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Conceptual Framework: The Mediating Effect of Self-Efficacy in the Relationships of Self-Leadership, Knowledge Sharing, and Innovative Work Behaviour

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Abstract

There are substantial empirical evidences on the influence of self-efficacy towards organisational performance. However, the mediating effect of self-efficacy in the relationships of self-leadership and knowledge sharing with innovative work behaviour, particularly in the educational context, remains inadequately explored. Addressing that, this study attempts to contribute in-depth insights on the factors that influence innovative work behaviour in the higher education institutions based on a proposed conceptual framework to promote innovative work behaviour among Malaysian academics. **Keywords**: Self-leadership, Self-efficacy, Knowledge Sharing, Innovative Work Behaviour, Malaysian Academics

Introduction

High unemployment rate among Malaysian graduates is a prevalent concern of many today, which was reportedly due to their lack of skills required by the potential employers (Grapragasem et al., 2014). According to the Department of Statistics Malaysia the unemployment rate in December 2017 recorded 3.3%, which increased to 3.4% in January 2018. (Department of Statistics, Jan. 2018). Essentially, both creativity and innovation should be incorporated in the teaching and learning process to equip students—as the future workforce—with appropriate competencies and skills (in enhancing their employability) given the significant role of education as the source of knowledge in providing innovation support. Addressing that, this study attempts to comprehensively evaluate the factors that influence innovative work behaviour among Malaysian academics in the higher education institutions (HEIs).

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The higher education system in Malaysia has demonstrated progressive growth and development over the past two decades, which has spurred intensified competition between the public higher education and the private higher education. The future workforce must be adequately responsive to the changes and demands of the existing market through innovation. In addition, innovative educational professionals are necessary to ensure the implementation of innovation in the education and development aspects with respect to the challenges of the 21st century (Van de Ven, 1986; Janssen, 2000; De Jong and Den Hartog, 2010). After all, the significance of individuals who demonstrate innovative work behaviour at the workplace is widely acknowledged for the continuous development of innovative products and services (Tang et al., 2013; Abstein et al., 2014). Substantial studies also revealed significant empirical evidences and theories on the personal factors and innovative work behaviour among employees (Janssen et al., 2004) with the agreed notion that innovative individuals assist in realizing higher organisational performance from the theoretical and practical viewpoints (Axtell et al., 2000; Smith, 2002; Unsworth and Parker, 2003).

In conclusion, innovation is increasingly significant for the organisations to achieve higher performance with respect to the changing economic environment and globalization, which has gained growing research interest (Chen, 2011; Kim and Lee, 2013; Akram et al., 2016). In view of the above, this study expects to significantly extend the existing knowledge base on innovation at the individual level, specifically innovative work behaviour, considering that studies on innovative work behaviour among employees remain rather scarce (Li and Hsu, 2016). Additionally, prior studies were more focused on the manufacturing organisations, rather than service organisations (Lee et al., 2014; Lai et al., 2016; Javed et al., 2017). Furthermore, most of these studies were performed beyond the Malaysian context. Hence, this study attempts to propose an integrated model that incorporates the effects of self-leadership, self-efficacy, and knowledge sharing towards innovative work behaviour among employees within the Malaysian educational context.

Higher Education System in Malaysia

The Private Higher Educational Institutions Act (1996:13) characterized the term "higher education" as "the direction or preparing of a course of study prompting the honour of an endorsement, certificate or degree upon the successful fulfilment thereof." The higher education system generally includes community colleges, colleges or polytechnics, university colleges, and universities. Besides that, the higher education system in Malaysia also includes both public institutions and private institutions (MOE, 2006). In particular, there are 20 public universities, 20 university colleges, 28 private universities, 30 polytechnics, 30 international university branch campuses, 70 community colleges, and 403 private colleges (Ministry of Higher Education, 2015).

