organizational strategies to promote a culture of innovation in the organization.

Keywords: Organizational Factors, Employee Creativity, SME's, Employee Innovation, Correlation, Principal Component Analysis.

INTRODUCTION

Extant literature in HR management predominantly emphasized on personnel innovation, manpower, operational capabilities and tactical aspects and projected socio-culture, work-life balance concepts as vital factors for a successful firms' performance. Contrastingly, 360-degree dimensional view of organizational factors pertaining to employee creativity were rare which is actually an essential consideration in the developing arena of HR. In fact, creativity is a broad aspect. However, in this study the author aligns the concept referring to employee creativity. Retrospective literature states the words creativity and innovation are used interchangeably. To be more specific creativity involves in the idea generation and innovation as the administration of such notions in improvement of implementation process. Therefore, creativity is precondition for innovation. In this study, the authors intended (Woodman et al., 1993) meaning of creativity as the generation of an original knowledge specific to the field it denotes. In other study,

(Mumford et al., 2008) coined innovation as a sequence of processes beginning with identification of problem, generating novel ideas, assessment, and implementing them.

Many authors addressed that organization must improve in innovative initiatives to withstand in industry and be competitive (Roberts, 1998; Porter, 1990; Lengnick-Hall, 1992). Despite the existence of sufficient literature on organization dimension like Marisa et al., 2008; Anthony, 2000) contrastingly there is also a lack of explanation on statistical perspectives of identified factors. While some researchers overlooked to address organizational factors from employees' viewpoint; others did not attempt to look it holistically. Hence, this paved the way to research gap from an organizational standpoint and skipped to contemplate the critical issues. Therefore, this research proposed to identify relevant organizational elements and analyze statistically to consolidate the organizational dimensionalities into a reduced number to focus easily.

In spite of being considerate of the organization role that drive the creativity process, pragmatic studies on influential factors on employee creativity were rare among Saudi Arabia SMEs and few other studies remained scattered. While interrelating organizational factors, authors also recommend to consider to view holistically various contingent variables. Therefore, this study proposed to tailor the gap by investigating the possible organizational components by the application of PCA method. The study is structured into six sections. Firstly, it brings the background of the study. Secondly, it provides a retrospective literature review. The next section conducts the data analysis followed by conclusion and managerial implications, scope of further research studies, and limitations faced in this study.

THEORETICAL BACKGROUND

Andriopoulos, identified five factors namely organizational climate, organizational culture, skills and resources, leadership style, and corporate structure as encouraging employee creativity. Likewise, (Dul, 2011) clarified twenty-one constituents progress innovation and creativity. Some of them to list are encounters in job, collaboration, job rotation, independency in the job, superior's coaching, self-thought process, creative objectives, acknowledgment of creative ideas, incentives. Jiang et al., found that employee creativity and organizational innovation are significantly influenced by finest HR practices. The constituents in HR practices driving employee creativity are hiring and selection process, rewards, job design and teamwork but not training and performance appraisal. Anthony, 2000 considered twelve factors for actual organizational innovation *viz*; management support, customer attention, internal and external communication, HR policies, teamwork, management, knowledge supervision, creative development, strategic posture, simple structures, persistent advancement, technological application. The author mentioned these twelve elements cover the global aspects of an organization and management support initiated the most imperative factor as it contributes in instilling innovative culture, deploy modern structures and practices and invite innovation as a strategic advantage. Rohman et al., studied the relationship between numerous individual and organizational factors and their consequence on knowledge sharing behavior. Some of the variables considered in the study were management support, leadership, organization's incentives and reward system, organizational culture and illustrated these angles possess

substantial association with knowledge sharing and also determine such behavior in an organization.

