



Employee Engagement, Work Autonomy and Innovative Work Behaviour: An empirical study

Pragati Swaroop and Varsha Dixit, Gautam Buddha University, India¹

Innovation is critical for organizations to survive and grow in this competitive age. Innovation cannot take place without the active involvement of employees, and hence, study of organizational behaviour that supports innovation is important for organizational success. This paper aims to examine the effect of employee engagement and work autonomy on innovative work behaviours in organizations. Data was collected from 267 employees, 231 males and 36 females, from various organizations in India. Empirical analyses of data through statistical procedures indicate that employee engagement and work autonomy are both positively related to innovative work behaviour. It was also found that employee engagement does not moderate the positive relationship of work autonomy with innovative work behaviour. Limitations of the study and directions for further research are also stated.



1. INTRODUCTION

In this competitive age, organizations need to continuously create, innovate and renew themselves not only to survive but also grow in an uncertain business environment. Organizations that survive and grow not only create new products or technologies; they also work on their systems and processes to increase their efficiency and effectiveness. The process of idea generation and implementation becomes important for providing a competitive advantage to the firm as organizations attempt to tap the mental faculties of employees in their quest for success (Anderson et al, 2004; Zhou & Shalley, 2003; Omri, 2015). As the foundation of innovation is ideas, and it is the people who are responsible for developing, carrying and reacting (Van de Ven, 1986), the study of how an individual is motivated for innovation is very important.

A wide and diverse literature has attempted to tease out the antecedents of innovation (Baer, 2012; Smith and Tushman, 2005). Despite some insightful studies (e.g. West, 2002), organizational behaviour variables, especially employee engagement and work autonomy have had a somewhat muted voice. There is still a shortage of empirical research on employee engagement and work autonomy and how they interact to affect innovative behaviours. It is proposed that engagement and autonomy could have important consequences on innovative behaviour of employees and thus may affect the success of organizations. Even though academicians and practitioners have lately been focussing on employee engagement (Shuck et al, 2011), much of the documented literature on employee engagement comes from consulting firms where the focus is practice rather than theory. Additionally, work autonomy (Hackman & Oldham, 1975) and its relationship with innovative work needs to be further explored (Orth and Volmer, 2017).

Studies have also suggested that job design has important effects on innovativeness (Axtell et al, 2000). Work autonomy is an important component of job design. Autonomy can give individual sufficient latitude on how he goes about doing his work. When the employee experiences greater control over his work, he engages in complex tasks (Urbach and Ahlemann, 2010). Although important for innovativeness, there are only a few studies examining relationships between work autonomy and innovative behaviour. In addition, the linking mechanism between engagement, work autonomy and innovative work behaviour are not available. The present study centres on the relationship between work engagement, work autonomy and innovative behaviour of people in organizations and aims to fill the gap in literature.



The rest of the paper is organised as follows: the next section dwells on review of literature and gives the theoretical backdrop of the study that lead to the development of hypotheses. The methodology is described in the following section. The fourth section presents the results of data analysis while the fifth section focusses on discussions and implications of our study. It also gives the limitations and some possible directions for future research. The sixth and final section is the concluding section of the paper.

2. LITERATURE REVIEW AND THEORETICAL BACKDROP

Innovative Work Behaviour

Creativity in organisations has been perceived as the generation of novel and useful ideas (Mumford & Gustafson, 1988). Innovation looks beyond creativity and includes both the creation and implementation of new ideas (Kanter, 1988). West and Farr (1989) have defined innovative work behaviour as “the intentional creation, introduction and application of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization” (Janssen, 2000: 288). Innovative work behaviour encompasses a range of behaviours related to idea generation, idea championing and helping in the implementation of those ideas (Scott & Bruce, 1998; Janssen, 2000).

From studies on creative and innovative work behaviour (Janssen, 2004; Kanter, 1988; Scott and Bruce, 1994; West and Farr, 1990), it can be concluded that there are four tasks in the process of innovation development: opportunity exploration, idea generation, idea promotion and idea realization. Comprehending the problems and needs in one’s work context that gives an opportunity for improvement is referred to as opportunity exploration. In order to approach the opportunities that have been identified, idea generation acts towards activation of innovation development, giving ideas for new products or processes. Idea promotion encompasses marketing the new ideas by convincing the social environment and building a team of employees who can take responsibility and provide necessary support and information. Idea realization is experimenting with the ideas and building a prototype so that it can be improved and integrated with organization practices.

