

## **The Impact of Employees' Core Self-Evaluation Personality Trait, Management Support, Co-worker Support on Job Satisfaction, and Innovative Work Behaviour**

**Saman Attiq**

University of Wah

**Sidra Wahid, Nimra Javaid, Maria Kanwal,  
and Hassan J. Shah**

National Defence University Islamabad

The study was aimed to investigate the effect of personality trait and supportive work environment on employee's job satisfaction as well as his/her innovative work behaviour. The current work supports previous prerogatives regarding the importance of supportive work environment for the formation of satisfaction that enhances innovation and change. A sample size of 251 respondents ( $N = 251$ ) comprised of 133 male and 118 female employees selected from NGOs, banking, and telecom sector from twin cities (i.e., Islamabad and Rawalpindi). Data were gathered through structured questionnaire based on convenient sampling technique. Data was analysed through structural equation modelling (SEM) with AMOS 22.0. Findings indicated that positive and direct relationship among core self-evaluation (as personality trait), supportive work environment (management and co-worker support), and job satisfaction. Similarly, employees' job satisfaction had positive and direct impact on innovative work behaviour. Furthermore, findings of the study proposed that managers and HRM professionals could play a pivotal role in exploiting and guaranteeing every employee trait that they possessed and for development of work environment that motivated employees to perceive things with innovation.

*Keyword.* Innovative work behaviour, core-self-evaluation, supportive work environment, management support, co-worker support

---

Dr. Saman Attiq, Department of Management Science, University of Wah, Pakistan.

Sidra Wahid, Nimra Javaid, Maria Kanwal and Hassan J. Shah, National Defence University Islamabad, Pakistan.

Correspondence concerning this article should be addressed to Hassan J. Shah, National Defence University Islamabad, Pakistan. E-mail: hassan6ff@gmail.com

In order to cope up with the swift changes in today's environment, businesses can gain competitive advantage by adopting the capability to innovate. For novelty employees, innovative behaviour is of utmost importance, as they are the building blocks in bringing these changes within the organization. The concept of workplace innovation obtained considerable attention in past few years (Frambach & Schillewaert, 2002), and particularly, in current economic situation, it may be perceived as the fundamental for firm's wellbeing (Zhou & Hoever, 2014). Generally, innovative work behaviour is argued to be a significant determinant of firm's achievement (Spiegelaere, Gyes, & Hootegeem, 2016). Within a firm, less supportive environment eradicates an important trigger to stimulate innovative work behaviour and innovativeness (Bysted & Jespersen, 2014). Currently, many large firms engage the transfer of knowledge-based services; these firms require processing knowledge effectively because innovative ideas require management support or leadership in the form of advocates by establishing an environment that accelerates employees sharing and knowledge acquisition (Richards & Duxbury, 2015). In such a context, employees would be encouraged to accumulate, use or even extend knowledge for the purpose of improving processes and innovation. This study supports previous claims regarding the importance of management support for the creation of a work and social environment that encourages innovation and change (Damanpour & Schneider, 2009; Yuan & Woodman, 2010).

Basically, employees' innovative work behaviour explains everyday innovative work practices relay on worker's deliberate contributions to give advantageous new results at workplace (Janssen, 2000) and it has been intended to be influenced by many individual, team and workplace elements (Farr & West, 1990). Along with other several aspects, innovative work and creativity are significantly affected by individual as well as organizational factors (Anderson & King, 1993; Birdi, Leach, & Magadley, 2016; Patterson, 2002). Personality is considered as a key predictor of job contentment as well as innovative behavior (Egan, 2005; Marcati, Guido, & Peluso, 2008; Stock, von Hippel, & Gillert, 2016). Workers demonstrate a greater level of innovative behaviour when they are committed to their firm (Dorenbosch, Engen, & Verhagen, 2005). Job satisfaction has been a well-known topic of significant concern and has also been identified to influence work behavior (Lee, Wong, Der Foo, & Leung, 2011; Ng & Feldman, 2011; Robbins, 1996). Thus, workers would be attracted towards innovative work behaviour when they have more job satisfaction (Lee et al., 2011; Pierce & Delbecq, 1977).

Literature review of more than two decades has shown various explorations and discussions on innovative work behaviours and their antecedents (Basu & Green, 1997; Messmann & Mulder, 2011). Different studies focused their attention on personality traits along with innovative work behaviour, employee attitudes, and his/her job performances (e.g., Yesil & Sozbilir, 2013). Prior researches related to innovation focused dominantly at organizational level, as recommended by Gumusluoglu & Ilsev (2009), while studies on innovative behavior have been mostly carried up in the Western context (Sellgren, Ekvall, & Tomson, 2008). Very few empirical studies on individual level focused on innovative work behavior, and those too in Western context (e.g. Reuvers, Van Engen, Vinkenburg, & Wilson-Evered, 2008).

Based on previous studies' scope, it is stimulating for an employee to keep his/her finest motivation and dynamism throughout an innovation process, possibly leading to innovative work behaviour. Yet, studies on the individual's personal and organizational motivational factors regarding innovative work behaviour remains comparatively underrepresented (Anderson, Potocnik, & Zhou, 2014).

On the other side, two separate studies done by Erez and Judge (2001) shows positive correlation of core self-evaluation with motivation and performance. Another study found core self-evaluation's outcomes for innovation, which pass on to individuals' belief of novel and functional ideas in the job (Amabile, 1983). Whereas, core self-evaluation in prior studies has been regarded to affect positively job performance. However, these results could not anticipate to judge, that how core self-evaluation (CSE) can inspire creativity in job and innovative behavior (Chang, Ferris, Johnson, Rosen, & Tan, 2012; Ferris et al., 2011; Kacmar, Collins, Harris, & Judge, 2009). Recently, a number of studies inculcate job satisfaction with core self-evaluation with and without intervening/observed factors (Zhang, Kwan, Zhang, & Wu, 2014).

Researchers acknowledge that they have ignored the underlying mechanism that builds these connections, hence emphasize the need for exploring abilities, traits, and knowledge with organizational support (Messersmith et al., 2011). Devloo et al. (2016) suggest exploring management support and opportunity to practice on transfer of knowledge. Correspondingly, several researchers have recommended investigating association among co-worker/supervisor support and organizational work behaviour. Further, it is also suggested to find out relation among individual factor, organisational factors, and practice environments (Birdi et al., 2016; Çokpekin & Knudsen, 2012) particularly in a path mechanism.