Marisa et al., methodical and structured literature on 102 research studies identified 31 sub-variables and derived into nine common elements for dealing with organizational creativity and established a conceptual model. The authors eliminated inappropriate, repeating variables and also those fall under common themes with different titles. Hence, this study considered major factors from (Marisa et al., 2008) to collect a likely number of pertinent factors. But, their study missed an empirical assessment of the recognized factors and unsuccessful to reflect contingency variables. Another study by (Fariborz, 1996) reflected fourteen contingency factors to study the association between structural complexity and organization size with organizational creativity. The findings showed structural complexity is dependent on the intricacy of procedures, ecological uncertainty, usage of facility and industrial companies, emphasize on technical, product and application of innovations. Whereas organization size is reliant on size of operational, environmental uncertainty, service and profits of business, technical and product highlight innovations. A recent study by (Khan, S. and Mohiya, M. 2020) considered crucial organizational factors of Saudi firms which affect the workers. Those organizational elements are thoughtful of employees' reactions. Hence few factors were considered as sub-factors under main titles in present research. However, this study organized Exploratory Factor Analysis (EFA), however could not establish holistic dimensions. The findings confirmed training and brainstorming sessions; employee recognition and rewards; resources and fund allocation; employee competencies; work environment and management collaboration have a significant effect on employee creativity. Khan and Mohiya stressed that management support is leading element for a firm's success only if it supports providing appropriate training on technology and work-related aspects, mobilizes the talents, deploy appropriate business models, and develop new policies and strategies. Inappropriately, the least coefficient value explained organizations give the least inclination to support their personnel creativity because of the prevalent dominating culture of employees in top job positions. (Atuahene-Gima, 1996; Balbontin, 1999; Keogh, 1999) highlighted HR strategies and identified the HR practices have a substantial role in dissemination of information and appropriate knowledge about creativity. Further, (Sirilli & Evangelista, 1998) augments technological innovation is vigorous for industrial and facility sectors, for which the workforce must be trained on modern technologies.

Cooperation of management is a big influencer to boost their manpower creative behavior by encouraging the creative ideas and relating them in daily work life (Atuahene-Gima, 1996; Balbontin, 1999; Spivey et al., 1997; Tang, 1999; Zhuang et al, 1999; Hurley & Hult, 1998). Tang, 1999; De Jong et al., 2007; Balbontin et al., 1999 study on leadership of managers' exposed they are responsible to institutionalize pioneering strategies and can reinforce employees' creativity. In the same way, another study by (Rosing et al, 2011) deployed the ambidexterity theory of leadership to recognize the unpredictable connections between leadership and innovation receptiveness of workers. Two types of leadership behaviors were used and entitled it as mirrors symmetry leadership, as the leaders can shift among opening and closing activities. It was identified the growth of rich ties between staff during the formal and informal dealings transferred the information and innovative behavior among the coworkers even when there is controlled power among the team members. De Clercq et al., study presented the

connection between employee creative susceptibility and hostile working environments. It described extra workload assigned by senior employees may degrade employee creativity. Therefore, leaders must deal sensitively in emerging relational conduits to solve employee work tensions. Many researchers studied organizational factors on innovation but with from a different perspective. Some of the studies are referred below in table 1.

Table 1 IDENTIFICATION OF FACTORS AND DEVELOPMENT OF SUB-ITEMS. SOURCE: FACTORS IDENTIFIED FROM LITERATURE REVIEW		
S.No	Factors and sub-items	Authors
1	Corporate Structure (CS)	Khan S. 2020; Marisa Smith et al., 2008; Mintzberg, 1992
	Our organization structure is differentiated with other firms (CS1)	
	Our organization is centralized in terms of structure (CS2)	
	Our organization is more formalized (CS3)	
	The organization size is big enough to define the hierarchical structure (CS4)	
2	Corporate Culture and Environment (CCE)	Khan S. 2020; Marisa Smith et al., 2008
	Our organization encourages open communication (CCE1)	
	There is a fair cooperation among the peer (CCE2)	
	Our organization is prepared to face risk and environment certainty (CCE3)	
	All employees have the attitude to innovate (CCE4)	
	Our organization provides its employees independency at work (CCE5)	
	There is a dynamic work culture among all employees (CCE6)	
Employees in all departments have team spirit (CCE7)		
3	Organization Strategy (OS)	Khan S. 2020; Marisa Smith et al., 2008; Damanpour and Evan, 1984; Martins and Terblanche, 2003; Read, 2000
	Organization takes strategic decisions at all levels (OS1)	
	There is a culture of innovation at all levels (OS2)	
	Organization's vision and mission are very clear to all employees (OS3)	
4	Innovation (I)	Khan, S. and Mohiya, M, 2020; Khan S. 2020; Anthony R. 2000; Marisa Smith et al., 2008; Cummings and O'Connel, 1978; Merx-Chermin and Hijhof, 2005; Knight, 1987; Amar, 2004; Bessant et al., 2005
	Employees have the ability to think creatively at work (I1)	
	Our organization selects and evaluates best innovative techniques (I2)	
	Our organization implements innovative mechanism (I3)	
	Our organization has series of phases in adopting the innovation process (I3)	
5	Employees (E)	Khan, S.and Mohiya, M, 2020; Khan S. 2020; Marisa Smith et al., 2008; Ahmed,
	Our employees are highly competent (E1)	
	All employees are thoughtful about self-development (E2)	