Studies on innovative work behaviour suggest that the antecedents of individuals’ innovation may comprise of a variety of factors, including factors such as organization culture and climate (e.g.,



Scott & Bruce, 1994), relationship with their supervisors (e.g., Janssen & Van Yperen, 2004), job characteristics (e.g., Oldham & Cummings, 1996) and individual differences (e.g., Bunce & West, 1995). It is mostly assumed that innovative work behaviour enhances the work outcomes. With this assumption, studies on innovative work behaviour have mainly focussed on identifying its antecedents.

Kim and Park (2017), in their study of 400 employees of Korean organizations, found that organizational procedural justice is positively related with work engagement, knowledge sharing and innovative work behaviour. Other organizational factors that have been found to be related to innovative work behaviour are, for example, an organization's culture and climate (Scott and Bruce 1994; Ibrahim et al, 2018), support for innovation (Axtell et al. 2000), employees' concerns for change, commitment to change (Battistelli et al, 2014) and leadership styles (Sethibe and Steyn, 2017). Transactional leadership has had mixed results on innovative work behaviour (Bednall et al, 2018). Innovative work behaviour can also be affected by individual differences. Some of the variables that have been studied include mastery orientation (Janssen and van Yperen, 2004), intrinsic interest (Yuan and Woodman, 2010) and propensity to innovate (Bunce and West, 1995). Orth and Volmer (2017) adopted a dynamic within-person perspective on employee innovation. Their study shows that the daily within-person effect of autonomy varied as a function of creative self-efficacy.

Employee Engagement

Kahn (1990) posited that engagement refers to the psychological presence of an employee when executing his organizational task. Kahn defined what he termed personal engagement as the "harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performance" (p. 694). Social exchange theory, wherein employment relationships are basically reciprocal exchanges between employees and their organizations, provides a theoretical foundation to employees' level of work engagement. When people are engaged in their work, there is a probability that employees will be proactive in trying to solve problems and issues in creative and innovative ways if the situation so demands.

Engagement has been positively related to such organizational outcomes such as organizational citizenship behaviour, job satisfaction, commitment and (Koyuncu et al, 2006; Saks, 2006).



Engaged employees are more likely to display discretionary behaviour (Shuck et al, 2011). According to Schaufeli et al's (2002) conceptualization of engagement, work engagement consists of three dimensions – vigour, dedication and absorption. Innovative work behaviours involve not only generation of new ideas but working on them to bring about their successful implementation. While creativity need not lead to actual implementation, innovation involving implementation of ideas requires individuals to invest substantial effort on the promotion and actualization of the idea. Innovative work behaviour is likely to involve employees' dedicating themselves cognitively, emotionally and behaviourally to ensure that the idea is implemented. It also brings about elements of change which others may not accept easily. Getting the acceptance of leadership, co-workers and others in the organisation is integral to the innovative behaviour. Convincing other workers who are resistant to change require a positive emotional energy and the capacity to be persevere even in the face of setbacks, that is, it requires mental resilience. Thus the following hypothesis is formulated for the study:

H1: Employee engagement is positively related to innovative work behaviour.

Work Autonomy and Innovative Work Behaviour

Hackman and Oldham (1975) have defined autonomy as “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and determining the procedures used in carrying out” (p162). According to Breugh (1999), job autonomy is the latitude allowed to an individual in his work and depends on the job design put in place by the managers.

The manner in which the work is designed can significantly affect the way in which employees engage in creative and innovative behaviours. Individuals having little control over their work would be likely to be more dependent on the organizational systems. A broad spectrum of studies has generally supported the positive relationship between work autonomy and work-related behaviours, attitudes and behaviours and negatively with absenteeism (Humphrey et al, 2007; Aube et al, 2007; Heerema et al., 2015; Russell, 2017).

According to Mischel (1977) jobs that are characterized by greater autonomy do not create as many constraints on employees' behaviors than jobs that entail lesser autonomy. This leads to a weaker situation according to Mischel and allows individual personality to drive individual behaviors and



performance. Supporting this argument, conscientiousness and extraversion were found to have stronger relationships with task performance in situations where individuals had greater job autonomy (Barrick and Mount, 1993).