Based on extensive literature reviews enumerating limitations, the current study emphasize on the role of individual's personality, and supportive work environment in stimulating employees' innovative work behaviour. The study continues building theoretical contribution by mapping the concepts of core self-evaluation trait, management support, and co-worker support with the job satisfaction and innovative work behaviour. It is crucial to realize which work environment (i.e., management support and co-worker support) enhances job satisfaction and innovative work behaviour. This would translate into managerial practice on how individual trait work environment can support employees in engaging his/her job gratification as well as innovative work behaviour. Hence, the present research aims to fill this gap and contribute to present literature on these factors as well as improve the consideration of researchers, managers, officials, behavioural scientist and psychologists, etc. To accomplish the objectives of this study, the subsequent research questions will be addressed.

1. Is there any positive and direct relationship between individual's core self-evaluation personality trait and supportive work environment (i.e., management support and co-worker support)?
2. Is there any positive and direct relationship between supportive work environment (i.e., management support and co-worker support) and employee's job satisfaction?
3. Is there any positive and direct relationship between employee job satisfaction and innovative work behaviour?

**Innovative Work Behaviour (IWB).** IWB is defined as the "intentional readiness by workers to work according to innovation such as improve working methods, contact with co-workers, the utilization of advanced technology and the expansion of novel manufacturing goods and services"(Dorenbosch et al., 2005; Yuan & Woodman, 2010). To put simply, IWB can be defined as the deliberated eagerness by individuals to perform innovatively for better procedures, communicate with colleagues, the utilization of advanced technology and the expansion of new manufacturing goods and services.

As leaders, business managers can influence workers' motivation and job satisfaction and create a work and social environment that encourages and rewards innovation and change. Damanpour and Schneider (2009) investigated the role of leaders in stimulating

Innovative work behaviour. Greater resources along with support from a top management increase the likelihood that Innovative work behaviour will be successful (Yuan & Woodman, 2010). These employees are perceived as more powerful and influential because of their access to valuable information and resources held by their top management or supervisor (Wang, Fang, Qureshi, & Janssen, 2015). A number of studies show significant relation between job satisfaction and innovative work behavior (Bysted, 2013).

**Core Self-Evaluation (CSE).** CSE coined by Edith Packer (1985) is defined as the assessment of particular situations which are mostly affected by basic appraisals. CSE is an essential, basic assessment of one's own value, success and potential as an individual (Hsieh & Huang, 2017; Judge, Erez, Bono, & Thoresen, 2003). CSE is an extensive, but hidden trait which is the edifice of four particular traits include; Self-esteem, generalised self-efficacy, locus of control and neuroticism (Judge, Bono, Erez, & Locke, 2005).

In simple words, CSE is the readiness to assist each other in organizational task in order to have offensive management and intimidating conditions to be work-environment fit. In the context of working environment, employee's self-esteem refers to a support from co-worker be able to believe influential for members of staff to set off their self-worth/self-esteem. Whereas, generalized self-efficacy refers as the ability of an individual to manage, achieve, and get success and employee's locus of control refers as the ability of one to think of having control on proceedings and events in life. Further, neuroticism trait is considered as fourth dimension of CSE and refers to level of stability regarding emotions.

Consistent with four dimensions of personality traits/CSE, researchers have posited that supplementary optimistic functional results, for example; job satisfaction and organization commitment; when their managers such as front supervisors and co-workers handle employees in an affectionate and accommodating manner (Eisenberg, Fasolo, & Davis-LaMastro, 1990). Since the inception of CSE, it has become an important area to study for many researchers due to its association with different phenomenon including recognition (Scott & Judge, 2009) and satisfaction (Judge, Locke, Durham, & Kluger, 1998). Amabile (1983) stated that the componential theory relates CSE with creativity, which results in innovative behaviour.

On the other side, the present study has used CSE personality traits for describing the personality regarding innovative work behavior. Very little research (Yesil & Sozbilir, 2013) exists which

explains the relationship between personality traits (such as ‘openness to experience’) and innovative work behaviour. Based on literature review support, it is hypothesized that:

- H1a: CSE has positive and direct effect on management support.
- H1b: CSE has positive and direct effect on co-worker support.
- H1c: CSE has positive and direct effect on employee job satisfaction.
- H1d: CSE has positive and direct effect on innovative work behaviour.

**Supportive Work Environment (SWE).** SWE or top management support is one of the specific aspect of work environment that contributes to the supportive work environment (Parker, Williams, & Turner, 2006). Support in terms of top management is defined as the support that assists/facilitates the stipulation of sufficient human as well as financial resources in order to align organizational actions (Colbert, 2004). Managerial support is considered as consideration, training, and feedback in a useful way and an openness to censure (Amabile, Schatzel, Moneta, & Kramer, 2004). In order to motivate employees, effective managerial support (e.g., top management) is necessary (Drucker, 1992). Effective consequences of CSE (e.g., neuroticism), have also been investigated that lead to negative but significantly related to perceived management support (Knussen & Niven, 1999). In addition, different researchers have also examined significant association between individual’s traits (such as locus of control, self-esteem) and management support (Premeaux & Bedeian, 2003). Similarly, the support from management and association with supervisors have been intended as significant in motivating innovative behaviour (e.g. Hunter & Cushenbery, 2011). The research has fully recognized the impact of management support as an important predecessor for innovative and unrestricted behaviour (e.g., Hoon Song, Kolb, Hee Lee, & Kyoung Kim, 2012).

Co-worker’s support in term of organizational environment, is defined as their readiness to assist each other in their task (e.g., co-operation, support, respect. etc.), in addition, managing offensive and intimidating conditions in order to have work-environment fit (Beehr & McGrath, 1992). There is a clear and significant connection among perception of an employee about co-worker support and commitment that eventually lead to job satisfaction (Susskind, Kacmar, & Borchgrevink, 2007). Xanthopoulou, Bakker, Demerouti, and Schaufeli, (2007) argued that self-efficacy and support received by

colleague have significant relation with each other. In addition, researchers' findings exhort that supervisory and co-worker support is positively related to locus of control, particularly, internal control (Rahim, 1997). Co-workers support also established negative relation with inverse affectivity formerly or neuroticism (Aryee, Srinivas, & Tan, 2005).