	Employees think creatively and generate novel ideas (E3)	1998; Mostafa, 2005; Bharadwaj and Menon, 2000
	Our organization motivates employees to learn new things (E4)	
	Organization proactively conducts training and brainstorming sessions (E5)	
	There is regular performance appraisal and reward system (E6)	
	Best employees are rewarded accordingly (E6)	
6	Technology (T)	Khan S. 2020; Marisa Smith et al., 2008
	Organization promotes technology usage over manpower utilization (T1)	
	Employees are educated on latest technology to improve their technical skills (T2)	
	Organization deploys modern technology regularly (T3)	
7	Resources (R)	Nohria and Gulati, 1996; Knight, 1987; Subramaniam, M., & Youndt, M. A. 2005; Khan, S. and Mohiya, M, 2020; Marisa Smith et al., 2008
	Organization recruits international talents (R1)	
	Our organization simplifies its business process (R2)	
	Our organization well utilizes slack resources (R3)	
	Our organization plans well and manages its resources properly (R4)	
8	Employees have easy access to knowledge, financial and technological resources (R5)	Salavou, 2004; Khan S. 2020; Marisa Smith et al., 2008
	Knowledge Management (KM)	
	There is a culture of sharing knowledge among peers (KM1)	
	Our organization encourages employees to learn new things regularly (KM2)	
9	Employees have knowledge on internal and external environment of the organization (KM3)	Rivas and Gobeli, 2005; Khan S. and Mohiya, M, 2020; Marisa Smith et al., 2008; Pearson et al., 1989; Roffe, 1999; Hyland and Beckett, 2005
	Employees can access knowledge repositories frequently (KM4)	
	Management Support (MS)	
	Our management empowers its employees (MS1)	
	Organization is thirst for new business opportunities (MS2)	
	Organization recruits high competent applicants (MS3)	
Management frequently monitors to practice fair HR policies (MS4)		
	Our organization leadership style is fair to all the employees (MS5)	

The major objectives for the proposed study based on the theoretical background are to understand the relationship between independent and dependent (EI) variables. Therefore, the following hypothesis were formulated to validate the data.

H1: There is a positive significant relationship between CS and EI

H2: There is a positive significant relationship between CCE and EI

H3: There is a positive significant relationship between OS and EI

H4: There is a positive significant relationship between I and EI

H5: There is a positive significant relationship between E and EI

H6: There is a positive significant relationship between T and EI

H7: There is a positive significant relationship between R and EI

H8: There is a positive significant relationship between KM and EI

H9: There is a positive significant relationship between MS and EI

METHODOLOGY

The study was conducted in four-folds. Initially, it recognizes variables and sub-variables from the literature, then developing the survey questionnaire and collection of data finally conducting the data analysis. A well-designed questionnaire with 5-point Likert scale was developed based on the variables identified in literature. By adopting a quantitative research method and by using closed-ended questions appropriate responses were collected from two hundred and ninety-five (295) respondents from managerial level employees across different Saudi SEM companies. After deletion of missing data using case wise deletion it resulted in two hundred and fifty (250) respondents. Data analysis was done using SPSS (software package for social services) version 23. Table 1 represents the coding of all the sub-variables of employee creativity in an organization.