Studies on job design and innovation indicate that individuals who can exert control over their work and engage in a variety of challenging and complex tasks exhibit greater levels of innovativeness (Scott and Bruce, 1994; Axtell et al, 2000; Urbach and Ahlemann, 2010). Hammond et al (2011), in their meta-analytic study, reported that work autonomy exhibited a moderately strong relationship with innovative behaviour. Implementation of new and creative ideas in the workplace inherently requires sufficient latitude to break out of routines (Axtell et al, 2000). Work autonomy may also reduce dispositional resistance to change in an individual (Orth and Volmer, 2017). Autonomy can provide flexibility in looking for opportunities and implementation of ideas. Again, according to social exchange theory, the employee would like to reciprocate and submit himself more to work to reciprocate the trust that is bestowed on him by more work autonomy. We thus propose the hypothesis:

H2: Work autonomy is positively related to innovative work behaviour.

Work autonomy, employee engagement and innovative work behaviour

Employees who are engaged will be more absorbed. Due to their dedication, they will persist in their efforts and are more likely to put forth greater efforts when they have freedom to complete their work and implement their ideas, even when encountering obstacles and negative experiences. Employees' satisfaction increases because of the feeling of competence and confidence which comes with greater work autonomy and makes the work more enjoyable. An employee thus engaged is more likely to experiment at the workplace. To the extent engagement is high; the employees will take advantages of the discretionary opportunities in how to go about doing the work that comes with higher levels of autonomy. When they are absorbed, dedicated and vigorous, the relationship between work autonomy and innovative behaviour is likely to be higher than when they are less engaged and there is slackness in efforts. Thus we hypothesize,

H3: Employee engagement moderates the positive relationship between work autonomy and innovative work behaviour such that the strength of the relationship increases under high levels of employee engagement and decreases under low levels of employee engagement.

The research model is shown in Figure 1

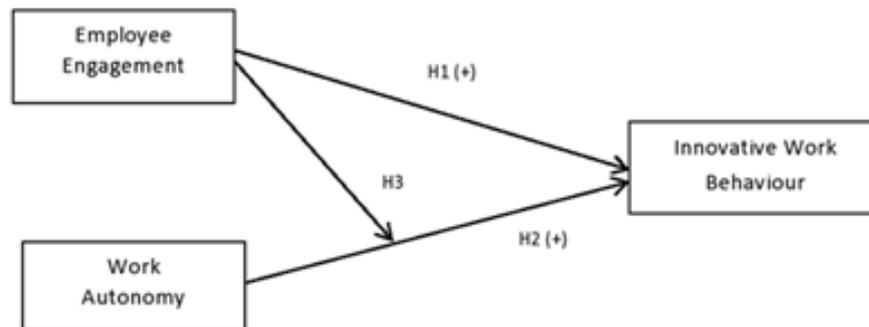


Figure 1: Research Model

3. METHODOLOGY

Sample and Procedures

The sample for the study was drawn from organizations in the manufacturing, service and information technology sectors in India. Various organizations were contacted and invited to participate. After explaining the details of the study to the managers of these organizations, their cooperation was sought for data collection. Confidentiality and anonymity were assured before collecting the data. Finally 330 hard copies of questionnaires were distributed. The surveys were returned directly to the researchers, ensuring confidentiality of the participants. However, only 282 responses were received. Out of the 282 responses, 15 were found to be incomplete and were not included in the final data set. Thus the final sample size was 267 giving a response rate of 81%.

The demographic breakup of the respondents is given in Table 1. 231(86.5%) of the respondents were male, while the remaining 36 (13.5%) were females. 137 (51.3%) were married. 55.1% (147) of the respondents had lower level management or technical profile, while the rest 120 (44.9%) belonged to the middle level of the organizations. The average age of the respondents was 29.14 years (SD=6.26). The respondents had an average tenure of 3.99 years (SD = 2.81) in their current organizations. All the respondents were at least graduates.

Table 1: Demographic profile of respondents (N= 267)

Variable	Marital Status		Gender		Level in Organisation	
	Married	Unmarried	Male	Female	Middle	Lower
No of employees	137	130	231	36	147	120
Percentage	51.3	48.7	86.5	13.5	55.1	44.9

Measures

Existing and accepted scales were used for the measures. These scales are described below.