Overall, management and co-worker support are probable to enhance employees' innovative behavior (Shalley, Zhou, & Oldham, 2004). Hence, both supports are particular dimensions of supportive work environment that works as conditional predecessors of innovative work behaviour by augmenting individuals' opinion about their contribution and their practical driving situation (Parker et al., 2006). Moreover, the perception of supporting work environment such as management and co-worker support have attained consideration in prior research also as significant elements of innovative work behaviour (e.g. Parker et al., 2006). Hence, it is inferred,

H2a: Management's support has positive and direct effect on employee job satisfaction.

H2b: Co-worker support has positive and direct effect on employee's job satisfaction.

**Employee's Job Satisfaction (EJS).** It can be defined as employee's perception about their job as fulfilling their material as well as psychological needs and influenced by his/her intrinsic motivation (Statt, 2004). Therefore, lower level of job satisfaction is closely related to poor performance, less retention, poor relations with co-workers and other organizational obstacles (Erdoğan, 1997; Rue & Byars, 1995; Spector, 1997). Job Satisfaction has also been defined in terms of combining all three circumstances including environmental, physiological, and psychological which make any person to say honestly that he is satisfied with his job (Hoppock, 1935).

Generally, employee's job satisfaction is a feeling based on the perception that job fulfills all their psychological and material needs (Aziri, 2008). Significant relationship exists between core self-evaluation (i.e., self-esteem, self-efficacy, locus of control, and neuroticism) and job satisfaction (Judge, Locke, Durham, & Kluger, 1998). For example, higher level of neuroticism would lead to more negative emotions which results in lower job satisfaction (Judge & Bono, 2001). Individuals who have trait of generalized self-efficacy would demonstrate more persistence, less frustration, good at handling difficult situations which help them to be satisfied from their jobs

(Judge & Bono, 2001). Another aspect of job satisfaction is the extent to which employees are satisfied with rewards they get for their performance, especially with regard to intrinsic motivation (Statt, 2004). Lower level of job satisfaction is closely related to poor performance, less retention, poor relations with co-workers and other organizational obstacles (Spector, 1997).

Significant correlation of four traits of CSE with job satisfaction has been studied (Judge et al., 1998). Higher level of neuroticism would lead to more negative emotions, which results in lower job satisfaction whereas, individuals who have trait of generalized self-efficacy would demonstrate more persistence, less frustration, good at handling difficult situations which help them to be satisfied from their jobs (Judge & Bono, 2001). Job satisfaction has been the topic of significant concern in industrial study and is identified as to influence work behavior (Ng & Feldman, 2011; Robbins, 1996). Thus workers would be attracted towards innovative work behaviour when they have more job satisfaction (Pierce & Delbecq, 1977). Hence, the current study hypothesized that;

H3: Employee job's satisfaction has positive and direct effect on innovative work behaviour.

### **Theoretical Framework**

In previous researches key personality theories identified are; 'psychoanalytic, humanistic, behavioural, social learning, cognitive and trait theories'. The theoretical support behind present study is trait theory and social cognitive theory. Traits theory states that individuals' behaviour is an outcome of some specific personality traits. The base of social cognitive theory is social learning theory. It entails an effective relationship between personal variable, environmental factors and behavior (Wood & Bandura, 1989). The theory explains how concepts, expectations, goals, and thinking escort towards certain behaviour. According to this theory, the main elements that effect individual's behavior is their perception, capability, learning, and personality (Lee-Ross, 2003).



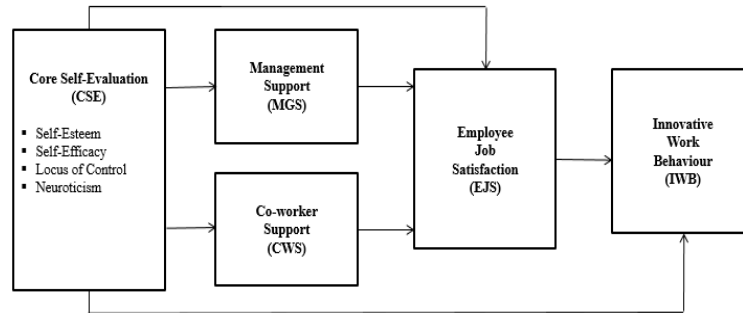


Figure 1. Theoretical framework.

## Method

### Sample

The current research was based on quantitative research approach, causal research design, survey method and cross sectional data. Sample size was 251 employees from services sectors such as banks, NGOs, and telecom sector by using convenient sampling technique.

Table 1

*Profile of Demographic Variable (N = 251)*

Variables		F
Gender		
Male	20-24	51
Female	25-29	55
Age		
	30-34	74
	35-39	38
	Above 40	33
Job Status		
	Non managerial	118
	First line manager	52
	Middle manager	81

### Measures

**Core self-evaluation (CSE).** It is the first variable, the study has used the measures developed by Judge et al., (2003) for measuring its four dimensions that is Self-esteem (3-items, I am confident I get the success I deserve in life), Self-efficacy (3-items, e.g., sometimes when

I fail I feel worthless), 'Locus of Control' (3-items, e.g., I am filled with doubts about my competence) and Neuroticism (3-item, e.g. I determine what will happen in my life). The reliability of CSE is .71.

**Supportive work environment (SWE).** It is measured with its two dimensions (11 items), in which Management Support consists of 5 items (e.g., "employees in this organization receive encouragement and support from their supervisors) by Chandler, Keller, and Lyon (2000) and Co-worker Support consist of 6 items (e.g., employees in this organization trust in their co-workers) by Subramaniam and Youndt, (2005). The reliability of both dimensions are .86 and .88 respectively.

**Employee Job Satisfaction (EJS).** It is measured with 19 items (e.g., my job provides adequate opportunities to do something that makes use of my abilities) by Hackman and Oldham (1975). The reliability of EJS .83.

**Innovative Work Behaviour (IWB).** It is measured by 6 items (e.g., finding new ways to perform one's job with limited resources) by Scott and Bruce (1994) with reliability is .91.

