

Factors Affecting Innovative Work Behavior: A Case of Manufacturing Company in Malaysia

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Abstract

Innovative Work Behaviour (IWB) among employees is very important as it could affects the work performance and sustainability of organizations. This study aims to investigate the impacts of training and development, personality, and organizational culture on IWB. Quantitative method was used where a set of questionnaire was distributed among 200 employees at one manufacturing company located in Kedah, Malaysia. The results presented significant relationships between training and development and IWB ($r=0.65$, $p<0.01$); personality and IWB ($r=0.64$, $p<0.01$); and organizational culture and IWB ($r=0.70$, $p<0.01$). Thus, the appropriate activities should be designed to enhance IWB of employees in the aspects of training and development, personality and organizational culture. Several suggestions for the future study has also been discussed.

Keywords—Innovative work behaviour (IWB); training and development; personality; organizational culture.

Keywords: *We would like to encourage you to list your keywords in this section*

1. Introduction

With rapidly growing of competition and spreading of knowledge, the future of organizations relies on their ability to innovate. Generally, innovation is considered as the most critical competitive advantage that allows an organization to flourish in the present dynamic business condition. Innovation is required as a prior condition especially in the knowledge-based economies. Innovation is defined as presentation of new types of production (products & processes) into the work environment [1]. It is important to enhance and increase the quality and innovativeness of employees. This is because employees played a vital role in the process of innovation and every of their actions are important for organization's continuous improvement [2].

Kedah has focused on agriculture industry for the last few decades and it was the largest rice production state in Malaysia. Currently, Kedah has rapidly developed and pushed for manufacturing to replace agriculture as the main driver of its economy. However, Department of Statistics Malaysia reported the Gross Domestic Product (GDP) for manufacturing sector in Kedah has shrank from RM 6,339 million in 2008 to RM 5,818 million in 2010 due to the lack of knowledge and innovation among employees in 2010 [3]. Therefore, the workforce's talent of Malaysia has fallen behind the standard of high-income countries. National Economic Advisory Council reported that Malaysia faces with the lack of skilled workers, low productivity, growth stemming from lack of

innovation and creativity in the workforce, and over-dependence on low-wage and unskilled workers from other countries in 2010. Despite, there are several issues has been faced by the Malaysian manufacturing industry including the low level of innovation among employees [4]. As reported, studies claimed that manufacturing companies have low level of innovation in Malaysia as compared to other countries [5]. In 2016, the competitiveness of labour cost in the manufacturing industry decreased from 5.0% to 3.1% due to the increment of labour cost per employees [6].

Many studies have been conducted to look on the influence of training and development on IWB [7; 8; 9]. However, almost all of the studies are conducted in the foreign countries. Thus, new knowledge in the local view is deemed important to be revealed. Moreover, personality is the uniqueness of the individual [10]. While, everyone has different personality but the groups or society the individual belongs to will affect the development of personality. Therefore, further research is required to determine whether personality can create an affect on the IWBs in the local manufacturing context. Next, it is important to look on the influence of organizational culture on the IWBs. This is because every organizations have their own culture which makes them different from other organizations. As claimed by [11], it is essential to explore and understand the cultural differences and the characteristics of the organizational. Unfortunately, [12] stated that organizational culture is still has unexplored in the previous research. Given that, this paper seeks to reveal the influence of several factors such as training and development, personality and organizational culture on employees' IWB in one of the manufacturing company in Kedah.

2. LITERATURE REVIEW

A. Innovative Work Behaviour (IWB)

IWB has been given varying definitions, but generally includes both the development and implementation of new ideas by employees [2]. Importantly, IWBs do not appear to be an inherent trait only applicable to certain individuals and are amenable to organizational interventions [13].

[14] refers intentional behaviour as individuals who generate, process and apply the new ideas regarding ways of doing things. It was one of the most vital asset for organization to pursue innovativeness and as a determining factor to achieve success in the dynamic environments. As stated by [15], IWB refers to the actions which individuals concentrated on producing and processing the ideas, and applying of the new ideas to do the tasks. It included new ideas to do the work, technologies used to do the task, the work procedures with the aim of improving the efficiency and organizational processes [15]. IWB implies the wholistic construct made out of interdependent activity and jobs attached to the complex and iterative innovative development process [16]. It is widely recognized that the most competitive organizations benefit from the innovative behaviours of employees [2].

There are significant links between IWB and training and development; personality and organizational culture. For example, [17] claimed that training can be used by the organization to motivate innovative behaviour of employees. In respect to the impact of personality, [18] study presented that proactive personality was significantly positively associated with teachers' IWB in China. Also, [19] presented a the significant finding between organizational culture and IWB in tourism enterprises that market sport services. With respect of the present study, we sought to focus on these combination factors namely training and development, personality and organizational culture because they are conceptually most likely to be related to IWB, and specific evidence can be revealed in the context of the Malaysian manufacturing industry.

