Reviewing the Link between Employee Creativity, Innovative Behavior and Organizational Innovation

Khawar Hussain* and Eta Wahab

Faculty of Technology Management and Business University Tun Hussein Onn Malaysia, 86400, Johor, Malaysia khawaredu@yahoo.com

Abstract

Interest has been rapidly growing in recent years in which is conceptualized the relationship between employee creativity (EC), innovative behavior (IB), and organizational innovation (OI) in a literature review from both perspectives (i.e., theoretical and empirical). Furthermore, the results of prior research demonstrated that creativity positively affects innovative behavior on the one hand and innovative behavior positively affects organizational innovation on the other hand. In addition, Amabile's (1988) componential theory of organizational creativity and innovation leads to develop the integrated conceptual framework to solve this seeming inconsistency and the associated contradictions (e.g., from an intangible to a tangible outcome) that support the relationship between EC, IB, and OI.

Keywords: employee creativity (EC), innovative behavior (IB), organizational innovation (OI)

1. Introduction

For organizations, innovation is a significant asset to hold competitive benefit that relies on the most favorable of those novel ideas that have to execute to introduce the new services and products in market (Anderson et al. 2014, Kim et al. 2012, Sanz-Valle and Jiménez-Jiménez 2018). Therefore, the recent literature highlights that creativity plays an important role in innovations' success, and development (Anderson et al. 2014, Sanz-Valle and Jiménez-Jiménez 2018). Goepel et al. (2012) and Naranjo-Valencia et al. (2017) described that human resources generate new ideas that are the creation of individuals in human brains who can transform these ideas into new working process, system, products, services, and methods. Conversely, among different innovation levels, OI depends on a fundamental factor (i.e., Employees' IB) (Janssen et al. 2004, Sanz-Valle and Jiménez-Jiménez 2018). In the same way, IB disclosed a self-action process in which is generated new ideas, executed, promoted, recognized, and amended by employees for innovation (den Jong and den Hartog 2005, Konermann 2012). On the other hand, EC impacts employee behavior by developing new ones and motivating employees (Slåtten and Mehmetoglu 2011, Slåtten et al. 2011). As well, the people's creativity and IB strongly support Innovation in innovative organizations (Thurlings, et al. 2015, Naranjo-Valencia et al. 2017). Many researchers examined that EC and innovative employee behavior are crucial for organizational innovation, survival, and success in service industries (Amabile 1988, Sanz-Valle and Jiménez-Jiménez 2018, Slåtten and Mehmetoglu 2011, Yuan and Woodman 2010). On the other hand, some scholars have investigated the link between EC and IB (Slåtten and Mehmetoglu 2011, Slåtten et al. 2011), furthermore, only some pay attention to IB to link with OI (i.e., radical product and product innovation) (Naranjo-Valencia et al. 2017, Sanz-Valle and Jiménez-Jiménez 2018).

For instance, EC (idea generation) and IB (idea implementation) are necessary for OI (Sanz-Valle and Jiménez-Jiménez 2018, Slåtten and Mehmetoglu 2011). In this respect, there is no conceptual paper to date. Conversely, the research gap is identified that the relationship between EC, IB, and OI has scarcely been addressed in theoretical and empirical research in order to need to develop an evidence-based conceptual model for promoting innovation. However, the aim of research work is to present reviewing the link between EC, IB, and OI. In addition, a comprehensive literature review identifies "gaps" in relation to question and objective. Moreover, a lack of clarity regarding these issues that are determined a research question: What is the relationship between EC, IB, and OI? Likewise, the research also has a research objective that seeks to review the relationship between EC, IB, and OI, and to develop the conceptual framework of OI. However, firstly, the research article reviews complex literature that

hinders understanding of the relationship between EC, IB and OI and to develop the propositions in the organizational context. Lastly, the conclusion that is revealed the limitations, and evidence-based future research avenue.

2. Literature Review

Recently, some scholars, the link between EC and IB, empirically investigated, on the other hand, the influence of IB on OI has been tested. In this way, the literature review integrates the association between EC, IB, and OI. Consequently, more information and significant findings are disclosed in this article (see table 1).