The higher education system in Malaysia, which remains under the jurisdiction of the Ministry of Education (MOE), has demonstrated tremendous growth in addressing the increasing demands of providing higher status of education. The private colleges and universities are established with the goal to provide admittance for all accomplished students to the tertiary education level. However, the HEIs, especially the private higher education institutions (hereinafter PHEIs), experience significant challenges given the intensified competition among one another and also with the public HEIs. Hence, it is significant to further evaluate the factors that initiate and promote the development of innovative work

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behaviour among Malaysian academics in the PHEIs to remain highly competitive and to attain long-term profitable growth—which will be addressed in this study.

Literature Review and Development of Hypotheses Innovative work behaviour

West and Farr (1990) defined "innovative work behaviour" as the process of generating, promoting, realizing, and operating an idea within a specific work function in a group or an organisation that benefits the job performance at the individual, group, and organisation levels. The innovative work behaviour is also viewed as the introduction and application of new technologies or work strategies to enhance the existing tasks (Yuan and Woodman, 2010). Accordingly, Janseen (2000) and De Jong and den Hartog (2010) proposed four dimensions of innovative work behaviour: (1) Opportunity exploration; (2) Idea generation; (3) Idea championing; (4) Idea application. Firstly, opportunity exploration involves the identification of opportunities to introduce innovation in terms of ideas and solutions. Secondly, idea generation is defined as a dynamic process of creating, associating, and generating different types of opportunities and representations for the idea interaction in the form of abstract, concrete, or visible (Kleysen and Street, 2001). Meanwhile, idea championing reflects ideas that are generated from highly committed individuals, which are unanimously accepted. Lastly, idea application involves a process of developing, testing, commercialising, and executing the generated idea or in other words, this is when the idea is taking its shape (De Jong et al, 2003).

Self-leadership

Neck and Manz (2010) characterized self-leadership as a process that involves the individual capacity to self-influence to perform or accomplish a specific task with respect to the personalized individual goal. Self-leadership enables individuals to identify and remove ineffective work behaviour through self-reflection and evaluation to deliver more effective work behaviour (DiLiello and Houghton, 2008; Neck and Manz, 2013). Essentially, there are three proposed strategies to achieve self-leadership, namely behavioural focused strategies, natural reward strategies, and constructive thought pattern strategy (Neck and Houghton, 2006; Neck and Manz, 2010). A behavioural focused strategy assists in managing one's behaviour, which incorporates the process of self-attentional of self-observation, self-goal setting, self-reward, self-correcting feedback, and self-cueing. Meanwhile, a natural reward strategy focuses on being positive and enjoyment towards the tasks (Houghton, et al., 2002). As for a constructive thought pattern strategy, it is related to the individual capacity to influence and direct oneself through certain cognitive strategies (Neck and Manz, 1992; Godwin et al., 1999).

Self-efficacy

According to Bandura (1997), self-efficacy is related to a specific cognitive procedure to self-evaluate the capability to perform a specific task. This capability reflects one's confidence in the capacity to accomplish the assigned task. Individuals who believe to have the effective capability to perform the task will take on the job (Bandura, 1997; Tenaw, 2013). High self-efficacy is related to one's belief in possessing the specific skills to productively accomplish the job with minimal assistance from others or without the assistance of others (Hsieh et al., 2012).

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Knowledge Sharing

Knowledge sharing typically reflects the transmission of knowledge between individuals within or beyond the boundary of an organisation (Yi, 2009) or the transfer and dissemination of knowledge between individuals, groups, or organisations (Lee, 2001). Pulakos et al. (2003) argued that knowledge sharing is a process of collaborating with other individuals for problem-solving, policy implementation, or idea development.

Relationship between self-leadership and innovative behaviour

It is imperative that one possesses self-leadership to independently lead the process of learning using specific behavioural and cognitive skills to deliver effective performance (D'Intino et al., 2007). Self-leaders are independently motivated to exhibit positive behaviours and remove negative behaviours to deliver high performance (Manz, 1986).

The social cognitive theory describes the interactions of cognitive factor, behavioural factor, personal factor, and environmental factor in influencing how one behaves and self-motivates (Crothers et al., 2008). Self-leadership describes how leaders with self-leadership think and the capability to demonstrate specific behaviours using certain behavioural strategies, motivation, and cognitive strategies (Kraft, 1998; Prussia et al., 1998; Yun et al., 2006). According to Carmeli & Weisberg (2006), individuals who demonstrate self-leadership are more likely to be innovative in their job. Thus, this study assumes that such individuals are highly self-directed and motivated to be more innovative in handling their work-related problems.