B. Training and Development

Training refers to an effort that planned to allow employees to learn job-related skills, knowledge and practices with the objective of applying those on the employee's job [20]. It included skills, behaviours or knowledge, which is important for achieving good job performance [21]. Development usually goes beyond current job and has a longer focus term [22]. It refers to the process of obtaining behaviour, skills and knowledge that enhance the capabilities of employee to meet changes in demands of customer and job requirements [20].

[23] claimed developments are in training and structured-like format. Coaching is suitable for the employees that are prepared to reconstruct their role or improve development activities and interpersonal skills. In addition, [23] further stated that development results not necessarily related to certain goals and it can be private and associated to the individual. The development for employees were utilized in order to enhance decision-making, competency, perception of development and adequate resources [24].

[25] claimed that if employees perceive training and development provided by organization are useful and valuable, they are more prepared to develop new ideas. Other researchers [7;26] also provided supports for the significant link of training and development on IWB. Give this evidence, the following hypothesis is proposed. H1: There is a significant relationship between training and development and IWB.

C. Personality

Personality refers to relatively enduring external and internal aspects of an individual's character that affect behaviour in various circumstances [22]. According to [23], personality is the general description of an individual and it gives a framework or universal taxonomy to distinguish individuals and at the same time, it also can responsible for everyone's distinctiveness. Meanwhile, [6] described that personality as the uniqueness of the individual. [24] further described personality as behaviour patterns which an individual attained under certain condition during the development of individuals and also as a member of individual's society and the few groups that the individual belongs.

Conceptually, focusing solely on main effects of personality traits on IWB may be unjustified [25]. This is because the nature and scope of antecedents of IWB are wide ranging, and so effects of personality may interact in various ways with other individual and contextual variables. Drawing on trait theory, various authors have proposed that individuals vary in their potential to innovate [25; 26]. For example, personality of employees working in the local context may differ with those who come from the foreign countries. Also, the personality may depend on the nature of the working environment (eg. public vs private) and different industries (eg. manufacturing, banking, educational, etc.).

Personality plays an important role in understanding individual innovative behaviour. Numerous studies have found the relationship between personality traits and IWB; however the significant level is different and shows inconsistent results [32]. Thus, this study aims to investigate the relationship between personality and IWB among employees who work in the Malaysian manufacturing industry. Given that, the second hypothesis is developed. H2: There is a significant relationship between personality and IWB.

D. Organizational Culture

[33] described organizational culture as the social or normative glue that ties the members of organization together. It was described as the identity or personality of an organization [34]. Organizational culture is the main driver to innovation and it affects the way on how the innovative solutions are supported, encouraged and implemented. Therefore, in order to enhance the level of IWB, organizational culture has to be well

emphasized to increase the innovative behaviour among employees. The employees will feel that they have greater degree of freedom and free from restrictions if they worked in the accepted culture in the organization, in which the culture is closely aligns with their individual value. Therefore, IWB also could be initiated through the set of organization's shared values.

Organizational culture often perceived as a vital influential factor when analyze the organization in different contexts. It is the main influential in determining the organization's achievement. Organizational culture is the working environment or working condition formulated by the employees' interaction in the workplace. It able to encourage and motivate IWB of employees in the organization and it could also be learned via the social condition. A study conducted by [19] presented the significant findings between organizational culture and IWB. Moreover, other researchers [35] found that one dimension of organizational culture (market culture) showed a significant correlation with IWB among employees in the organization. Therefore, the third hypothesis is given. H3: There is a significant relationship between organizational culture and IWB.

3. METHODOLOGY

Quantitative method is adopted in this study due to the short frame time. Table I indicated the measures of the study variables used for the questionnaire in this research.

TABLE I. INSTRUMENTATION OF THE STUDY VARIABLES

Study Variables	Number of Items	Sources of Scale
Innovative Work Behaviour (IWB)	5	De Jong & Den Hartog (2008)
Training & Development	5	Beyazen (2011)
Personality	5	Donnellan, Oswald, Baird & Lucas (2006)
Organizational Culture	5	Sashkin & Rosenbach (2013)

The structure of the questionnaires is self-administered type; where the five scale score (1=Strongly Disagree; 2=Slightly Disagree; 3=Neutral; 4=Slightly Agree; 5=Strongly Agree) is used in this study. Data is gathered from 189 employees working in one of the manufacturing company located in Alor Setar, Kedah.

4. FINDINGS ANALYSES

The participants of the study consists of 54.5% (103) male and 45.5% (86) female. The dominant respondents of the study were from the individuals ranged the age of 21 to 40 years old (47.6%). 51.9% (98) workers are degree holders which is the majority academic qualification of the employee in the company from the survey taken. Most of the respondents (50.3%; 95) experienced more than 5 years working with the company.