DATA ANALYSIS AND DISCUSSION

Table 2 shows the demographic data of the respondents. As shown in Table 2, the respondents age is within the range of 21 to 60 years and most of them are between 31 – 40 years (32.8%) and very few are 36 (14.4%) range from 21 – 30 years. 70% have 6 to 10 years work experience and 48 (19.2%) with 5 years or less experience. Most of them have master's degrees 112 (52%) and 49 (19.6%), have Ph.D. 153 (61.2%) of them are employed in top level managerial positions and others at middle-level respondents are 110 (44%). 110 respondents (44%) are from medium size firms and 95 (38%) from enterprises.

Variable	Category	Frequency	%
Age	21 - 30 years	36	14.4
	31 - 40 years	82	32.8
	41 - 50 years	70	28
	51 - 60 years	62	24.8
Education	Bachelors	71	28.4
	Masters	130	52
	Doctorate	49	19.6
Organization	<500 employees	95	38
Size	>500 but <1000	110	44

	>1000	45	18
Designation	Top Level	153	61.2
	Middle Level	97	38.8
Experience	1 - 5 years	48	19.2
	6 - 10 years	75	30
	11 - 15 years	67	26.8
	16 and above	60	24

Factorization Using PCA Method

All the sub-items under study were developed for the study and scaled to their corresponding constructs, the exploratory factor analysis determined the organizational factors (constructs) reliability and validity. Sampling adequacy is used to exam the factorability conditions and illustrates the Kaiser-Meyer-Olkin (KMO) value was 0.839 and a significant Bartlett's test of sphericity value of 1684.54 for organizational factors indicating the correlation matrix is an identity matrix. Therefore, this demonstrates the data has acceptable factorability conditions.

Table 3 elucidates the summary of rotated factor matrix of organizational variables using Principal Component Analysis with Varimax rotation under Kaiser Normalization (Kaiser, 1958) and Table 4 shows the relationship among the organizational variables. The PCA method converged rotations into 8 iterations. All the sub-items were extracted into nine factors and accounted for 98.421% of the total variance. Only those factor loading above 0.50 were considered to be significant (Hair et al., 2006).

Corporate structure consists of four items ranging its component matrix value from 0.823 to 0.932; accounted for 6.382% of the variance. Corporate culture and environment with seven items ranging from 0.832 to 0.932 and accounted for 17.794% of variance. Organization strategy constitutes of four items ranging its value from 0.894 to 0.942 with 9.546% of variance. The innovation variable constitutes of three items ranging from 0.816 to 0.905 and accounted for 16.742% of the variance. Employees variable constitutes of six items ranging value from 0.800 to 0.892 and accounted for 22.448% of the variance. Technology constitutes of three items ranging from 0.773 to 0.882 and accounted for 5.439% of the variance. Resources variable consists of five items ranging its values from 0.802 to 0.901 and accounted for 12.684% of the variance. Knowledge management constitutes of four items with values from 0.823 to 0.892 and accounted for 2.497% of the variance. Management support constitutes of five items ranging from 0.799 to 0.932 and accounted for 4.889% of the variance.

The study illustrates all the identified factors except corporate strategy and corporate culture and environment established a significant positive relation with employee innovation.

Hence hypotheses H1 and H2 were rejected as data did not support and H3, H4, H5, H6, H7, H8 and H9 are accepted and supported by the data. Among all the factors, resources 0.875 and training 0.737 given to the employees explains a high significant relation with their innovation at $p < 0.001$. While organization structure 0.481 and management support 0.457 are vital for any firm, they showed a moderate positive relation with EI and innovation 0.750,

employees 0.646, knowledge management 0.624 and management support 0.457 are subsequent highest positive relationship with EI. This shows that corporate strategy and corporate culture and environment does not actively contribute for employee innovation rather are important for strategically growth of the organization in many other global aspects.