Although the relationship between self-leadership and innovative behaviour was extensively explored, the findings on this particular relationship remain inconclusive. There are limited empirical evidences on the significant effect of self-leadership towards innovative behaviour (Carmeli et al., 2006; Curral and Marques-Quinteiro, 2009; Kalyar, 2011, Gomes et al., 2015; Park et al. 2014). However, Pratoom, K., & Savatsomboon, (2012) found insignificant effect on the relationship and Omar, et al., (2014) found partially significant effect on the relationship. Besides that, Gomes et al. (2015) and Kor (2016) argued that the relationship between self-leadership and innovative behaviour remains in the nascent stage. Nevertheless, studies on individual innovation remain scarce with inconclusive findings on how individual factors influence individual innovation (Pratoom, K., & Savatsomboon, 2012). Adding to that, most of these studies, which focused on the non-educational sectors, were performed beyond the Malaysian context. Thus, it is imperative to explore the relationship between self-leadership and innovative behaviour within the Malaysian educational context. Neck and Houghton (2006) also put forward similar notion that addresses the need to further evaluate the relationships of self-leadership, creativity, and innovation. Hence, this study proposes the following hypothesis for testing:

H1: There is a significant relationship between self-leadership and innovative work behaviour among Malaysian academics in the PHEIs.

Relationship between self-efficacy and innovative behaviour

Accordingly, individuals who possess high self-efficacy demonstrate higher tendency to creatively participate and perform challenging task (Hsiao et al., 2011). The positive relationship between self-efficacy and performance (e.g., creativity, motivation, learning transfer intention, job satisfaction, career commitment, work performance, and productivity) was substantially demonstrated in prior studies

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(Stajkovic and Luthans, 1998; Compeau et al., 1999; Hsu et al., 2007; Judge et al., 2007; Abele and Spurk, 2009; Liu et al., 2010; Gong et al., 2009; Leon-Perez et al., 2011; Pan et al., 2011; Tierney and Farmer, 2011; Judeh, 2012; Cherian and Jacob, 2013). However, how self-efficacy influence innovative behaviour remains inadequately explored. There are only several studies that empirically demonstrated the significant effect of self-efficacy towards innovative behaviour (Hsu et al., 2011; Hsiao et al., 2011; Momeni et al., 2014). In contrast, Sarmawa et al. (2017) demonstrated insignificant relationship between self-efficacy and innovative behaviour. Furthermore, most of these studies were performed beyond the Malaysian context with inconclusive findings on the relationship between self-efficacy and innovative behaviour. In view of the above, this highlights the need of this study to further evaluate the effect of self-efficacy towards innovative behaviour within the Malaysian educational context.

Meanwhile, the social cognitive theory postulates the reciprocal linkages of personal factors (e.g., cognitive, affective, and biological events), external factors, and behaviour towards the human function. As previously implied, self-efficacy is related to the cognitive procedure of self-evaluation on one's capability to perform the assigned task (Bandura, 1997). Creative self-efficacy improves innovation (Tierney and Farmer, 2011), which subsequently affects innovative behaviour (Mathisen, 2011). Hence, employees with high self-efficacy are more assured in undertaking multiple innovation-based tasks because they have the capabilities to perform these tasks effectively, resulting in innovative behaviour. Based on above arguments, this study considers the significance of assessing how innovative behaviour is influenced by self-efficacy. Thus, this study proposes the following hypothesis for testing:

H2: There is a significant relationship between self-efficacy and innovative work behaviour among Malaysian academics in the PHEIs.