## Procedure

Data was collected by distributing structured questionnaire to employees. Questionnaires were administered online as well as in personal.

Research's purpose was briefly elucidated in the beginning to give clear idea to the respondents. Questionnaire comprised of 53 items in total. First five sections included CSE as personality trait, management support, co-worker support, innovative work behaviour and job support while last section comprised of demographic information including age, gender, education and work experience. Responses were recorded by using 5-point Likert scale. The scale ranging from 1(*strongly disagree*) to 5(*strongly agree*) has been used.

## Pilot study

It is evident that established instruments/measures had been used already in western as well as Asian context. Even then prior to collection of final data, a pilot study survey was also carried to confirm the validity of the structured questionnaire as well as clarity in the context of their job. For this purpose, questionnaire was filled from 50 employees. After data collection of pilot study, Cronbach's alpha test was used to test the reliability of all observed variables or items. Results of reliability test was in acceptable range that is  $>.70$ .

## Results

### Sample Descriptive

In order to attain the current objectives of the study, a thorough data analyses have been performed. Descriptive analysis for all variables was examined through SPSS 20.0 in term of mean, standard deviation, skewness and kurtosis. For examination model fitness, structural equation modeling (SEM) technique was employed for analysis with AMOS 22.0. Further, SEM has been applied by analysing its two models that is measurement model validation and fitness of structural model. Basically, for validation of measurement model, confirmatory factor analysis (CFA) was used while path analysis has been employed for structural model fitness.

Out of 251 participants, 133 (53%) were male and 118 (47%) were female respondents. On the basis of age, 55 respondents lie in group age of 25-30 and 74 lie in group age of 30-35. Mean for age is 2.79 and standard deviation for age is 1.29. Whereas, employees' job status, 118 employees were from non-managerial status and 81 are middle managers (see Table 1).

### Correlation and Descriptive Analysis of Constructs

To check relationship among variables (Table 2), correlation analysis has been performed that presented significant positive relation among all variables at  $p < .01$ . Results presented strong positive correlation between CSE and management support. In the same way, results present strong positive correlation among management support and innovative work behavior.

Multicollinearity was examined for the studied variables with employee job satisfaction and innovative work behaviour separately (see Table 4). For this purpose, variance inflation factor and tolerance test was employed and results represented no issue of multicollinearity (O'Brien, 2007).

Table 2  
*Correlation and Descriptive Analysis (N=251)*

Latent Variables	1	2	3	4	5	M (S.D)	Skewness	Kurtosis
1. CSE	-					2.35 (.63)	.78	1.30
2. MGS	.53**	-				1.96 (.68)	1.44	1.48
3. CWS	.60**	.70**	-			2.13 (.80)	1.53	1.32
4. EJS	.66**	.72**	.74**	-		2.29 (.61)	.99	1.59
5. IWB	.59**	.75**	.70**	.70**	-	1.99 (.75)	1.53	1.03

*Note.* CSE: Core Self-evaluation; MGS: Management Support; CWS: Co-worker Support; EJS: Employee Job Satisfaction; IWB: Innovative Work Behaviour.

\*\* $p < .01$  level.

Similarly, descriptive statistics such as mean values (M) of all latent variables which lie between 1.96 and 2.35, while standard deviation (SD) of studied variables lie between .61 - .80. Skewness and kurtosis presents that values lie in acceptable range -2 to +2 (see Table 2).

### Structural Equation Modeling (SEM)

**Testing of measurement model.** CFA is executed for measurement model. The main purpose of this analysis is to examine hypothesis about a factor structure as well as to investigate the consistency with observed data. In AMOS, CFA analyses produce two major measures that is squared multiple correlations (SMC) and factor loading (FL) for both observed and unobserved/latent variables. FL describes the relationship between the latent variable/factor and its indicator and is defined as the standardized regression weights. Whereas, SMC also known as a lower bound estimate of the reliability and it describes the proportion of its variance that is accounted for by its indicators/predictors (Hu & Bentler, 1999). Basically, SMC of the all observed variables are a measure of the reliability of them and it is like the square of the FL of an exploratory factorial analysis.

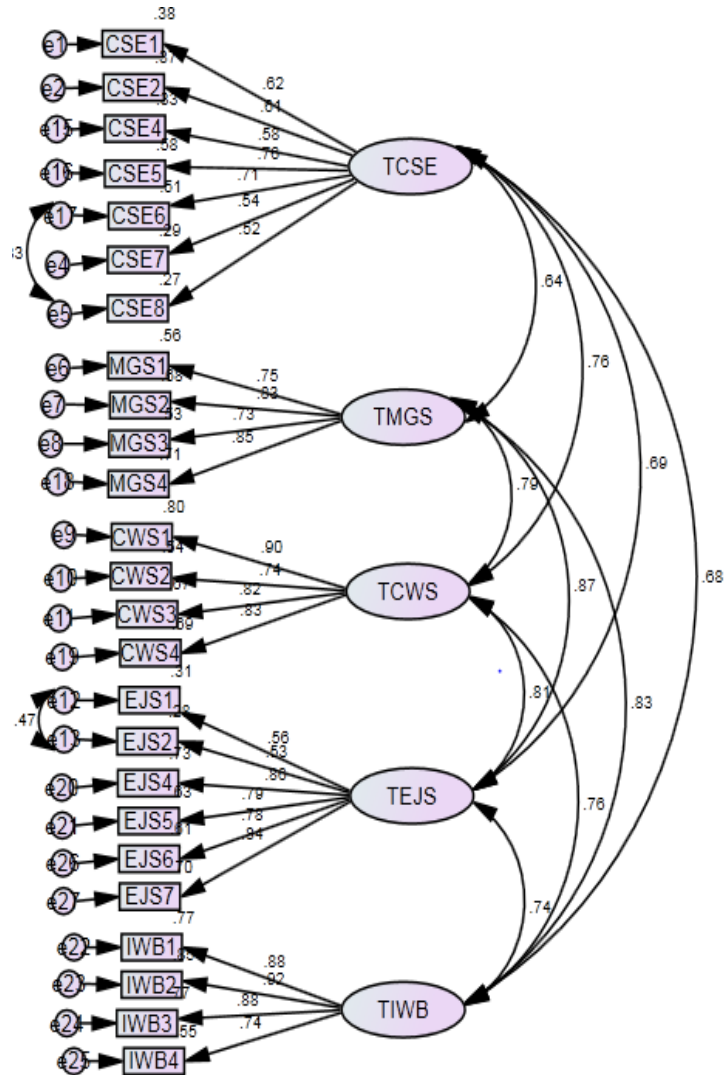


Figure 2. Measurement model

Note. TCSE = Total Core Self-evaluation; TMGS = Total Management Support; TCWS = Total Co-worker Support; TEJS = Total Employee Job Satisfaction; TIWB = Total Innovative Work Behaviour.