The findings of this research are also analogous with many other studies. Marisa Smith et al., 2008 mentioned the structure and strategy of a firm is favorable to actual innovation management and also delegates the job nature to its employees alongside strategy driving the organizational culture and familiarizes innovation process through firm's vision and mission. Rohman et al., study revealed organization culture will positively influence the employees in sharing work related knowledge. Employees being human capital of a firm could be competent by facilitating training and empowerment programmes and even proper utilization of slack and financial resources could simplify and streamline the business (Khan & Mohiya, 2020). Employees' innovation improves through internal and external organizational learning and sharing of such knowledge will develop knowledge repositories with the support of the management (Khan & Mohiya, 2020; Rohman et al., 2020).

Item					Components				
	1	2	3	4	5	6	7	8	9
CS1						0.846			
CS2						0.823			
CS3						0.932			
CS4						0.847			
CCE1		0.862							
CCE2		0.832							
CCE3		0.874							
CCE4		0.932							
CCE 5		0.863							
CCE 6		0.882							
CCE 7		0.854							
OS1					0.942				
OS2					0.901				
OS3					0.894				
I1			0.905						
I2			0.816						
I3			0.832						

E1	0.832								
E2	0.852								
E3	0.801								
E4	0.892								
E5	0.852								
E6	0.8								
T1							0.773		
T2							0.844		
T3							0.882		
R1				0.901					
R2				0.881					
R3				0.849					
R4				0.871					
R5				0.802					
KM1									0.841
KM2									0.892
KM3									0.882
KM4									0.823
MS1									0.831
MS2									0.799
MS3									0.932
MS4									0.82
MS5									0.896
Initial Eigen Value	3.401	2.954	2.461	2.264	1.582	1.478	1.548	1.183	1.321
% Variance	22.448	17.794	16.742	12.684	9.546	6.382	5.439	4.889	2.497
Cumulative %	22.448	40.242	56.984	69.668	79.214	85.596	91.035	95.924	98.421

Factors	CS	CCE	OS	I	E	T	R	KM	MS	EI
CS	1	0.672	0.428	0.227	0.366	0.473	0.236	0.348	0.161	0.264
CCE		1	.421*	.657*	.475*	.175*	.625**	.587*	0.608	0.461
OS			1	.523**	.437**	.444*	.314*	.372*	.329*	.481*
I				1	.384**	.486**	.715**	.460*	.423*	.750**
E					1	.471*	.370*	.514**	.348*	.646**
T						1	.754**	.688**	.324*	.737**
R							1	.569**	.304*	.875**

KM								1	.523*	.624**
MS									1	.457*
EI										1

LIMITATIONS AND SCOPE OF FUTURE RESEARCH

This study identifies the relationship between various organizational factors and employee innovation. However, it could not demonstrate to address the statistical reduction of dimensionalities and the methods that are practiced among various organizations. Only holistic corporate elements were considered but lacked to study on specific industrial sector. The responses included only HR departments but not all the employees in other departments, so it lacks the ideas of general employees who also involve in innovation process at work. Therefore, more qualitative approach using Delphi or focused group studies are crucial and appropriate to collect employees' viewpoints. Also, sometimes the work and organization culture differs among the firms of different region. Present study did not attempt to understand the effect of age, education, job experience and other demographic variables on employee innovation. Therefore, further researchers may conduct similar studies in different nations using these factors with more sample size and compare the results for further growth and development of the organizations.