2.1 Employee creativity (EC)

In a job and organizational context, creativity potentially generates useful and novel ideas (Amabile 1988, Woodman et al. 1993). Zhou and George (2001) defined EC that is an idea to be considered a creative idea that must contain both usefulness and novelty of the idea. In addition, Joo et al. (2013) noted the difference between "Big C" creativity and "Little C" creativity is revealed (i.e., "Big C" creativity that is occurred a big breakthrough to occur for products or services changes occasionally and "Little C" creativity that is performed by us for minor addition or to resolve the problem in our daily lives) (Gardner 1993). On the other hand, Boden (1991) differentiated historical (H) creativity and psychological (P) creativity (Nickerson 1999). While H creativity means "to do with ideas" that are generated "fundamentally novel ideas given the whole of human history", and P creativity means "to do with an idea" that is generated at a personal level (Boden 1991). A number of scholars define that creativity focuses on generating new and useful ideas about procedures, processes, services, and products (Amabile 1996, Zhou 1998). The research has investigated the use of definitions for creative changes, creative business strategies, creative solutions to problems in job and business (Taggar 2002). In the development of new processes, or products, creative outcomes can add form minor addition to breakthroughs in products or workflow (Mumford and Gustafson 1988).

2.2 Innovative behavior (IB)

De Jong and Den Hartog (2010) used both terms "Innovative behavior (IB) and innovative work behavior (IWB)" have the same concept. West and Farr (1990) and Yuan and Woodman (2010) introduced IB as the new idea is executed by employees' behaviors to develop or change the procedures, processes, and products at their work or organization. Janssen (2000) described that innovative behavior, at the individual, group, or organizational level, is concentrated on purposeful efforts to create beneficial outcomes, and products of IB to encompass both psychological and social benefits (e.g., enhanced communication, increased job satisfaction, better job fit,) and better functioning of the organizational performance.

IWB disclose in three steps: idea generation, promotion, and realization (Scott and Bruce 1994). The first step follows to identify problems and to recognize the novel idea for solving the problem, the second step seeks sponsorship and establish the coalitions to perform the new ideas, the third stage that can be institutionalized and diffused when they have enough support to complete the process and to produce a prototype (Scott and Bruce 1994). In addition, De Jong and Den Hartog (2007) determined thirteen leadership behaviors connected with a new idea generation that is implemented to shape the procedure, process, product, and service innovation. These behaviors (e.g., task assignment, monitoring, resources, providing, rewards, recognition, organizing feedback, supporting for innovation, delegating, consulting, providing vision, stimulating knowledge diffusion, intellectual stimulation, innovative role modeling) are described by (De Jong and Den Hartog 2007). In addition, De Jong and Den Hartog (2010) mentioned the four facets of IB such as idea exploration, generation, championing, and implementation). West and Farr (1990) and Yuan and Woodman (2010) noted at the workplace, employee's IB solves the problem develop service processes that behavior comprises activities related to searching the new ways to do things (e.g., work methods, technologies, services, and products) and securing the finding of resources to apply new ideas. Likewise, these factors (e.g., generate, communicate, modify, and implement novel ideas) and creativity behavior strongly support the concept of innovative behavior, the researchers and practitioners paid less attention to innovative behavior for decades (Li and Hsu 2016, Magbool et al. 2019).

2.3 Organizational Innovation (OI)

Many scholars and practitioners have been described a variety of definitions of innovation. For instance, Schumpeter (1934) defined the role of innovation as an important aspect of economic change that rotates around innovation market power and entrepreneurial activities that prove innovation-originated market force can afford better outcomes than price rivalry and the hidden hand. Thompson (1965) clearly stated: "Innovation is the generation, recognition, and execution of new idea for process, services, or product." Similarly, West and Anderson (1996) and Wong et al. (2009)

quoted "Innovation, for benefit of an organization and its stakeholders, can be divulged "to execute the designed new process, services, products, and methods effectively. Damanpour (1996) mentioned: "Innovation is considered as a method of changing in an institution, either as a pre-emptive activity to impact the environment or as a reply for changing in the external environment." The researcher noted: "Innovation as the creation of new information to assist new business results, expected at improving structures, and internal business processes to generate market driven service and product items" (Plessis 2007). As per the OECD, innovation is introduced, in business activities or outside relations, the application of a new organizational method, marketing method, process, or product that embraces the innovation in such fields as non-technological, technological, marketing, process, product innovation such as goods and service (OECD 2005).