Employee Engagement: Nine item abridged version of Utrecht Work Engagement Scale (UWES)) (Schaufeli et al, 2006) was used to measure employee engagement. The UWES items incorporate three underlying dimensions of engagement: vigour, dedication and absorption, each measured by three items. Sample items are ‘At my job, I feel strong and vigorous’ (vigour), ‘My job inspires me’ (dedication) and ‘I get carried away when I’m working’ (absorption). The three dimensions of engagement were not treated distinctly in our study but aggregated to create an overall scale of engagement. The items were anchored on a five point scale with anchors 1 (strongly disagree) to 5 (strongly agree). The Cronbach alpha reliability for this scale was 0.873.

Work Autonomy: Morgeson and Humphrey’s (2006) Work design Questionnaire assesses a number of job design aspects ranging decision-making autonomy to such aspects such as task significance and feedback from job. In line with the approach adopted by Battistelli et al (2014), we have assessed work autonomy using the Decision-Making Autonomy subscale. Sample items include ‘My job gives me a chance to use my personal initiative or judgement in carrying out the work,’ and ‘The job provides me with sufficient autonomy in making decisions.’ These items were anchored on a five point scale ranging from 1 (strongly agree) to 5 (strongly agree). The Cronbach alpha of this scale was 0.813.

Innovative Work Behaviour: We used the 10 item scale of De Jong and Den Hartog (2010) to measure innovative work behaviour. Sample items from the scale are ‘I find new approaches to execute tasks,’ ‘I generate original solutions for problems’ and ‘I contribute to the implementation of new ideas. The scale was anchored over five points ranging from 1 (never) to 5 (always). Cronbach alpha reliability was 0.824.

Control Variables: Gender, level in the organization, age and tenure were treated as control variables in this study.

Data Analysis

Data was analysed through SPSS software version 21. The primary statistics used were correlational analysis and hierarchical regression analysis.

4. RESULTS

Table 2 presents the means, standard deviations, alpha reliabilities and intercorrelations amongst the study variables. It is seen that the mean employee engagement score is 3.68 (SD= 0.718), the mean for work autonomy being 3.69 (SD= 0.781), while the mean for innovative work behaviour is 3.79 (SD=0.521). Gender is positively correlated with innovative work behaviour ($r=0.147$, $p<0.05$) while tenure has a positive correlation with level ($r = 0.139^*$, $p<0.05$) and work methods autonomy ($r= 0.172$, $p <0.01$). There is positive and significant correlation of employee engagement with innovative work behaviour ($r=0.407$, $p<0.01$) and between work autonomy and innovative work behaviour ($r= 0.473$, $p<0.01$).

Table 2: Intercorrelations amongst study variables (N = 267)

		Mean	SD	1	2	3	4	5	6	7
1	Gender #	0.87	0.342							
2	Level\$	1.55	0.498	.172**						
3	Tenure (years)	3.990 6	2.8190 3	0.033	.139*					
4	Age (years)	29.14	6.263	0.1	.278**	.283**				
5	EE	3.681 6	0.7176 7	0.071	0.063	- 0.032	- 0.005	- 0.873		
6	WA	3.690 4	0.7808 4	0.115	.172**	0.065	- 0.007	.318**	- 0.813	
7	IWB	3.790 3	0.5210 4	.147*	-0.06	0.018	- 0.031	.407**	.473**	- 0.824

Note: **.p<0.01; *p<0.05 # 0:Female, \$ 1:Lower, 2:Middle, 3:Top Alpha reliabilities are given in parentheses

To test hypothesis 1, hierarchical regression analysis was used with innovative work behaviour as the dependent variable and employee engagement as the independent variable. Control variables were entered first (model 1) followed by employee engagement (model 2). Table 3 summarizes the key results of this analysis. From the table, it is seen that Durbin-Watson statistic is 1.807, showing that autocorrelation is not a problem. Further, $R^2 = 0.194$, $F = 52.811$ ($p < 0.01$), implying that the model is acceptable. All the variance inflation factor (VIF) scores are within acceptable range, so multicollinearity is not a problem in our model.