Measurement Model shows three kind of results i.e. factor loading (FL) for observed items/variables, squared multiple correlation (SMC) for observed items/variables and co-variances among unobserved/latent variables.

FL and SMC values are assessed to examine reliability of items and observed errors. If FL value of an item is less than .50 and SMC value is less than .20 then this item is excluded as per standard of Hu and Bentler (1999). For SEM, first latent variable is denoted as total CSE and its items produced FL and SMC values between .52 - .76 and 0.27-0.58 respectively. Second latent variable was denoted as total MGS and its items produced FL and SMC values between .73 - .85 and .53-.72 respectively. Third latent variable was denoted as total CWS and its items produced FL and SMC values between .74 - .90 and .54 -.80 respectively. Fourth latent variable was denoted as total employee EJS and its items produced FL and SMC values between .53 - .92 and .29 -.73 respectively. Last latent variable was denoted as total IWB and its items produced FL and SMC values between .74-.92 and .55 -.85 respectively (see Figure 2).

Table 3

*Results of Measurement Model*

Latent Variables	SMC Range	St. FL Range	Cronbach Alpha	CR	AVE
TCSE	.27-.61	.52-.76	.71	.82	.49
TMGS	.53-.71	.73-.85	.86	.87	.64
TCWS	.54-.80	.74-.90	.88	.89	.68
TEJS	.29-.73	.53-.94	.83	.87	.54
TIWB	.55-.85	.74-.92	.91	.92	.74

*Note.* TCSE = Total Core Self-evaluation; TMGS =Total Management Support; TCWS = Total Co-worker Support; TEJS = Total Employee Job Satisfaction; TIWB =Total Innovative Work Behaviour.

In measurement model testing, a satisfactory level of reliability and validity analysis is produced. Moreover, convergent validity such as composite reliability and average variance extracted also requires that SMCs be equal to or greater than .50 along with factor loading equal to or greater than .70. For example, for reliability analysis i.e., Cronbach alpha or internal consistency among observed variables ranged among .71-.91. Further, convergent validity also examined successfully for measurement model because convergent validity tests whether the Items converges to measure a construct (Fornell & Larcker, 1981). Therefore, composite reliability is ranged between .82-.92 and average variance extracted is ranged between .49-.74 showed that these values are within acceptable range (see Table 3).

Finally, goodness fit indices of measurement model are also examined that represented satisfactory results that is CMIN/DF = 2.21; GFI = 0.89; AGFI = 0.81; CFI = 0.92; RMSEA = 0.07.

**Testing of structural model.** Structural model consisted of five latent/unobserved variables and twenty-five observed variables. Conceptual model comprised of one exogenous that is Core Self-Evaluation (TCSE) and four endogenous variables i.e., management support (TMGS) and co-worker support (TCWS), employee job satisfaction (TEJS) and innovative work behaviour (TIWB). This model comprised of five unobserved/latent variables with twenty-five observed variables.

### Hypotheses Testing

In structural model analysis, according to the first hypothesis, that is H1a and H1b, the values of standardized regression indicate that core self-evaluation has significant effect on management support and on co-worker support respectively. Similarly, core self-evaluation has also significant effect on innovative work behavior, whereas, no significant relationship was found between core self-evaluation and employee job satisfaction. Results also show positive effect of management support on employee job satisfaction and co-worker support has significant effect on employee job satisfaction respectively. In addition, results have shown significant effect of employee job satisfaction on innovative work behavior.

To conclude, goodness of fit indices of structural model showed satisfactory results i.e., CMIN/DF = 2.49; GFI = 0.89; AGFI = 0.81; CFI = 0.90; RMSEA = 0.07.

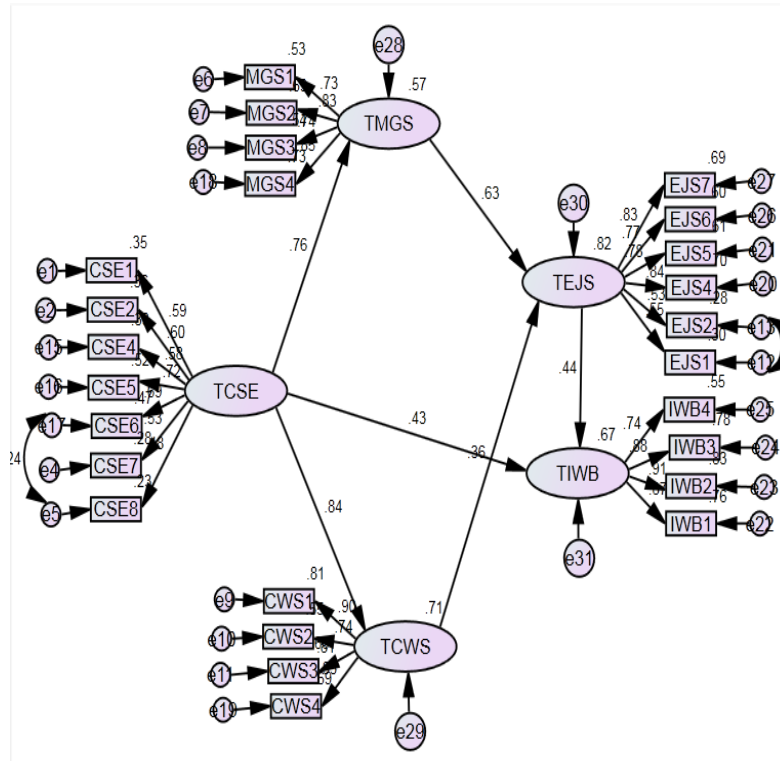


Figure 3. Structural model. TCSE = Total Core Self-evaluation; TMGS = Total Management Support; TCWS = Total Co-worker Support; TEJS = Total Employee Job Satisfaction; TIWB = Total Innovative Work Behaviour.