Moreover, some scholars described two types of innovation (i.e., incremental innovation and radical innovation). Incremental innovation is categorized the significant developments in the present processes or products, and radical innovation is completely presented by the new process or product to the market (Oke et al. 2007). For instance, Nadkarni et al. (2018) and Perry-Smith and Mannucci (2017) depicted radical innovation captures new knowledge, skills, and new processes and executes change in the organization. Radical innovation is not essential to comprise disruptive innovation, on the other hand, in recent years, a theory of disruptive innovation is emphasized to discourse in innovation perspective, which is an influential way of thinking and to assist innovation-driven growth (Christensen et al. 2015). Disruption is portrayed as a process by which the services and products are shaped with simple steps from the bottom of a market that contributes to moving upmarket to sustain among the competitors and to effectively manage the challenges of small businesses (Christensen et al. 2015). However, Bedford et al. 2019 and Benner and Tushman (2002) illustrated that incremental innovation is categorized by the growth of existing capabilities of an organization, to expresses the protection of surviving capabilities, to use basic technology, and existing knowledge in the industry (Anderson and Tushman, 1990, Hussain et al. 2018).

2.4 Relationship between employee creativity (EC) and innovative Behavior (IB)

In prior literature, both concepts EC (Zhou and George 2001), and IB (Scott and Bruce 1994), are separately disclosed which represented a sequence to convert a new idea into an execution method (Van de Ven 1999, Woodman et al. 1993). For instance, in the first phase: creativity presents to the generation of novel and executable ideas (Amabile, 1988), to introduce a new process, technique, or method to an organization (Mumford and Gustafson 1988, Madjar et al. 2002). In addition, the employees' interaction with their job and customer that occupies employee creative engagement such as cognitive process, when frontline employees manage the solution to the problem of customers during the performing their job services (Gadrey et al. 1994). Likewise, cognitive engagement, not a behavioral, is an aspect of cognitive concept (Reiter-Palmon and Illies 2004).

The second phase: IB demonstrates the execution of creative ideas (Scott & Bruce, 1994), and implementing a solution to a problem at the job or organizational level (Shalley and Gilson 2004). Furthermore, creative engagement and its nature are more essential to input to the application of novel ideas at the job (Slåtten et al. 2011). Consequently, the recent research determined the results that showed EC significantly influenced on employee innovative behavior (Slåtten et al. 2011). Another study's results found EC alone explained about 47% of the variance of IB (Slåtten and Mehmetoglu 2011). In the recent literature perspective, creativity illustrates as a significant facet of IB. **Hence:** Proposition 1: EC has a positive relationship with IB.

2.5 Relationship between innovative behavior (IB) and organizational innovation (OI)

The literature review perceives that IB is a part of employees' behaviours that acts as extraordinary role or discretionary (Abstein and Spieth 2014, Ramamoorthy et al. 2005), that executes the generated and promoted idea within the firm (Janssen 2000, Yuan and Woodman 2010). IB is a multidimensional concept that is encompassed the diversified employees' behaviors such as solving problems by generating an idea, identifying opportunities or problems, or taking opportunities, to evaluate the ideas, to endorse promotion, to seek the funds, and for supporters for application of the requirements of ideas, and to develop the implementation plans (De Jong and Den Hartog 2010, Scott and Bruce 1994). In addition, IB is allied with the learning concept (i.e., exploratory learning) (Escribá-Carda et al. 2017). Moreover, IB, in an organizational context, is related to learning (Park et al. 2014), which fosters collaboration among employees, unlearning of developed ideas, experimentation, reconsideration, or knowledge acquisition, etc. Likewise, exploratory learning encourages to do with the ability, to find, and to assess new talent, competencies, and integrate new knowledge into an organization (Danneels 2002, Hussain et al. 2018).