TABLE II. RELIABILITY ANALYSIS

Variables	Number of Items	Cronbach Alpha
Training and Development	5	.86
Personality	5	.87
Organizational Culture	5	.85
IWB	5	.87

To assure the accuracy of the subjects on this study, the reliability analysis was done to validate the items to test the relationship between the independent variables (training and development, personality and organizational culture) and dependent variable (IWB).

Table II results of reliability analysis proved that all the items were reliable to be used to answer the objectives and questions of the study.

TABLE III. CORRELATION ANALYSIS

Variables	N	1	2	3	4
Training and Development	189	-			
Personality	189	.52	-		
Organizational Culture	189	.69	.60	-	
IWB	189	.65	.64	.70	-

**Correlation is significant at the .01 level (2-tailed)

One of the centre attention of the study is about the correlations between independent variables and dependent variables of this study. After the analysis has been done, the results can be seen as in Table III. The key findings from Table III is that it can be found that organizational culture is highly correlated with IWB ($r=.70$, $p<.01$); followed by training and development ($r=.65$, $p<.01$) and personality ($r=.64$, $p<.01$) to IWB which the value of both were very close to each.

TABLE IV. REGRESSION ANALYSIS

Variables	IWB	
	Beta	Sig.
Training and Development	.24**	0.00
Personality	.27**	0.00
Organizational Culture	.37**	0.00
R ² = .60		
Adjusted R ² = .59		
F Change = 93.35		

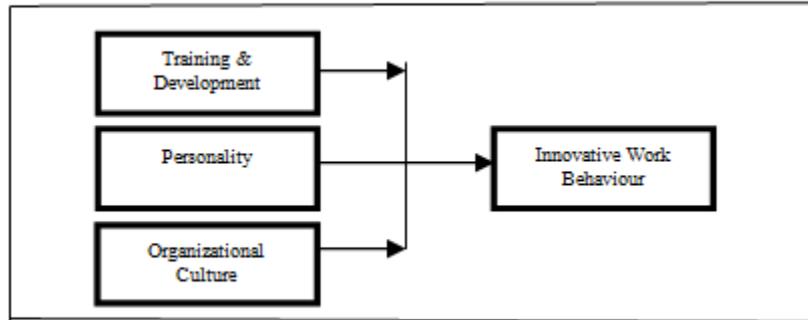
Significant level: ** $p<0.01$

The description of the regression analysis in Table IV showed that 60% of the variance in IWB are explained by training and development, personality and organizational culture ($R^2 = .60$). The present study proved that organizational culture significantly impacted IWB the most ($\beta = .37$, $p<.01$) compare to the other two independent variables (training and development ($\beta = .24$, $p<.01$) and personality ($\beta = .27$, $p<.01$)). These findings answer both research questions and research objectives.

5. CONCLUSIONS

As indicated in Table III, this study provided several evidences regarding the correlations between training and development, personality and organizational culture and IWB. According to the table, it is noted that positive relationships existed between all of the independent variables (training and development, personality and organizational culture) and IWB among employees in this company. Organizational culture appeared as the most correlated factor which influenced IWB among employee in this company ($\beta=.37^{**}$, $p=.00$). This implied that the more employees exposed with a good perception upon the organizational culture, the more they become innovative with their work. Similarly, there was also a positive correlation between IWB and development ($\beta=.24^{**}$, $p=.00$) as well as personality ($\beta=.27^{**}$, $p=.00$). This results showed that the more employees engaged with training and development, and the more they display a good personality; the more they become innovative with their job. To date, this study is conducted to examine the impact of training and development, personality and organizational culture on employees' IWB. Since the results presented that all of the predictors are positively significantly to employees' IWB; thus, the components of IWB model among employees in this Malaysian manufacturing company is presented in Figure I.

FIGURE I: IWB MODEL BASED ON THE STUDY FINDINGS



This study found that the workers impacted more on organizational culture to lead them behave in innovative way of doing work. The employees sampled in this research were agreed on the effect of organizational culture to IWB as in many studies such as 36; 35; and 19. Indeed, with the strong culture applied in the company, the employees will easily influence to show their kind of innovative behavior to handle their daily task. Organizational culture has high level of autonomy to help enhance the work environment performance with the worker's ideas and suggestions (innovative behavior) [12]. However, focusing only on organizational culture is not accurate to conclude the whole context that can affect IWB to employees. Thus, personality, training and development and other possible variables are also important to take into account on its contribution to employees' participation for IWB. Further research needs to be conducted to determine on how well the employees participate in IWB at work to get the different angle of point of views regarding the topic of interest. Particularly, Malaysian workers might have different way to define IWB compare to other workers in other country. With that, it is interesting to find out the elements that differ the acceptance of such behavior according to people in a country. IWB refers to intentional behavior of an individual to generate, process and apply the new ideas regarding ways of doing things [14]. Based on the definition itself, the centre point of the behavior is rely on intention of individuals. This study provided prove that employees need the push factor to improve their beliefs about the advantages of IWB at work. The employer must use their smart strategies, decision and move to develop their employees that is necessary for being effective in today's world.

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