## Discussion

The model presented in the current study signifies the role of personal traits and support factors in affecting the innovative work behaviour and satisfaction in organizations. The main theoretical contribution of the study lies in the fact that it offers a framework that explains the interplay of individual attributes and the outcome of behavioral responses of co-workers and higher management of the organization. Specifically, this research study evaluated a model that regards to the impact of personality traits and supporting environment (co-worker and management support) on job satisfaction as well as innovative work behaviour. Employee's core self-evaluation trait has been a strong predictor of employee's satisfaction (e.g., Judge et al., 1998).



The results of the study validate a significantly positive and direct impact of CSE on management support and co-worker support. From the result it can be comprehended that components of CSE, that is locus of control and self-esteem are helpful in getting support from management as well as from co-workers. When employees are confident with fewer tendencies towards negative emotions and have strong control over experiences and situations related to their lives than they are more likely to get encouragement from management as well as from co-workers. Furthermore, being consistent with the previous research (Azmi, Desai, & Jayakrishnan, 2016; Devloo, Anseel, De Beuckelaer, & Salanova, 2015), it was found that support from the management and co-workers are helpful in keeping employees satisfied and engaged in innovative work activities. Peer and management support can be acknowledged as important predecessors of job satisfaction that ultimately leads toward innovative work behaviour.

Additionally, connection among perception of an employee about co-worker support and commitment resulted in job satisfaction. Co-workers support in term of emotional support, sharing of critical information and reduced role conflict and role overload are helpful for reducing uncertainty about one's expected role within the organization that ultimately are associated with higher level of job satisfaction. Results are also in support of a significant association between job satisfaction and innovative work behaviour. This is in line with the positive outcomes of job satisfaction as identified in many researches (Bakker & Demerouti, 2007; Xanthopoulou et al., 2007) which also described that a satisfied employee is more inclined for expansion and implementation of novel thoughts and to fix the problem in the existing circumstances.

Effective support by top management is necessary for employee satisfaction and innovative work behavior but such support might not influence neurotic employees as validated in the current study. Our analysis revealed that CSE traits (i.e., self-esteem, self-efficacy, locus of control and neuroticism) had significant and strong effect on management support as compare to co-worker support. These results are consistent with previous studies (e.g., Bakker & Demerouti, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Various studies have found significant association between CSE traits (i.e., self-esteem and locus of control) and management support (Beehr & McGrath, 1992; Kudisch, Fortunato, & Smith, 2006). The focus of current study was also on co-worker support in terms of individual employees acquiring knowledge as well as expertise (e.g., pertinent expertise) from coworker who is supportive and helps in doing things

in new possible ways (Beehr & McGrath, 1992; Kudisch et al., 2006). As the results implied that employees who have high locus of control and self-efficacy would be able to get support from colleagues and lesser inverse affectivity.

This finding could be helpful in refining the recruitment processes by evaluating the CSE of candidates as a determinant of their ability to get peer and management support; while, neuroticism means inverse affectivity, which forms a negative relationship with co-workers support (Singleton, Bumpstead, O'Brien, Lee, & Meltzer, 2003). In present study, employees, readiness in support and corporation with each other helped in restraining aggression and offensive situations within organizations. These results are similar with preceding study (Beehr & McGrath, 1992). Similar trend has been exhibited in our research that personality significantly influences innovative work behaviour. Employees who were efficient, had high locus of control (internal) were found to be more engaged in extension and execution of novel thoughts and less negative emotions. Easy problem handling and creativity had been observed in the workers who had higher self-esteem and efficacy. For example, by not recognizing or appreciating their work, close supervision and negative reinforcement occurs. Supportive relation between managers and subordinates enhances creativity (Shin & Zhou, 2003), whereas demanding, controlling relationships between subordinates and managers reduces innovation among employees (Deci, Connell, & Ryan, 1989; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). Usually working environment which encourages support of co-workers enhances employees' working capabilities and helps them to think more innovatively (McLean, 2005). Management support is required to achieve synchronization of hard work for developing supportive attitude, which help in extensive use of innovative behavior (Cabrera, Collins & Salgado 2006; Tsai & Ghoshal, 1988). Furthermore, workers are more attracted towards IWB if they are more satisfied with their jobs (Pierce & Delbecq, 1977), validating the hypothesis that more satisfied the employees, more innovative they would be.

### **Limitations and Recommendations**

Like all other studies, this study also has few limitations that may probably affect the findings. Ostensibly, no research method is ideal and relevant to consider all variables and span all circumstances. First and foremost, data were collected from banking and telecom sector of Pakistan, future study may consider other sector and in multinational

firms in which innovative work behaviour is still in nascent phase. Secondly, the study did not consider the dimensions that is, idea generation, idea promotion and idea realization and types of innovative behaviour; future study may see the individual effects of all these. Thirdly, due to short time span and lack of resources, cross-sectional study was conducted; a longitudinal study in the future may yield more fruitful results. Fourthly, this study was quantitative in nature, a study qualitative in nature is recommended to accrue maximum dividends. Finally, a smaller sample size was a limitation of this study, large sample size in the future studies would help in the generalizability of the results.

According to future research, this study emphasised on a composite model testing, the analysis of individual mediating mechanisms as identified in the framework could provide a useful insight into the relationship between variables. Independent studies on such insights could be helpful in advancing our knowledge about support, satisfaction, and innovative work behaviour.

### **Practical Implications**

The present study has developed various remarkable theoretical and practical implications. The study has attempted to develop and analyse the factors impacting employee job satisfaction as well as innovative work behaviour. This study proffers two folded proposals to organizational decision makers. Organizations can improve satisfaction and innovative work behaviour either by inducting human resource that is high on core self-evaluations or nurture a culture of peer support and management support to realize the benefits of innovative work behaviour. Attempts should be made to employ individuals who have personality traits such as self-efficacy, self-esteem and locus of control, because these all have positive impact on innovative work behaviour.

### **References**

- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357.
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviours and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15(1), 5-32.