CONCLUSIONS

The organizational factors influence innovation process and also strategically determine the organization's success. This study examined the relationship between various organizational variables and employee innovation in Saudi SMEs. Majority of the factors gained a significant positive relationship with employee innovation which are consistent with other relevant studies (Khan & Mohiya, 2020; Anthony, 2000; Marisa et al., 2008). Khan & Mohiya in their study revealed the importance of organizational factors and their role in transforming the employees. The findings of this paper contribute to a better understanding of the various organizational factors holistically. Not only the study identified and validated the determinants, but it also contributes both in the theoretical and relational explanations of the organizational factors. The present findings are extremely appropriate to the context of SMEs. The study pointed, corporate strategy and organizational structure showed no significant correlation with employee innovation. Subramaniam & Youndt; Marisa Smith et al., stated the importance of resources in enhancing the innovation and generating new ideas at work. This shows the employees are better shaped and groomed with the availability of financial, knowledge and technological resources. Therefore, this study addressed the research gaps which were not addressed previously pertaining to Saudi SMEs.

REFERENCES

- Ahmed, P.K. (1998). Culture and climate for innovation. *European Journal of Innovation Management*, 1, 30-43.
- Amar, A.D. (2004). Motivating knowledge workers to innovate: A model integrating motivation dynamics and antecedents. *European Journal of Innovation Management*, 7(2): 89-101.
- Andriopoulos, C. (2001). Determinants of organizational creativity: A literature review. *Management Decision*,

- 39(10), 834-841.
- Anthony, R. (2000). Determinants of successful organizational innovation: A review of current research. *Journal of Management Practices*, 3(1), 95-119.
- Atuahene-Gima, K. (1996). Differential potency of factors affecting innovation performance in manufacturing and services firms in Australia. *J. Product. Innovative Management*, 13(1), 35-52.
- Balbontin, A., Yazdani, B., Cooper, R., & Souder, W.E. (1999). New product success factors in american and british firms. *International Journal of Technology and Management*, 17(3), 259-80.
- Bessant, J., Lamming, R., Noke, H., & Phillips, W. (2005). Managing innovation beyond the steady state. *Technovation*, 25, 1366-1376.
- Bharadwaj, S., & Menon, A. (2000). Making innovation happen in organizations: Individual creativity mechanisms, organizational creativity mechanisms or both? *Journal of Product Innovation Management*, 17, 424-437.
- Cummings, L.L., & O'Connell, M.J. (1978). Organizational innovation: A model and needed research. *Journal of Business Research*, 6(1), 33-42.
- Damanpour, F. (1991). Organisational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3), 555-590.
- DeClercq, D., Dimov, D., & Belausteguigoitia, I. (2016). Perceptions of adverse work conditions and innovative behavior: The buffering roles of relational resources. *Entrepreneur Theory and Practice*, 40(3), 515-542.
- De Jong, J.P.J., Den Hartog, D.N. (2007). How leaders influence employees' innovative behavior. *European Journal of Innovative Management*, 10(1), 41-64.
- Dul, J., & Ceylan, C. (2011). Work environments for employee creativity. *Ergonomics*, 54(1), 12-20.
- Fariborz, D. (1996). Organizational Complexity and Innovation: Developing and Testing Multiple Contingency Models. *Management Science*, 42(5), 693-716.
- Fiol, C. M. (1996). Squeezing Harder Doesn't Always Work: Continuing the Search for Consistency in Innovation Research. *Academy of Management Review*, 21(4), 1012-21.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate Data Analysis*, 6, Pearson Prentice Hall, Upper Saddle River.
- Hurley, R.F., & Hult, G.T. (1998). Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination. *Journal of Marketing*, 62(3), 42-54.
- Hyland, P., & Beckett, R. (2005). Engendering an innovative culture and maintaining operational balance. *Journal of Small Business and Enterprise Development*, 12(3), 336-352.
- Jiang, J., Wang, S., & Zhao, S. (2012). Does HRM facilitate employee creativity and organisational innovation? A study of Chinese firms. *The International Journal of Human Resource Management*, 23(19), 4025-4047.
- Kaiser, H.A. (1970). second generation little jiffy. *Psychometrika*, 35(4), 401-415.
- Kaiser, H.F. (1958). The Varimax Criterion for Analytic Rotation in Factor Analysis. *Psychometrika*, 23(3), 187-200.
- Keogh, W. (1999). Understanding Processes and Adding Value Within Innovative Small Firms. *Knowledge and Process Management*, 6(2), 114-25.
- Khan, S., & Mohiya, M. (2020). Determinants of SMEs employees' creativity and their impact on innovation at workplace. *Management Science Letters*, 10(16).
- Khan, S. (2020). Analysis of Organizational Factors Affecting Employee Innovation. Preprints.
- Knight, R.M. (1987). Corporate innovation and entrepreneurship: A Canadian study. *The Journal of Product Innovation Management*, 4(4), 284-298.
- Lengnick-Hall, C.A. (1992). Innovation and competitive advantage: What we know and what we need to learn. *Journal of Management*, 18(2), 399-429.
- Marisa S., Marco, B., Peter, B., & Robert, V.M. (2008). Factors Influencing an Organizations ability to Manage Innovation: A Structured Literature Review and Conceptual Model. *International Journal of Innovation Management*, 12(4), 655-676.
- Martins, E.C., & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European Journal of Innovation Management*, 6(1), 64-74.
- Merx-Chermin, M., & Hijhof, W. (2005). Factors influencing knowledge creation and innovation in an organisation. *Journal of European Industrial Training*, 29(2), 135-147.
- Mintzberg, H. (1992). The structuring of organizations. In H. Mintzberg, and Quinn, J. B. (Ed.), *The strategy process: Concepts and contexts*. New Jersey: Prentice-Hall.
- Mostafa, M. (2005). Factors affecting organisational creativity and innovativeness in Egyptian business organisations: An empirical investigation. *The Journal of Management Development*, 24(1/2), 7-33.