Additionally, scholars claimed that IB contributes to innovation such as shaping new products or new services (Abstein and Spieth 2014, Goepel et al. 2012, Yuan and Woodman 2010). Fu et al. (2015) found that IB positively associated new clients, and new services (i.e., used the instrument of innovation), and 120 Irish accounting firms were selected for collecting data. For example, IB is an individual's ability to create ideas that implement to transform into innovation (Naranjo-Valencia et al. 2017). However, the innovation process stages are associated with IB (Sanz-Valle and Jiménez-Jiménez 2018). Furthermore, some scholars found positive results that IB significantly associated with new products originality on the one hand and IB positively linked with new products radicalness on the other hand (Sanz-Valle and Jiménez-Jiménez 2018). Moreover, Naranjo-Valencia et al. (2017) significantly tested that innovative behavior positively linked with radical product innovation for a firm's innovation. **Hence**, it is reasonable to suggest that Proposition 2: IB has a positive relationship with OI.

3. Research Method

A methodology system approach is followed to integrate literature review that is significantly studied the applicable detail for research (Callahan 2010). As well, the past integrated literature is necessary to review for developing the linkage of EC and IB with OI. However, Loewenberger (2013) noted the barriers to incorporate in creativity and innovation procedures, (e.g., how to produce creative ideas to execute, strategies, organize routines, rationales, competing expectations, overcome, poor understanding about solution of a problem, and mitigate perceived risk). Therefore, the University's digital library resources, *Google Scholar* databases, EBSCO Research Database, and *Business Source Premier* were used to access specific databases: using the keyword, "creativity" and "innovative behaviour/behavior", "innovative work behaviour/behavior" and "organizational/organisational innovation" and "innovation", to find the limited articles that have been published since 2020.

More specifically, the prior literature review and findings strongly supported the link between EC, IB, and OI. For instance, two studies tested the link between EC and IB and four studies examined the relationship between IB and OI (see table 1).

Table 1. The previous literature review on EC, IB, and OI

Authors	Country	Relationship Between	Beta value	P-value
Fu et al. (2015)	Irish	IWB and firm innovation (e. g., new clients, and new services)	(β=0.19) Innovation	Less than 0.10
Lukes and Stephan (2017)	Switzerland, Germany, the Czech Republic and Italy	IB and innovation	(β=0.73) Innovation	Less than 0.001
Naranjo-Valencia et al. (2017)	Spanish companies	IB and radical innovation	(β=0.263) radical innovation	Less than 0.465
Sanz-Valle and Jiménez-Jiménez (2018)	Spanish	IB and product innovation (e.g., new products originality, and radicalness)	(β= 0.203) New product originality and (β= 0.257) New products radicalness	Less than 0.001
Slåtten and Mehmetoglu (2011)	Norway	EC and IB	(β=0.58) IB	Less than 0.001
Slåtten eta al. (2011)	Norway	EC and IB	(β=0.47) IB	Less than 0.001

Note: EC: employee creativity, IB: Innovative behavior, IWB: innovative work behavior, OI: organizational innovation

Table 1 was displayed that Fu et al. (2015) significantly tested that IWB (β = 0.19) positively impacts innovation (e.g., new services and new clients). As well, IB (β =0.19) has a positive influence on innovation (Lukes and Stephan 2017). Furthermore, the significant results were revealed that IB positively (β = 0.203) related with new products originality, in addition to, IB (β = 0.257) significantly connected with new products radicalness (Sanz-Valle and Jiménez-Jiménez 2018). Moreover, Naranjo-Valencia et al. (2017) significantly tested that innovative behavior (β =0.263) positively

related with radical innovation for a firm's innovation on the one hand. On the other hand, EC has been illustrated as a positive and significant influence on IB (Slåtten and Mehmetoglu 2011). Another study found significant results that EC (β =0.58) significantly predicted employee's IB (Slåtten et al. 2011). Finally, findings seem to the link between EC, IB, and OI.