Relationship of self-efficacy, self-leadership, and innovative behaviour

The mediating role of self-efficacy in various relationships (between self-leadership and performance; between self-leadership and organisational citizenship; between Big Five personality characteristics and depression; between academic climate and performance; between negative self-statement and social anxiety; between creativity and transformational leadership; between hope and peace attitude) was explored across diverse studies (Prussia et al., 1998; Moore, 2010; Abd Elmotaleb and Saha, 2013; Mansor, 2013; Wang et al., 2014; Mithal et al., 2015; Sari, 2016). Additionally, Li et al. (2017) demonstrated the mediating effect of self-efficacy in the relationship between proactive personality and innovative work behaviour among teachers. Besides that, Ma, et al. (2016) assessed the mediating effect of innovative self-efficacy in the relationship between person-organisation fit and innovative behaviour, which revealed that higher person-organisation fit increases the innovative self-efficacy and subsequently influences the employees to be more innovative in their job.

Besides that, confident individuals were revealed to have higher self-control (i.e., self-leadership skill development), which, in turn, enhances their perception on efficacy (Manz and Sims, 1996). Meanwhile, Chaijukul (2010) evaluated the relationships of self-leadership, psychological empowerment, self-efficacy, job satisfaction, and job performance among private firm employees in Bangkok. Specifically, the self-leadership was revealed to contribute direct, significant effects towards psychological empowerment, self-efficacy, and job satisfaction. The mediating effect of self-efficacy in the relationship between self-leadership and job performance was reaffirmed with the direct effect of self-leadership towards self-efficacy (Prussia et al., 1998).

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With respect to the social cognitive theory, one's cognitive process influences how one behaves (Bandura, 1977). In addition, Bandura (1986) argued that self-efficacy functions as the central factor within the mechanism of self-regulatory, which regulates one's action and motivation. Self-leadership involves the internal reflective process where one is conscious and constructive moving their mind and intentions to create the expected transformation, enhancement, and innovative behaviour (Carmeli et al., 2006). Furthermore, employees are more curious through creative self-efficacy and willing to take risks and be creative thinking, consequently will increase their motivation level to engage in innovation (Gong, Huang, & Farh, 2009). In other words, such individuals have the motivation through self-leadership to perform the assigned task innovatively.

Although there are several studies on the mediating effect of self-efficacy, empirical evidences on the mediating effect of self-efficacy in the relationship between self-leadership and innovative behaviour in the Malaysian educational context remain scarce. Addressing that, this study proposes the following hypothesis:-

H3: Self-efficacy mediates the relationship between self-leadership and innovative work behaviour among Malaysian academics in the PHEIs.

Relationship between knowledge sharing and innovative behaviour

Through knowledge sharing, one can enhance creativity and critical thinking (Aulawi et al., 2009). Higher level of knowledge sharing promotes access to new knowledge, which is critical for effective problemsolving and decision-making at lower cost (Almahamid, McAdams, and Kaladeh, 2010). The social cognitive theory postulates the influence of cognitive, personal behaviour, and external factors towards one's motivation and behaviour (Crothers et al., 2008). In addition, one should continuously manage knowledge through the discussion, translation, recombination, and dissemination of tacit knowledge to exhibit innovative behaviour (Nonaka, 1994; Quintane et al., 2011). Thus, those who actively engage in knowledge sharing are motivated to exhibit innovative behaviour with the newly acquired knowledge. There are substantial empirical evidences on the significant influence of knowledge sharing towards innovative work behaviour (Yu et al., 2013; Radaelli et al., 2014; Akhavan et al., 2015; Ologbo, et al., 2015; Jaberi, 2016; Suk Bong Choi et al., 2016; Fauzia, 2017; Kim and Park, 2017; Phung et al., 2017). However, Yeşil and Hırlak (2013) and Kang et al. (2017) concluded insignificant relationship between knowledge sharing and innovative behaviour. Therefore, inconclusive findings of prior studies demonstrate the need of this study to specifically evaluate the relationship between knowledge sharing and innovative behaviour in the Malaysian educational context. Hence, this study proposes the following hypothesis:

H4: There is a significant relationship between knowledge sharing and innovative work behaviour among Malaysian academics in the PHEIs.