- Mumford, M.D., Scott, G.M., Gaddis, B., & Strange, J.M. (2002). Leading creative people. Orchestrating expertise and relationships *Leadership Quarterly*, 13, 705- 750.
- Nohria, N., & Gulati, R. (1996). Is slack good or bad for innovation? *Academy of Management Journal*, 39(5), 1245-1264.
- Pearson, G.J., Pearson, A.W., & Ball, D.F. (1989). Innovation in a mature industry: A case study of warp knitting in the U.K. *Technovation*, 9(8), 657-678.
- Porter, M.E. (1990). *The competitive advantages of nation*, London, UK: Macmillian Press.
- Read, A. (2000). Determinants of successful organisational innovation: A review of current research. *Journal of Management Practice*, 3(1), 95-119.
- Rivas, R., & Gobeli, D.H. (2005). Accelerating innovation at Hewlett-Packard. *Research Technology Management*, 48(1), 32-39.
- Roberts, R. (1998). Managing innovation: The pursuit of competitive advantage and the design of innovation intense environments. *Research Policy*, 27, 159–175.
- Roffe, I. (1999). Innovation and creativity in organisations: A review of the implications for training and development. *Journal of European Industrial Training*, 23, 224-241.
- Rohman, A., Anis Eliyana, A., Purwana, D., & Hamidah. (2020). Individual and organizational factors' effect on knowledge sharing behavior. *Entrepreneurship and Sustainability Issues*, 8(1), 38-48.
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *Leadership Quarterly*, 22(5), 956-974.
- Salavou, H. (2004). The concept of innovativeness: Should we need to focus? *European Journal of Innovation Management*, 7(1), 33-42.
- Sirilli, G., & Evangelista, R. (1998). Technological Innovation in Services and Manufacturing: Results from Italian Surveys. *Research Policy*, 27(8), 881-99.
- Spivey, W.A., Munson, J.M., & Wolcott, J.H. (1997). Improving the New Product Development Process. *Journal of Product Innovation Management*, 14(3), 203-18.
- Subramaniam, M., & Youndt, M.A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 43(3), 450-463.
- Tang, H.K. (1999). An Inventory of Organisational Innovativeness. *Technovation*, 19(1), 41-51.
- Woodman, R.W., Sawyer, J.E., & Griffin, R.W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18(2), 293–321.
- Zhuang, L., Williamson, D., & Carter, M. (1999). Innovate or Liquidate – Are All Organizations Convinced': A Two-phased Study into the Innovation Process. *Management Decision*, 37(1), 57-71.