

# Innovative Work Behavior: A Review of Literature

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**Abstract---** *Innovation has been recognized as one of the main strategies for organizations to remain competitive in today's competitive economy. Employees' innovative work behavior is the primary driver for organizational-wide innovation. Innovative work behavior is the production of usable products, processes, or services originating from identifying problems to generating ideas. From the review of existing studies, this paper defines the concept of innovative work behavior, explaining why these behaviors are so important for organizations and discusses the determinants of innovative work behavior.*

**Keywords---** *Innovative Work Behavior, Human Resource Practices, Transformational Leadership, Emotional Intelligence*

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## I. INTRODUCTION

“In today's economic and interconnected environment, customers access to wider range of information and suppliers. Such exposure enables customers to be more demanding. That is, asking for greater products quality and service, while paying lesser price (Brett & Okumura, 1998; Yukl, 2001).” Back in the 1990s, innovation was seen as a tactical factor for organizations competitiveness. However, through economic approach the innovation concept and its relevance for economic development has been emphasized (Zawislak & Marins, 2008). Therefore, for organization to remain competitive, organizations must tactfully overcome these challenges. In this light, scholars vowed that to remain relevant and competitive in today's market, it is essential for organization to practice continual innovation (Chow, 2001; Xerri & Brunetto, 2011).

The word “Innovation” originated from the Latin verb “Innovates”, which refers to introduce something new or make changes in anything already established (Dictionary.com Unabridged, 2014). In reviewing the past literature, Schumpeter (1934) was seen as being one the first scholars to recognize innovation. Schumpeter (1934) sees innovation as creating, implementing and combining something new such as products, services, work processes as well as new markets. Since then, various scholars have redefined innovation.” More specifically, in the era of 1950-1960, scholars tend to see innovation as creating changing from technical aspect. For instance, Schmookler (1957) defined ‘technical change’ as an enterprise producing goods or services or using a method or input process that is new. While Marquis (1969) seen innovation as a changes in technology. Back in 1970, Tinnesand (1973) provided a summary of innovation based by reviewing 188 publications. Tinnesand's work reported that 36 % of the publications defined innovation as the introduction of a new idea; 16 % defining innovation as a new idea, meanwhile only 14 % of the work defining innovation as the introduction of an invention; 14 % defining innovation

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as an idea different from existing ideas; 11 % defining innovation as the introduction of an idea disrupting prevailing behavior; and 9 % viewing innovation as being an invention.

While in the 80's, the concept of innovation has been further expanded from introducing technical change to generating new ideas. For example, Amabile (1983) advocated that the successful deployment of new ideas in organization is considered as innovation. Further from this point, Urabe (1988) viewed innovation consists of various stages. For Urabe, innovation should not only limit to the generation of 'new' ideas but should include implementation. According to Urabe (1988), "Innovation consists of the generation of a new idea and its implementation into a new product, process, or service, leading to the dynamic growth of the national economy, increase in employment, as well as, the creation of pure profit for the innovative business enterprise" (p. 03).

Aside to the discussion on what innovation is, discussion related to who are responsible for innovation also happened. King and Anderson (2002) viewed innovation as the introduction of something new to an individual, group, firm, industry, wider society. King and Anderson (2002) explained that ideas are needed before innovation can happen. Ideas is the initial starting point, while innovation only occurred when the ideas were further developed. West and Farr (1990) explicated that innovation can occur at various levels such as individual, team and organization. They further pointed out that the establishment of innovation in organization is reliant upon employees who is responsible in developing and performing the new ideas. This view coincides with Simonton (1984) who pointed out that innovation is the result of individual efforts and dedication. Likewise, Scott and Bruce (1994) pointed that innovation at the individual level should be first cultivated by the organization to enable organizations to innovate. In sum, innovation, is aimed towards producing new product, process, or service which will benefit to individual, group and wider society. The following section discuss about innovation at the employees level which commonly regarded as innovative work behavior.

## **II. LITERATURE REVIEW**

### ***Innovative Work Behavior***

Adding to the definition from Farr and Ford (1990), de Jong (2007) viewed innovative work behavior as being the individuals' behavior directed towards the initiation and intentional introduction (within a work role, group or organization) of new and useful ideas, processes, products or procedures. While Spreitzer (1995) defined innovative work behavior as the reflection of creating something new or different. Scott and Bruce (1994) defined innovative work behavior as the production of usable products, processes, or services that originate from the identification of problems and generation of ideas.