Table 3: Results of hierarchical regression predicting innovation work behaviour (independent variable: employee engagement) (N = 267)

DV: innovative work behaviour

Independent Variables	Model 1	Model 2
gender	0.163**	0.138*
level	-0.084	-0.109
tenure	0.034	0.049
age	-0.034	-0.026
EE		0.406**
R^2	0.031	0.194
adj R^2	0.016	0.178
ΔR^2	0.031	0.163
ΔF	2.071	52.811**
Durbin Watson	1.807	

Note: ** $p < 0.01$; * $p < 0.05$

Our hypothesis stated that employee engagement would positively impact innovative work behaviour. Results of the regression equation strongly support the hypothesis. The β coefficient for engagement, with innovative work behaviour as the dependent variable, is 0.406 ($p < 0.01$), thus strongly supporting the hypothesis that there is a positive and significant impact of employee engagement on innovative work behaviour.

Table 4: Results of hierarchical regression predicting innovation work behaviour (independent variable: work autonomy) (N = 267)

DV: innovative work behaviour

Independent Variables	Model 1	Model 2	Model 3
Gender	0.163**	0.118*	0.122*
level	-0.084	-0.167	-0.163
tenure	0.034	0.004	0.004
Age	-0.034	0.006	-0.003
WA		0.488**	0.516**
WA x EE			0.077
R ²	0.031	0.258	0.263
adj R ²	0.016	0.244	0.246
□ R ²	0.031	0.228	0.005
□ F	2.071	80.049**	1.74
Durbin Watson	1.763		

Note: **p<0.01; *p<0.05

The second hypothesis stated that there would be a positive relationship of work autonomy with innovative work behaviour, while the third hypothesis stated that employee engagement would moderate the positive relationship between work autonomy and innovative work behaviour. The results of the hierarchical regression analysis used to test these hypotheses are summarized in Table 4. In model 1, only control variables are entered. In model 2, besides the control variables, the independent variable, work autonomy, is also entered. To avoid multicollinearity issues, the standardized values of work autonomy and employee engagement are multiplied and then entered in the third equation (Model 3). Table 4 gives the results of these analyses. It is seen that Durbin-Watson statistic is 1.763, showing that autocorrelation is not an issue for data analysis considerations.

Further, in Table 4, model 2, □ R² = 0.228, □ F = 80.049** (p<0.01), implying that the model is acceptable. The variance inflation factor (VIF) scores were within acceptable range; thus multicollinearity is not a problem. Results of the regression equation strongly support hypothesis 2. The □ coefficient for work autonomy with innovative work behaviour as the dependent



variable is 0.488 ($p < 0.01$). Thus, there is a positive and significant impact of work autonomy on innovative work behaviour. Table 4, model 3 shows that $\Delta R^2 = 0.005$, $\Delta F = 1.74$ ($p > 0.05$) which is insignificant. Thus hypothesis 3, that employee engagement moderates the positive relationship between work autonomy and innovative work behaviour such that the strength of the relationship increases under high levels of employee engagement and decreases under low levels of employee engagement, does not hold.

5. DISCUSSIONS

The Indian economy was liberalized in early 1990s, bringing in many multinationals to the country and Indian companies setting up their operations in larger numbers outside India. In this age of globalization where companies have to compete with the best in the world, innovation and creativity can provide a competitive advantage to the firm and are important determinants of organizational performance and long-term survival. Organizations desirous of being creative and innovative need to harness the highest potential of their employees which is possible only when employees are willing to go beyond merely fulfilling job requirements and exerting discretionary efforts in the form of innovative work behaviour (Janssen, 2000). Given this critical role, our study has investigated the link between autonomy, employee engagement and innovative work behaviour. The results are a pointer to the argument that employee engagement positively impacts innovative work behaviour. Workers who have higher levels of engagement are more likely to exhibit innovative work behaviour than those who have lower levels of employee engagement. In addition, employees who perceive higher levels of work autonomy exhibit higher levels of innovative work behaviour.

As stated earlier, engagement has positive consequences for the employees experiencing it, as engaged employees enjoy good health and positive affect (Rothbard, 2001). Engagement has also been found to have important consequences for organizations by influencing such outcome variables as job satisfaction, organizational commitment, organizational citizenship behaviour and intention to quit (Saks, 2006; Koyuncu et al, 2006; Shuck et al, 2011). This study reveals that engagement also has positive consequences for employees' innovative work behaviour.