- Anderson, N., & King, N. (1993). Innovation in organizations. *international Review of industrial and Organizational Psychology*, 8, 1-34.
- Anderson, N., Potocnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40, 1297-1333.
- Aryee, S., Srinivas, E. S., & Tan, H. H. (2005). Rhythms of life: Antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology*, 90(1), 132-146.
- Aziri, B. (2008). Menaxhimi i burimeve njerëzore. *Satisfaksioni nga puna dhe motivimi i punëtorëve, Tringa Design, Gostivar*, 46.
- Azmi, F. T., Desai, K., & Jayakrishnan, K. (2016). Organizational Citizenship Behaviour (OCB): A comprehensive literature review. *Sumedha Journal of Management*, 5(1), 102-117.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Basu, R., & Green, S. G. (1997). Leader-member exchange and transformational leadership: An empirical examination of innovative behaviours in leader-member dyads. *Journal of Applied Social Psychology*, 27(6), 477-499.
- Beehr, T. A., & McGrath, J. E. (1992). Social support, occupational stress and anxiety. *Anxiety, Stress, and Coping*, 5(1), 7-19.
- Birdi, K., Leach, D., & Magadley, W. (2016). The relationship of individual capabilities and environmental support with different facets of designers' innovative behavior. *Journal of Product Innovation Management*, 33(1), 19-35.
- Bysted, R. (2013). Innovative employee behaviour: The moderating effects of mental involvement and job satisfaction on contextual variables. *European Journal of Innovation Management*, 16(3), 268-284.
- Bysted, R., & Jespersen, K. R. (2014). Exploring managerial mechanisms that influence innovative work behaviour: Comparing private and public employees. *Public Management Review*, 16(2), 217-241.
- Cabrera, A., Collins, W. C., & Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management*, 17(2), 245-264.
- Chandler, G. N., Keller, C., & Lyon, D. W. (2000). Unraveling the determinants and consequences of an innovation-supportive organizational culture. *Entrepreneurship: Theory and Practice*, 25(1), 59-59.
- Chang, C. H., Ferris, D. L., Johnson, R. E., Rosen, C. C., & Tan, J. A. (2012). Core self-evaluations: A review and evaluation of the literature. *Journal of Management*, 38(1), 81-128.

- Çokpekin, O., & Knudsen, M. P. (2012). Does organizing for creativity really lead to innovation? *Creativity and Innovation Management*, 21(3), 304-314.
- Colbert, B. A. (2004). The complex resource-based view: Implications for theory and practice in strategic human resource management. *Academy of Management Review*, 29(3), 341-358.
- Damanpour, F., & Schneider, M. (2009). *Characteristics of innovation and innovation adoption in public organizations: assessing the role of managers*. *Journal of Public Administration Research and Theory*, 19(3), 495-522.
- De Spiegelaere, S., Van Gyes, G., & Van Hootegem, G. (2016). Innovative work behaviour and performance-related pay: Rewarding the individual or the collective?. *The International Journal of Human Resource Management*, 1-20.
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74(4), 580-590.
- Devloo, T., Anseel, F., De Beuckelaer, A., & Feys, M. (2016). When the fire dies: Perceived success and support for innovation shape the motivating potential of innovative work behaviour. *European Journal of Work and Organizational Psychology*, 25(4), 512-524.
- Devloo, T., Anseel, F., De Beuckelaer, A., & Salanova, M. (2015). Keep the fire burning: Reciprocal gains of basic need satisfaction, intrinsic motivation and innovative work behaviour. *European Journal of Work and Organizational Psychology*, 24(4), 491-504.
- Dorenbosch, L., Engen, M. L. van, & Verhagen, M. (2005). On-the-job innovation: The impact of job design and human resource management through production ownership. *Creativity and Innovation Management*, 14(2), 129-141.
- Drucker, P. F. (1992). Organizations. *Harvard Business Review*. Retrieved from [http://wiki.dbast.com/images/f/fd/Newsociety\\_organizations\\_-drucker.pdf](http://wiki.dbast.com/images/f/fd/Newsociety_organizations_-drucker.pdf)
- Egan, T. M. (2005). Factors influencing individual creativity in the workplace: An examination of quantitative empirical research. *Advances in Developing Human Resources*, 7(2), 160-181.
- Eisenberg, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75(1), 51-59.
- Erdoğan, İ. (1997). İşletmelerde Davranış, İstanbul İÜ İşletme Fakültesi Yayınları.
- Erez, A., & Judge, T. A. (2001). Relationship of core self-evaluations to goal setting, motivation, and performance. *Journal of Applied Psychology*, 86(6), 1270-1279.
- Farr, J. L., & West, M. A. (1990). *Innovation and creativity at work: Psychological and organizational strategies*. Wiley.

- Ferris, D. L., Rosen, C. R., Johnson, R. E., Brown, D. J., Risavy, S. D., & Heller, D. (2011). Approach or avoidance (or both?): Integrating core self-evaluations within an approach/avoidance framework. *Personnel Psychology*, 64(1), 137-161.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382-388.
- Frambach, R. T., & Schillewaert, N. (2002). Organizational innovation adoption: A multi-level framework of determinants and opportunities for future research. *Journal of Business Research*, 55(2), 163-176.
- Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461-473.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159-170.
- Hoon Song, J., Kolb, J. A., Hee, U., & Kyoung K, H. (2012). Role of transformational leadership in effective organizational knowledge creation practices: Mediating effects of employees' work engagement. *Human Resource Development Quarterly*, 23(1), 65-101.
- Hoppock, R. (1935). Job satisfaction. Retrieved from <http://psycnet.apa.org/psycinfo/1936-00559-000>
- Hsieh, H. H., & Huang, J. T. (2017). Core self-evaluations and job and life satisfaction: the mediating and moderated mediating role of job insecurity. *The Journal of Psychology*, 1-17.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Hunter, S. T., & Cushenbery, L. (2011). Leading for innovation: Direct and indirect influences. *Advances in Developing Human Resources*, 13(3), 248-265.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287-302.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1), 80-92.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology*, 90(2), 257-268.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The core self-evaluations scale: Development of a measure. *Personnel Psychology*, 56(2), 303-331.

- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83(1), 17-34.
- Kacmar, K. M., Collins, B. J., Harris, K. J., & Judge, T. A. (2009). Core self-evaluations and job performance: The role of the perceived work environment. *Journal of Applied Psychology*, 94(6), 1572-1580.
- Knussen, C., & Niven, C. A. (1999). Neuroticism and work-related stress in a sample of health care workers. *Psychology and Health*, 14(5), 897-911.
- Kudisch, J. D., Fortunato, V. J., & Smith, A. F. (2006). Contextual and individual difference factors predicting individuals' desire to provide upward feedback. *Group and Organization Management*, 31(4), 503-529.
- Lee, E. J. (2003). Effects of "gender" of the computer on informational social influence: The moderating role of task type. *International Journal of Human-Computer Studies*, 58(4), 347-362.
- Lee, L., Wong, P. K., Der Foo, M., & Leung, A. (2011). Entrepreneurial intentions: The influence of organizational and individual factors. *Journal of Business Venturing*, 26(1), 124-136.
- Marcati, A., Guido, G., & Peluso, A. M. (2008). The role of SME entrepreneurs' innovativeness and personality in the adoption of innovations. *Research Policy*, 37(9), 1579-1590.
- McLean, L. D. (2005). Organizational culture's influence on creativity and innovation: A review of the literature and implications for human resource development. *Advances in Developing Human Resources*, 7(2), 226-246.
- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. S. (2011). Unlocking the black box: exploring the link between high-performance work systems and performance. *Journal of Applied Psychology*, 96(6), 1105-1118.
- Messmann, G., & Mulder, R. H. (2011). Innovative work behaviour in vocational colleges: Understanding how and why innovations are developed. *Vocations and Learning*, 4(1), 63-84.
- Ng, T. W., & Feldman, D. C. (2011). Affective organizational commitment and citizenship behaviour: Linear and non-linear moderating effects of organizational tenure. *Journal of Vocational Behaviour*, 79(2), 528-537.
- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality and Quantity*, 41(5), 673-690.
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behaviour at work. *Journal of Applied Psychology*, 91(3), 636-652.
- Patterson, F. (2002). Great minds don't think alike? Person-level predictors of innovation at work. *International Review of Industrial and Organizational Psychology*, 17, 115-144.

- Pierce, J. L., & Delbecq, A. L. (1977). Organization structure, individual attitudes, and innovation. *Academy of Management Review*, 2(1), 27-37.
- Premeaux, S. F., & Bedeian, A. G. (2003). Breaking the silence: The moderating effects of self-monitoring in predicting speaking up in the workplace. *Journal of Management Studies*, 40(6), 1537-1562.
- Rahim, M. A. (1997). Relationships of stress, locus of control, and social support to psychiatric symptoms and propensity to leave a job: A field study with managers. *Journal of Business and Psychology*, 12(2), 159-174.
- Reuvers, M., Van Engen, M. L., Vinkenburgh, C. J., & Wilson-Evered, E. (2008). Transformational leadership and innovative work behaviour: Exploring the relevance of gender differences. *Creativity and Innovation Management*, 17(3), 227-244.
- Richards, G. S., & Duxbury, L. (2015). Work-group knowledge acquisition in knowledge intensive public-sector organizations: An exploratory study. *Journal of Public Administration Research and Theory*, 25(4), 1247-1277.
- Robbins, S. P. (1996). *Organizational Behaviour: Concepts, Controversies, Applications*. New Jersey: Prentice Hall. Inc.
- Rue, L. W., & Byars, L. L. (1995). *Management: Skills and Application*. Boston: Irwin.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behaviour: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580-607.
- Sellgren, S. F., Ekvall, G., & Tomson, G. (2008). Leadership behaviour of nurse managers in relation to job satisfaction and work climate. *Journal of Nursing Management*, 16(5), 578-587.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30(6), 933-958.
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, 46(6), 703-714.
- Singleton, N., Bumpstead, R., O'Brien, M., Lee, A., & Meltzer, H. (2003). Psychiatric morbidity among adults living in private households, 2000. *International Review of Psychiatry*, 15(1-2), 65-73.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences* (Vol. 3). Sage publications.
- Statt, D. A. (2004). *The Routledge dictionary of business management*. Routledge. Retrieved from [https://books.google.com.pk/books?hl=en&lr=&id=bdZ\\_AgAAQBAJ&oi=fnd&pg=PP1&dq=+The+Routledge+Dictionary+of+Business+Management,+Third+edition&ots=we9owS3YxL&sig=c9Zj-ClkuaO99VJOj\\_t0fhiJkAE](https://books.google.com.pk/books?hl=en&lr=&id=bdZ_AgAAQBAJ&oi=fnd&pg=PP1&dq=+The+Routledge+Dictionary+of+Business+Management,+Third+edition&ots=we9owS3YxL&sig=c9Zj-ClkuaO99VJOj_t0fhiJkAE)



- Stock, R. M., von Hippel, E., & Gillert, N. L. (2016). Impacts of personality traits on consumer innovation success. *Research Policy*, 45(4), 757-769.
- Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450-463.
- Susskind, A. M., Kacmar, K. M., & Borchgrevink, C. P. (2007). How organizational standards and coworker support improve restaurant service. *Cornell Hotel and Restaurant Administration Quarterly*, 48(4), 370-379.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41(4), 464-476.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87(2), 246-260.
- Wang, X. H. F., Fang, Y., Qureshi, I., & Janssen, O. (2015). Understanding employee innovative behaviour: Integrating the social network and leader-member exchange perspectives. *Journal of Organizational Behaviour*, 36(3), 403-420.
- Wood, R., & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of personality and social psychology*, 56(3), 407-415.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121-141.
- Yesil, S., & Sozbilir, F. (2013). An empirical investigation into the impact of personality on individual innovation behaviour in the workplace. *Procedia-Social and Behavioural Sciences*, 81, 540-551.
- Yuan, F., & Woodman, R. W. (2010). Innovative behaviour in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal*, 53(2), 323-342.
- Zhang, H., Kwan, H. K., Zhang, X., & Wu, L. Z. (2014). High core self-evaluators maintain creativity: A motivational model of abusive supervision. *Journal of Management*, 40(4), 1151-1174.
- Zhou, J., & Hoever, I. J. (2014). Research on workplace creativity: A review and redirection. *Annual Review of Organizational Psychology and Organizational Behaviour*, 1, 333-359.

Received November09, 2015

Revision received March 06, 2017