Relationship of knowledge sharing, self-efficacy, and innovative behaviour

Self-efficacy is the individual capability to perform a specific task (Bandura, 1997), which potentially serves as a key predictor in influencing one's decision to share knowledge (Bock and Kim, 2002; Hsu et al., 2007; Hu, 2010). In addition, it is also argued that self-efficacy can enhance innovation, in which individuals with high self-efficacy are more creative, innovative, and willing to challenge themselves (Bandura, 1995). The social cognitive theory highlights that individuals are encouraged to undertake

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specific task based on how they evaluate their capability (or behaviour) and their expectations on the outcomes of their actions (Bandura, 1986, 1997). Therefore, individuals with high self-efficacy possess higher capability for enhanced performance, which builds their confidence and motivation to share knowledge. Consequently, with the acquired knowledge and skills (through knowledge sharing) further promotes innovative work behaviour. Therefore, this study assumes that self-efficacy enhances the relationship between knowledge sharing and innovative behaviours.

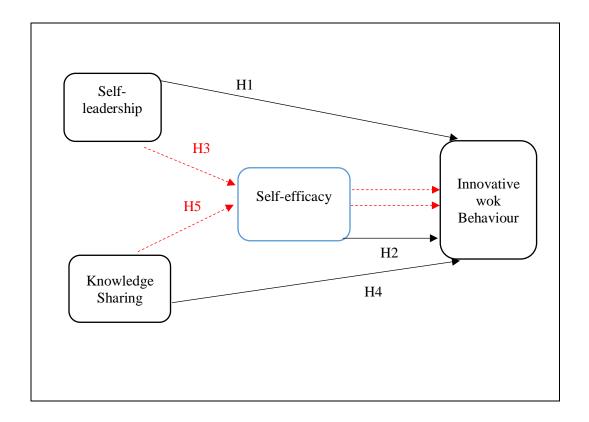
Apart from the social cognitive theory, this study also considers the Knowledge-Based View theory (KBV) given the significance of knowledge for innovation. The KBV emphasizes the application of knowledge to deliver innovative goods and services, which is typically the primary organisational goal (Grant, 1996b). The extensive knowledge and skills enable these organisations to innovate new products and processes and to enhance the existing products and processes for higher efficiency and effectiveness (Nonaka and Takeuchi, 1995). Hence, knowledge sharing is evidently crucial for innovation, which also can be applied in the educational context.

Hu, B. & Zhao, Y (2016) had examined the mediating effect of self-efficacy on the relationship between knowledge sharing and innovative behavior among the employees in non-educational firms, China. The result found out that self-efficacy mediated the relationship between knowledge sharing and innovative behavior. Hence, this study hypothesizes that the self-efficacy mediates the relationship between knowledge sharing and innovative behaviour in the Malaysian education context. The following hypothesis is proposed for testing:

H5: Self-efficacy mediates the relationship between knowledge sharing and innovative work behaviour among Malaysian academics in the PHEIs.

Research Framework

The underlying theoretical basis of this study is developed with respect to the empirical evidences and assumptions of prior related studies. These existing studies highlighted the relationships of self-leadership, self-efficacy, and knowledge sharing with innovative work behaviour. Hence, this study proposes an integrated framework to illustrate these relationships of identified variables: (1) Self-leadership (independent variable); (2) Self-efficacy (independent variable; mediator); (3) Knowledge sharing (independent variable); (4) Innovative work behaviour (dependent variable). The lines with H1, H2, and H4 show the direct relationship to innovative work behaviour, while the lines with H3 and H5 denote the indirect or mediating relationship between the variables. (Figure 3.1).



Conclusion

The proposed framework is expected to provide empirical evidences on the relationships of self-leadership, self-efficacy, knowledge sharing, and innovative work behaviour within the Malaysian educational context, specifically among Malaysian academics in the PHEIs. Besides that, this study will significantly contribute to the existing body of knowledge and addresses the gap of the inconsistent findings in prior studies. The proposed framework also becomes the starting point for future research to explore the integration of various individual, task-related, organisational factors that may influence innovative work behaviour. Last but not least, this study provides scholars and managers a new perspective to realize the importance of increasing self-leadership, knowledge sharing and self-efficacy to stimulate innovate behaviour among academics and non-academics within the education institutions.

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