Harnessing the full potential of employees is not possible until the employees are willing to engage their 'hands, head and heart' to their work (Ashforth and Humphrey, 1995). Schaufeli et al (2002)



also conceptualize work engagement as consisting of vigour, dedication and absorption. Innovative work behaviour requires employees to not only be creative, share their ideas but also involving themselves fully in order to champion their ideas, persevering in the face of opposition and setbacks, and being energetic, enthusiastic and motivated to see their creative ideas coming to a fruition. This is not possible if the employees lack dedication, are not energetic, and do not absorb themselves into their work, that is, it is not possible without their being engaged.

Moreover, employees who have greater levels of work autonomy may feel responsible and empowered. According to social exchange theory (Blau, 1964) and the reciprocity rule of Meeker (1971), such employees will try to give back to their organization through extra-role behaviours. Innovative work behaviour could be one such behaviour involving discretionary efforts wherein employees share their creative idea, champion their ideas and exert their cognitive, emotional and physical energies while attempting to get their ideas implemented. In addition to a sense of obligation, they may also be guided by logic and rationality as the new ideas, when implemented successfully, can enhance their image and status amongst the co-workers and in the eyes of management which might have positive consequences for their career growth.

The findings also confirm a significant role of work autonomy in enhancing innovative work behaviour. The link between perceiving higher levels of work autonomy and innovative work behaviour was positive and nonsignificant. A possible explanation for this result might be that work autonomy is really perceived by individuals as giving greater freedom and being innovation-supportive. This work design characteristic has been earlier been associated with increased levels in creativity and innovation within stable contexts (Amabile et al., 1996; Shalley, 1991) since it gives the required freedom and independence to people to explore new ideas, champion them and implement useful ideas within the work environment. Implementation of new ideas brings in change which brings in some uncertainty. Work autonomy enhances freedom of choice and discretion and gives more power to the individuals to experiment. Thus work autonomy can be regarded as a crucial work design element that can be used to enhance innovativeness in organizations.

We could not find any significant moderating effects of engagement on the relationships between autonomy and innovative behaviour at work. Higher levels of engagement were not sufficient to



instil higher effects of work autonomy on innovative behaviour beyond the direct impact of work autonomy on innovative work behaviour. These results might be explained if we consider that engagement and autonomy act independently on innovative work behaviour.

Implications

In a competitive environment, organizations require energetic employees who are willing to go beyond mere job descriptions and do not have to be prodded, induced or controlled for such extra-role behaviours (Macey et al, 2009). Competitive environment also requires organizations to be innovative. Since creativity and innovative behaviours lie in the hearts and heads of the employees, managers need to provide conducive culture and environment where employees are open to sharing their ideas and experimenting with them, even at the cost of failing. Apart from organizational resources, this experimentation requires energy, passion and resilience, which engagement can provide. Managers can not only provide the physical resources to support employees in their endeavours to see an idea coming to its fruition, but also help in stimulating employee engagement and in developing a culture of mutual cooperation and support. Organizations can have special training programmes for managers to help increase employee engagement as well as innovative work behaviours.

Limitations

The study is not without its limitations. All the concepts used in the analysis are measured through a single method. We have taken precautions to minimize common methods bias while collecting the data through such means as rearranging the questions from different constructs and reverse coding of certain items. We also used Harman's single factor test on the data collected, in which all items were loaded into one common factor and no single factor accounted for more than 50% of the variance. Researchers have also stressed the need to distinguish between the different dimensions of innovative work behaviour (De Jong & Den Hartog, 2010; Kleysen & Street, 2001), which we have not examined. Future studies may also consider a larger number of organizations to arrive at more robust conclusions. Future studies can incorporate variables like leader support, organizational and personality factors in more complex models. The role of propensity to innovate as a mediating or moderating variable may also be examined.



6. CONCLUSION

In the current age of intense competition, innovation is an important determinant of organizational success and growth. Companies that do not continuously improve their processes and systems or do not innovate for products may not survive in the long run. It is the hearts and minds of employees where creative ideas reside. Companies need to design the work appropriately and also to fully engage their employees to harness their physical, cognitive and emotional energies so that they contribute to the organization through innovative work behaviours. This study contributes to the ongoing research on employee engagement, work autonomy and their possible consequences. The result suggests that engaged employees are intrinsically inclined towards greater innovative behaviour at work and that work autonomy leads to greater innovative work behaviour.