In agreement with Scott and Bruce (1994), Janssen (2000, 2004) described innovative work behavior as a multifaceted behavior, involving idea generation, idea promotion, and idea realization. Specifically, idea generation denotes the creation of useful idea (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Kanter, 1988); idea promotion encompasses the effort in identifying potential allies to support the generated idea (Kanter, 1983, 1988) while idea realization is the creation of innovation model which can be implemented in a job, team, or even in entire organization (Kanter, 1988).

Constructed on the existing definitions, innovative work behavior involved a three stage process. Typically, it starts with the generating new ideas and ended with the implementation of those new ideas (de Jong, 2007). Adding to that, Yidong and Xinxin (2013) explained that individuals can be involved in any behavior or combination of different behaviors at any time of each stage. The following section illustrates the measures used to estimate innovative work behavior.

**Previous measures**

The measurement of innovative work behavior can be categorized into two main categories. For some scholars (Scott and Bruce, 1994; Bruse and West, 1995; Spreitzer, 1995), innovative work behavior is viewed as singular construct. Conversely, some scholars viewed innovative work behavior as multi-dimensional construct (Krause, 2004; Dorenbosch, van Engen, and Verhagen, 2005). The most common measures developed in the previous study to assess innovative work behavior is illustrated in Table 1.

Table 1: Measures of Innovative Work Behavior			
“Author(s)”	“Items and dimensions”	“Sample”	“Reliability and validity”
Innovative work behavior (one-dimensional)			
Scott and Bruce (1994)	Six items	“Managers of 172 engineers, scientists and technicians in an R&D department”	“ $\alpha = 0.89$ ; significant correlation with filed invention disclosures ( $r = 0.33$ )”
Bunce and West (1995)	Five items	Test 1 “435 employees from a national health service”	“Test 1 $\alpha = 0.75$ ; no validity reported”
		Test 2 “281 employees from a national health service”	“Test 2 $\alpha = 0.80$ ; no validity reported”
Spreitzer (1995)	Four items	“Subordinates of 393 managers in an industrial company”	“ $\alpha = 0.91$ ; no validity reported”
Basu and Green (1997)	Four items	“Supervisors of 225 employees of a printing”	“ $\alpha = 0.93$ ; no validity reported”

		manufacturer”	
Scott and Bruce (1998)	Four items	<p>“Sample 1 110 professionals in an R&amp;D facility”</p> <p>“Sample 2 R&amp;D engineers working at four locations of a manufacturer of electronic equipment”</p>	<p>“Sample 1 <math>\alpha = 0.86</math>; significant correlation with number of invention disclosures”</p> <p>“Sample 2 <math>\alpha = 0.84</math>”</p>
Janssen (2000)	Nine items	“Self-ratings of 170 employees of a food manufacturer and 110 supervisor ratings of innovative behavior”	“ $\alpha = 0.95$ (self-ratings) and 0.96 (supervisor ratings); significant correlation between both scales ( $r = 0.35$ )”
Kleysen and Street (2001)	14 items	“Self-ratings of 225 employees from different organizations”	“ $\alpha = 0.97$ ; inadequate fit of structural equation model”
<i>Innovative work behavior (multi-dimensional):</i>			
“Krause (2004)”	“Two dimensions. Five items measure generation and testing of ideas; three items measure implementation)”	“399 managers various German based organizations”	“ $\alpha$ -values of 0.78 and 0.81 were reported. “The exploratory factor analysis shows the two factors as distinctive””
Dorenbosch, van Engen, and Verhagen (2005)	“Two dimensions. (Ten items for creativity-oriented; six items for implementation oriented behavior)”	“132 non-managerial employees in a Dutch local government organization””	“ $\alpha$ -values of 0.90 and 0.88 are reported; the additive scale of both dimensions had $\alpha = 0.92$ ””

### **III. WHAT FACTORS PROMOTE INNOVATIVE WORK BEHAVIOUR (IWB)?**

In reviewing previous literature, variables that support innovative work behavior have been identified. Examining these variables further revealed that these determinants are related to leadership, organizational and individual factors.

#### ***Leadership Related Factors***

“Various leadership styles such as leader-member exchange, transactional leadership, laissez-faire and transformational leadership styles have been examined on their impact on innovative work behavior (Oukes, 2011).”

“The tenet of LMX theory suggests that leader and subordinate develop negotiated understanding about their roles.” In particular, this model suggests the leaders-subordinate relation has an effect on innovativeness (Pandey & Sharma, 2009). “That is under the LMX leadership, in group subordinates tend to have substantial decision making latitude and thereby could enjoy more time for the negotiated tasks (Pandey & Sharma, 2009). “Meanwhile the out group subordinates others whose role making process is less successful, are more likely to confine within performing routine task.” Krishnan (2005) stated that a discrimination issue might arise among employees. Also, a universal criticism was viewed as haunting the measurement of leader-member exchange given the many diverse measurements of leader-member exchange developed and applied since the theory was initially proposed (Yukl, 2006).

As for transactional leadership, the previous research did not identify any association between transactional leadership and innovative work behavior (Boerner, Eisenbeiss, & Griesser, 2007; Pieterse, van Knippenberg, Schippers, & Stam, 2010).

Conversely, research scholars (Afsar, Badir, & Bin Saeed, 2014; Bass, 1990; Burns, 1978; Jung, Wu, & Chow, 2008) demonstrated that transformational leadership stimulates an employee’s values and self-concepts, helping the employees to attain higher levels of needs and aspirations as well as raising their performance expectations through innovative work behavior. The results were further supported by the recent study of Choi, Kihwan, Ebrahim-Ullah, and Kang (2016) who found that transformational leadership encourages employees intellectual thinking thereby helping them to think outside the box. “Furthermore, under the transformational leader improves the supportive actors of innovative work behavior and stimulates employee working behavior to commit their efforts for the betterment of the organization.”

#### ***Organizational-Related Factors***

“Damanpour (1991) advocated that organizational factors play a pivotal role in the innovation process.” Based on the review of previous literature, organizational related factors that promote innovative work behavior include organizational climate and human resource management practices (such as rewards, remuneration, training and development, recognition, communication, and job security).” According to Wilson-Evered, Härtel, and Neale (2001) organizational climate created from employees’ perception towards the policies and procedures implemented by the organization. Schneider, Bowen, Ehrhart, and Holcombe (2000) asserted that organizational climate could have some influences the employees work behavior. Empirically, using the sample of 320 managers in

Pakistan, Imran and Anis-ul-Haque (2011) reported that organizational climate influences the display of innovative work behavior.

Rogg, Schmidf, Shull, and Schmitt (2001) explained that human resource management practices shape organizational climate. This hinted towards the possibility of human resource practices shaping the corporate environment which in turn, could lead to innovative employee behaviors. For instance, Rousseau and Greller (1994) found that human resource practices established the tone and conditions of the employee-employer relationship which will, in turn, influence the employee's behavior in the work environment. When employees believe that their organization is investing in the human capital, they are more likely to react by demonstrating positive attitudes and behaviors. Corroborating with this view, Jiménez-Jiménez and Sanz-Valle (2005) advocated that human resource practices play a vital role in promoting innovation activities.

### ***Individual Related Factors***

Individually related factors that have been studied relating to innovative work behavior include attitudinal variables (such as work engagement, organizational commitment), personality variables (such as proactive personality), as well as the employee's competency (such as emotional intelligence skills). "In an empirical study carried out in a telecommunication company located in China, sampled 300 employees in China, Aryee, Walumbwa, Zhou, and Hartnell (2012) demonstrated that innovative work behavior are significance among engaged employees." While a sample of 400 employees of 40 small and medium-sized enterprises located in Turkey, Taştan (2013) observed that employees who possess proactive personalities are more inclined to display innovative work behavior. Likewise, some scholars (Anderson, de Dreu, & Nijstad, 2004; Zhou & Shalley, 2003) assert that innovative work behavior greatly depends on the skill of an individual's interaction with other individuals or groups at the workplace (i.e. emotional intelligence). In particular, individuals' emotional intelligence such as the one's capability to distinguish emotions, and to assess and rule their own emotions will assist in the understanding of the others' emotions (Mayer & Salovey, 1997). "Such emotional capability is crucial to cushion the innovative activities. In a study sampled among 500 employees from 19 organizations in the United Arab Emirates, Abubakr and Al-Shaikh (2007) reported the positive association between emotional intelligence and innovative work behavior."

## **IV. CONCLUSION**

"From reviewing the literature of past studies that related to the predictors of innovative work behavior evidenced that previous studies have only examined a limited or partial number of variables. This indicates that our understanding of determinants of innovative work behavior is still very limited. Therefore, it is beneficial for future researchers to examine the predictors of innovative work behavior. In addition, existing studies were confined within the factors related to leadership, organization, and individuals. It would be promising to extend the radius of current research by including factors related to team such as team composition and roles, group support, and team value co-creation. Moreover, it is also valuable to extend the investigation and research to include the effects of innovative work behavior and its contribution to organizational outcomes and performance. Last but not least, we should not take innovative work behavior for granted. Hence, study related to the side effect of innovative work behavior warrant an equal attention to enhance the current level of knowledge about employee innovation behavior."

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