4. The componential theory of organizational creativity and innovation

In an organization, according to Amabile's (1988) componential theory of organizational creativity and innovation, creativity is described as "the ability to generate new and useful ideas", and innovation is meant to execute the novel idea at the job in addition to, management practices, intrinsic motivation, creative skill, expertise, resources, organizational motivation, and environment assist to creativity and innovation (Amabile 1983, 1996). The personal components contribute to creativity such as skills, intrinsic motivation, and expertise. Skills are belonged to a cognitive propensity to try different working method to introduce new techniques and to accept new viewpoints, intrinsic motivation is described that is a personal sense of curiosity, involvement, and enjoyment at work, while expertise is defined such as special talents, proficiency, and knowledge in the domain of work, (Amabile 1983, 1988, 1997). In addition, management practices encourage the abilities of employees to generate new ideas and assist to portrait innovative work in an organizational context, the resources and environment are accessible to support the performance (e.g., innovation), and management systems support to apply new administrative processes and technologies at works to achieve the organizational innovation (Amabile et al. 1996). As well, individual, group, and organizational creativity feed innovation (Amabile 1998, Shalley et al. 2004).

Likewise, organizations expect both EC and OI to facilitate their marketing strategies, delivery, products, and processes with better knowledge-based business service (Amara et al. 2009, Crevani et al. 2011), in modern societies, services are the fundamental part of economic activities (Castro et al. 2011, Vermeulen and Dankbaar 2002). For example, the implication of Amabile's (1988) componential theory was found 94 groups performed 13 different goals that factors (i.e., intrinsic motivation, skills, and creativity) have a positive impact on EC (Taggar 2002). While creativity and innovation have a positive influences on each (Ford 1996; Woodman et al. 1993). Lastly, Amabile and Pratt (2016) suggested Amabile's (1988) componential theory that leads the numerous variables (e.g., psychological factors, leadership styles, organizational factors, employee creativity, innovative behavior, organizational innovation, and performance) in an institutional context.

5. Conceptual Framework

This study reviewed the previous research literature on the association between EC and IB (Slåtten and Mehmetoglu 2011, Slåtten et al. 2011) and IB linked with OI (Naranjo-Valencia et al. 2017, Sanz-Valle and Jiménez-Jiménez 2018). The research is very scarce on the influence of EC on IB to affect OI with the support of Amabile's (1988) componential theory. However, the investigation of the relationship between EC, IB, and OI is lacking. Therefore, the conceptual framework fills a gap to provide the clarity of these relationships that still need to be understood and integrates prior research to resolve inconsistencies in the literature (see Figure 1).

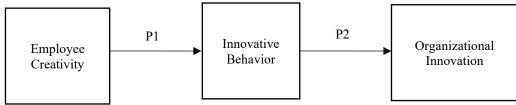


Figure 1. Conceptual framework

In summary, figure 1 shows that IB appears in the relationship between EC and OI. Specifically, literature was illustrated that EC closely related IB and OI. Besides, IB is also linked with OI. Consequently, both variables EC and IB significantly contribute to OI (e.g., processes, products, and services).

5.1 Propositions statement

The two propositions have been developed based on the previous literature review and figure 1:

Proposition1: Employee creativity (EC) has a positive relationship with innovative behavior (IB).

Proposition 2: Innovative behavior (IB) has a positive relationship with organizational innovation (OI).

6. Conclusion

Finally, scholars' findings highlight that creativity generates the idea that is implemented by IB to produce a physical form of an innovative product is called innovation. The research is limited to reveal the relationship between EC, IB, and OI in an organizational context. Managers maybe use the EC to enhance employees' IB for boosting the innovation level of a firm. Future research can be examined the impact of EC on IB to affect OI. Besides, the conceptual framework may be conducted on organizations' employees and students (e.g., Scholars (Collin et al. 2020, Hussain et al. 2018, Joo et al. 2013, Walker and Derbyshire 2020) have reviewed the prior research studies that surveyed, designers, musicians, artists, engineers, fall into the creative class sector, and knowledge-based professionals, and scientists).

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Biographies

Khawar Hussain is a Ph.D. student at the Department of Technology and Management, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia. His main research interests concern human resources, leadership style, psychological capital, psychological empowerment, employee creativity, innovative behavior, innovation, the componential theory of organizational creativity and innovation, and foresight studies.

Eta Wahab obtained her Ph.D. in Management from Curtin University of Technology, Australia. She is currently an Associate Professor and has been teaching for 20 years. She is now attached to the Department of Technology and Management, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia. Her research interests include technology adoption among SMEs, technology capability, innovation, commitment, perceived organizational support, innovative work behavior, and foresight studies.