REFERENCES

- Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity*. Hachette, UK.
- Anderson, N.R., C.K.W. De Dreu, and B.A. Nijstad. (2004). The routinization of innovation research: A constructively critical review of the state-of-the-science. *Journal of Organizational Behavior*, 25(2): 147–73.
- Ashforth, B.E. and Humphrey, R.H. (1995), “Emotion in the workplace: a reappraisal”, *Human relations*, Vol. 48 No. 5, pp. 97-125.
- Aubé, C., Rousseau, V., & Morin, E. M. (2007). Perceived organizational support and organizational commitment: The moderating effect of locus of control and work autonomy. *Journal of managerial Psychology*, 22(5), 479-495.
- Axtell, C.M., Holman, D.J., Unsworth, K.L., and Wall, T.D. (2000): Shopfloor Innovation: Facilitating the Suggestion and Implementation of Ideas, *Journal of Occupational and Organizational Psychology*, 73 (3), 265-285.
- Baer, M. (2012). Putting creativity to work: the implementation of creative ideas in organizations. *Academy of Management Journal*, 55(5): 1102–1119.
- Barrick, M. R., & Mount, M. K. (1993). Autonomy as a moderator of the relationships between the Big Five personality dimensions and job performance. *Journal of applied Psychology*, 78(1), 111.
- Battistelli, A. Montani, F., Odoardi, C., Vandenberghe, C. & Picci, P. (2014). Employees' concerns about change and commitment to change among Italian organizations: the moderating role of innovative work behavior, *The International Journal of Human Resource Management*, 25(7): 951-978.



Bednall, T. C., E. Rafferty, A., Shipton, H., Sanders, K., & J. Jackson, C. (2018). Innovative behaviour: how much transformational leadership do you need?. *British Journal of Management*, January.

Blau, P. M. (1964) *Exchange and Power in Social Life* (New Brunswick, NJ: Transaction Publishers).

Breaugh, J. A. (1999). Further investigation of the work autonomy scales: Two studies. *Journal of Business and Psychology*, 13(3), 357-373.

Bunce, D. and West, M.A. (1995). Self-perceptions and perceptions of group climate as predictors of individual innovation at work. *Applied Psychology*, 44(3), pp.199-215.

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

Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied psychology*, 60(2), 159.

Hammond, M. M., Neff, N. L., Farr, J. L., Schwall, A. R., & Zhao, X. (2011). Predictors of individual-level innovation at work: A meta-analysis. *Psychology of Aesthetics, Creativity, and the Arts*, 5(1), 90.

Heerema, M., Tummers, L., Steijn, B., & Nevicka, B. (2015). The effects of leadership and autonomy on vitality: Evidence from a survey and an experiment. In *Academy of Management Proceedings*, Vol 1, Briarcliff Manor, NY 10510: Academy of Management.

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

Ibrahim, H. I., Mohamad, W. M. W., & Shah, K. A. M. (2018). Organizational Innovative Climate as a Predictor of Innovative Behaviour among Engineers in the Electrical and Electronic Manufacturing Industry. *Review of Integrative Business and Economics Research*, 7, 1-14.

Janssen, O. (2000): Job Demands, Perceptions of Effort-Reward Fairness and Innovative Work Behaviour, *Journal of Occupational and Organizational Psychology*, 73 (3), 287-302.

Janssen, O. (2004) How fairness perceptions make innovative behavior more or less stressful, *Journal of Organizational Behavior*, 25, pp. 201–215.

Janssen, O. and van Yperen, N.W. (2004): Employees' Goal Orientations, the Quality of Leader-Member Exchange, and the Outcomes of Job Performance and Job Satisfaction, *Academy of Management Journal*, 47 (3), 368-384.

Kahn, W.A. (1990), 'Psychological Conditions of Personal Engagement and Disengagement at Work,' *Academy of Management Journal*, 33, 692–724.

Kanter, R.M. (1988), When a thousand flowers bloom: structural, collective and social conditions for innovation in organization, *Research in Organizational behavior*, 10, 169-211.



- Kim, W., & Park, J. (2017). Examining structural relationships between work engagement, organizational procedural justice, knowledge sharing, and innovative work behavior for sustainable organizations. *Sustainability*, 9(2).
- Kleysen, R. F., & Street, C. T. (2001). Toward a multi-dimensional measure of individual innovative behavior. *Journal of Intellectual Capital*, 2(3), 284-296.
- Koyuncu, M, Burke, R.J. & Fiksenbaum, L. (2006). Work engagement among women managers and professionals in a Turkish bank: potential antecedents and consequences. *Equal Opportunities International*, Vol. 25 Iss: 4, pp.299 – 310.
- Macey, W., Schneider, B., Barbera, K. and Young, S. (2009), *Employee Engagement: Tools for Analysis, Practice and Competitive Advantage*, Wiley-Blackwell, Malden, MA.
- Meeker, B. F. (1971). Decisions and exchange. *American Sociological Review*, 36: 485-495.
- Mischel, W. (1977). The interaction of person and situation. *Personality at the crossroads: Current issues in interactional psychology*, 333, 352.
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of applied psychology*, 91(6), 1321.
- Mumford, M., & Gustafson, S. 1988. Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin*, 103: 27-43.
- Oldham, G. R., & Cummings, A. 1996. Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39: 607-634.
- Omri, W. (2015). Innovative behavior and venture performance of SMEs: The moderating effect of environmental dynamism. *European Journal of Innovation Management*, 18(2), 195-217.
- Orth, M., & Volmer, J. (2017). Daily within-person effects of job autonomy and work engagement on innovative behaviour: The cross-level moderating role of creative self-efficacy. *European Journal of Work and Organizational Psychology*, 26(4), 601-612.
- Radaelli, G., Lettieri, E., Mura, M., & Spiller, N. (2014). Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects. *Creativity and Innovation Management*, 23(4), 400-414.
- Rothbard, N. (2001), Enriching or Depleting? The dynamics of engagement in work and family roles, *Administrative Science Quarterly*, 46: 655-684.
- Russell, M. (2017). "The Relationships among Autonomy, Job Satisfaction and Motivation" (2017). Honors Theses. University of North Georgia.
- Saks, A.M. (2006), 'Antecedents and Consequences of Employee Engagement,' *Journal of Managerial Psychology*, 21, 600–619.



- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2006). Dr. Jekyll or Mr. Hyde: On the differences between work engagement and workaholism. *Research companion to working time and work addiction*, 193-217.
- Scott, S. G. and Bruce, R. A. (1994) Determinants of innovative behavior: A path model of individual innovation in the workplace, *Academy of Management Journal*, 37, pp. 580–607.
- Sethibe, T., & Steyn, R. (2017). The impact of leadership styles and the components of leadership styles on innovative behaviour. *International Journal of Innovation Management*, 21(02), 1750015.
- Shalley, C. E. (1991). Effects of productivity goals, creativity goals, and personal discretion on individual creativity. *Journal of Applied psychology*, 76(2), 179.
- Shuck , B., Reio Jr. T.G. & Rocco, T.S. (2011) Employee engagement: an examination of antecedent and outcome variables, *Human Resource Development International*, 14:4, 427-445.
- Smith, W. K., & Tushman, M. L. (2005). Managing strategic contradictions: A top management model for managing innovation streams. *Organization science*, 16(5), 522-536.
- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *JITTA: Journal of Information Technology Theory and Application*, 11(2), 5.
- Van de Ven, A. (1986). Central problems in the management of innovation. *Management Science*, 32: 590-607.
- West, M. A. (2002). Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups. *Applied Psychology: An International Review*, 51: 355-387.
- West, M. A., & Farr, J. L. (1989). *Innovation at work: psychological perspectives*. Social Behaviour.
- West, M.A. & Farr, J.L. (1990). *Innovation and creativity at work: Psychological and organizational strategies*. Chichester: Wiley.
- Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal*, 53(2), 323-342.
- Zhou, J., & Shalley, C. (2003). Research on employee creativity: A critical review and directions for future research. In J. Martocchio (Ed.), *Research in Personnel and Human Resource Management*, 22, 165-2



International Journal of Innovation, Creativity and Change. www.ijicc.net
Volume 4, Issue 2, November, 2018

ⁱ Author contact pragati.swaroop@gmail.com: