



THE IMPACT OF SELF-EFFICACY AND CREATIVE PROCESS ENGAGEMENT ON INNOVATIVE WORK BEHAVIOUR IN THE TELECOMMUNICATION INDUSTRY IN MALAYSIA

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Abstract:

This study aimed to illuminate the influence of self-efficacy and creative process engagement on employees' innovative work behaviour in the telecommunication industry in Malaysia. To determine whether these two variables are linearly related, the researchers have applied the quantitative method to test the hypothesis developed for this study. The correlation procedure was used to test the strength of association, and the linear regression procedure was used to test the relationships between the quantitative variables. The population of this study was 45,093 employees working for 214 telecommunication employers in the southern and western regions of Malaysia. A self-administered survey was utilised to gather the data for this research. A total of 424 respondents provided the data to derive the analysis and conclusion for this study. It was shown that self-efficacy directly influences employees' cooperation and efforts, indicating that self-efficacy has a motivating potential for innovative work behaviours. Innovative work behaviour requires strong self-efficacy and involvement in the creative process. Commitment is a huge concern since the causes and consequences of inventive working behaviour may differ greatly depending on whether the emphasis is on self-efficiency or creative process engagement. It seems from the outcomes of this study that self-efficacy and participation in the creative process may help increase creativity and innovation. According to this research, innovative thinking is more likely to be associated with employees who are confident in their abilities to execute challenging tasks and multitask. Employees' capacity to innovate will improve if they have a sense of self-efficacy and participation in the creative process. This will help employees solve problems, enhance their creativity, and create new ideas.

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JEL: L20, L23, L96

Keywords: self-efficacy, creative process engagement, innovative work behaviour, creative process, development, competitiveness

1. Introduction

In today's world of intensive globalization, marketing has undergone a significant transformation because of technological advancements, resulting in more customized campaigns for consumers and integrated with the marketing ecosystems (Pinchbeck, 2019). Furthermore, urbanization and competitive market circumstances play significant roles in illustrating the many motivating reasons that drive businesses to indulge in innovation (Akram et al., 2016). When trust in the company was high, self-efficacy and creative process engagement had more significant beneficial impacts on work satisfaction, task performance, and a sense of belonging than when the trust was low. Significantly, when confidence in the company was low, self-efficacy and creative process engagement positively impacted turnover intentions, suggesting that solid trust in the organisation mitigated the effects of self-efficacy and creative process engagement on intentions to leave (Ozyilmaz et al., 2018).

In addition, it makes no difference what kinds of products or services an organisation offers; the interaction between people inside an organisation is referred to as personal conduct (Khalique et al., 2019). Person-organisation communication produces creative and inventive performance and satisfaction, which the individual inside the company experiences according to (Machmud, 2018). High self-efficacy improves the probability of completing a task effectively, and it may grow over time because of experiences and judgment about different aspects of life (Khalique et al., 2019). Therefore, a person does not have to be born with a high feeling of self-confidence or conviction in their talents; instead, they develop these characteristics via self-education.

In Malaysia, researchers discovered that self-efficacy and creative process engagement directly impacts workers' collaboration and effort behaviours, leading them to infer that self-efficacy and creative process engagement has a motivating potential for work behaviours that are most beneficial to their companies. Organisations often employ extrinsic motivation factors to encourage personnel. However, based on (Shahzadi & Khurram, 2020), this approach may be ineffective in the case of innovative work behaviour since intrinsic motivation elements such as efficacy beliefs drive such behaviour among employees.

Employees with high self-efficacy and creative process engagement may assist the business in increasing the employee's innovation, corporate citizenship, and several other positive behaviours that bring productivity and innovation to the company, either intellectually or physically (Kanapathipillai et al., 2021).

1.2 Research Problem Statements

Employees are made up of different behaviors in the workplace, and some aspects of these behaviours are hard to quantify. However, this research aims to explore how the moral aspects of self-efficacy and creative process engagement affect employees' innovative work behavior in the telecommunication industry in Malaysia.

According to (Kanapathipillai et al., 2021; Abdullah et al., 2019), employees, in particular, are responsible for nearly eighty percent of new ideas. Studies on the direct link between innovative work behavior and job performance, on the other hand, have come up indecisive. Innovative work behavior and job performance are fundamentally distinct, particularly among people who have worked in innovative industries. Furthermore, work definitions frequently overlook individuals' personal innovative or creative contributions, which would demotivate them from generating and promoting fresh job-improvement ideas. On the other hand, previous research has shown that self-efficacy has a favorable effect on innovative work behavior and job performance (van Zyl et al., 2021; Kanapathipillai et al., 2021).

According to (Saeed et al., 2019), psychological empowerment is the ability to make decisions and influence others. Employees who do not feel psychologically empowered are more inclined to avoid being innovative in their work environments. When workers lack confidence, they attempt to obey rules, laws, and organizational policies. They do not participate in the creative processes that bring answers to organizational challenges, and they do not exhibit entrepreneurial or inventive characteristics.

Self-efficacy and creative process engagement are critical aspects of innovative work behavior. Self-efficacy is a component of the self-system composed of a person's attitudes, abilities, and cognitive skills. As a result, this system has a significant impact on our perception of circumstances and our responses to various scenarios. The ability to believe in one's abilities is a critical component of this self-system (Kanapathipillai et al., 2021; Cherry, 2020).

To collectively develop innovative products that are at the heart of organizational innovation, small, diverse groups must be able to both draw on members' perspectives and expertise to generate novel and potentially useful creative ideas and to evaluate their most creative ideas as worthy of further development to be successful in their endeavor. However, small, diverse groups struggle with both tasks, so they should be formed first. A complete theoretical picture concerning the dynamics of group creativity may be gained by considering how the process of evaluating creative ideas is intertwined with both individual and group cognitions about ideas and the surrounding environment (Harvey & Kou, 2013).

Self-efficacy and creative process engagement could contribute to employees' innovative work behavior (Kanapathipillai et al., 2021; Shahzadi & Khurram, 2020). People who can produce more positivity and some influence over their lives do better in life and have a higher quality of life according to (Shahzadi & Khurram, 2020). Self-efficacy is something that almost everyone possesses to some degree. As individuals who

face various everyday challenges and levels of motivation, the goal is to increase a sense of self-efficacy and direct it in ways that will enable the individual to deal more effectively. To produce innovative work behavior, employees need to construct a self-system based on their social skills, cognitive abilities, observational lessons, and social backgrounds, among other characteristics. Thus, this self-system is the structural foundation of our personality, and self-efficacy is one of its most essential components (Kanapathipillai et al., 2021; Shahzadi & Khurram, 2020).

Moreover, there is no clear consensus on how commitment is defined as a big problem because the causes and effects of innovative working behavior may vary considerably depending on whether the focus is on self-efficiency or creative process involvement. Additionally, being dedicated to a job does not always imply that workers are inherently self-effective or innovative in their business (Riaz et al., 2018). Self-efficacy directly impacts work performance, and it serves as an important motivator for employees. Although self-efficacy has been highlighted as a critical predictor of performance, only a few researchers have explored its direct impact on innovative work behaviour, which enhances work performance and innovative work behaviour (Vitapamoorthy et al., 2021). Moreover, (Bani Melhem, 2020; Lunenberg, 2011) discovered that self-efficacy generates stress, which impedes employees from indulging in innovative work behaviour in an organization.

High self-efficacy impacts assessing the level of self-confidence in developing new ideas and the growth of innovative work behavior by everyone. High self-efficacy has an impact on influencing the motivation of employees to reach the company's goals (Christianto & Handoyo, 2020). Organizations commonly use extrinsic factors of motivation to encourage desired behavior among employees; however, this method may not be helpful in the case of innovative work behavior because intrinsic motivation variables such as effectiveness beliefs are the driving force behind such conduct (Shahzadi & Khurram, 2020). People with a high level of self-efficacy are more likely to work hard and independently to achieve positive outcomes in the workplace because of a motivational orientation approach, which refers to one's aim to actively pursue favorable outcomes in the workplace (Santoso & Heng, 2019).

Next, not fully engaging in creative process participation, for instance, identifying and understanding problems, gathering all vital information, or considering too few alternatives, will not yield positive and quality innovative work behaviour (Saeed et al., 2019). According to (Castillo-Vergara & Garca-Pérez-de-Lema, 2021), successful organizations learn by doing, and creativity plays a significant part in developing new goods since successful companies learn and innovate faster and more efficiently. Organizational performance, prosperity, and long-term survival are increasingly dependent on the ability of employees to innovate and be creative at work (Anderson et al., 2014). Creativity is a forerunner to innovation since it involves distinctive cognitive processes that generate new ideas (Elidemir et al., 2020).

Moreover, recent research has enlightened workers' autonomy, motivation, and engagement in increasing creative activities (Yi et al., 2019). However, in most research,

creativity is seen as a result of a creative endeavor, with the creative process engagement component occurring before creating the creative output. Moreover, (Yi et al., 2019) mentioned that employees build creative ideas to address the common issues in the organization via the interaction of the creative process engagement components, such as problem identification, information search, encoding, and idea creation. Conversely, (Alias & Abdullah, 2021) has uncovered that although creative process engagement of employees leads to positive, innovative work behaviour, the impact is only moderate. Additionally, (Alias & Abdullah, 2021) has unearthed that the impact of creative process engagement on innovative work behaviour of employees in Malaysia is inferior to other countries in the ASEAN region.

Since self-efficacy and creative process engagement comprise decision-making, personal knowledge, and other components of labor activities that are difficult to evaluate, it is essential to understand how they impact employees in the telecommunication industry in Malaysia. Additionally, research on the impact of self-efficacy and creative process engagement on employees' innovative work behavior in the telecommunication industry in Malaysia has not been conducted previously. Therefore, this research highlights a gap in the literature that needs addressing. Thus, studying the influence of self-efficacy and creative process engagement on innovative work behavior would provide a thorough understanding of the factors that drive innovation.

1.3 Research Questions

The following research questions will guide in answering the influence of self-efficacy and creative process engagement on employees' innovative work behaviour in the telecommunication industry in Malaysia:

RQ1: Is there a statistically significant influence of self-efficacy on employees' innovative work behaviour in the telecommunication industry?

RQ2: Is there a statistically significant influence of creative process engagement on employees' innovative work behaviour in the telecommunication industry?

1.4 Research Objectives

This study was constructed to understand the relationship between self-efficacy and creative process engagement in employees' innovative work behaviour. The following are the key objectives of this study:

RO1: To access the statistically significant influence of self-efficacy on employees' innovative work behaviour in the telecommunication industry.

RO2: To scrutinize the statistically significant influence of creative process engagement on employees' innovative work behaviour in the telecommunication industry.

2. Theoretical Underpinning, Literature Review and Hypothesis Development

The following sub-sections focus on the theoretical underpinning, literature and hypotheses developed concerning self-efficacy, creative process engagement and innovative work behaviour.

2.1 Theoretical Underpinning

This study was grounded on the following theories.

2.1.1 Self-Efficacy Theory

Referring to the social learning theory introduced by (Bandura & Adams, 1977), different methods of treatment derived from a common cognitive mechanism can produce changes in defensive behaviour. Therefore, it was noticed that self-efficacy influences people's choice of activities and behavioural settings, how much exertion they use, and how long they will continue within the confront of deterrents and aversive encounters. The more grounded the self-efficacy, the more dynamic people adapt endeavours. Decreasing physiological excitement makes strides in performance by raising adequacy desires instead of by disposing of the drive that affects the defensive behaviour.

In this study, the researchers intend to show that Bandura's self-efficacy theory is a highly effective basis for supporting innovative work behaviour. In this notion, people's activities are classified according to their beliefs about their abilities and the outcomes they anticipate. According to research, most people who are confident in their abilities tend to put up more effort and endure difficult circumstances (Kanapathipillai et al., 2021; Kolil et al., 2020).

Additionally, the self-efficacy theory implies that individuals can work out the impact of what they do. The Theory of Self-Efficacy is based on the form a concept of person-behaviour-environment interaction and social cognitive theory as triadic reciprocity, where it is the interrelationship among individual, behaviour, and environment; reciprocal determinism is the conviction that behaviour, cognitive, and other individual variables, as well as environmental impacts, work intelligence as determinants of each other (Resnick, 2008).

2.1.2 Creative Process Engagement Theory

When employees are betrothed in creativity-relevant systems or procedures, it is referred to as creative process engagement. Based on (Zhang & Bartol, 2010), the Creative Processes Engagement Theory (CPE) comprises three phases: problem recognition, information seeking and translation, and idea creation. This research emphasizes the employee's (CPE) and considers it an extraordinary job commitment. Job commitment has been a theoretically significant subject in researching employees' accomplishments, organizational administration, and innovative behaviour (Kanapathipillai et al., 2021).

Moreover, (Kahn, 1990) was the first to introduce the concept of engagement which was then further expanded by scholars (Yasin Ghadi, et al., 2013). Job engagement

can also be deemed as a great sense of accountability and dedication to one's innovative behaviour (Kanapathipillai, 2021). Previous scholars have revealed that job engagement can significantly influence work-related outcomes such as innovative work behaviour (Kanapathipillai, 2021)

Additionally, according to the Componential Theory of Creativity, intrinsic motivation is a necessary but insufficient condition for a person to produce desired creative outputs to be considered creative. The Regulatory Engagement Theory proposes that how individuals interact with the process of achieving goals determines their degree of process engagement and, as a result, the repercussions of motivation on behaviour outcomes. Psychological empowerment is seen as a vital part of keeping individuals engaged in the creative work process and in improving innovative efforts, among other things. Its most basic definition is a collection of cognitions or states that are influenced by the workplace and assist people in creating an active attitude toward their jobs (Saeed et al., 2019).

Furthermore, according to (Aslam, 2017), people who act on purpose belong to the inspiration category, which predicts how people attach greater weight to their desires and a person's beliefs, attitudes, and behaviours. Therefore, if a person is aware of and understands the significance of his or her social standing and self-recognition, creative process engagement will be the source of drive for him or her to attain job satisfaction, performance, and innovative achievements (Kanapathipillai, 2021; Robertson, et al., 2012; Warr & Inceoglu, 2012).

2.1.3 Innovation at Work

Innovation is generally acknowledged as essential for companies' performance and success (Mielniczuk & Laguna, 2020). Innovation has become essential for businesses because of increasing consumer requirements and expectations and the worldwide evolution of the markets (Breier et al., 2021). The organization's affective connection is favourably linked with innovation in work development adoption or development.

Researchers say that workers who are emotionally or effectively involved in the company are more involved with their organization and are ready to achieve the objectives and fundamental values of the firm (Kanapathipillai et al., 2021; Purc & Laguna, 2019). Innovative work behaviour needs transformation so that people's willingness to adapt adds to the result of innovation (Kwahk & Lee, 2008). Additionally, this research will examine how self-efficacy and creative process engagement may support innovative work behaviour since previous research has highlighted the significance of innovation in physical labour.

2.2 Literature Review and Hypothesis Development

This section focuses on the literature review and hypothesis developed for this study.

2.2.1 The Relationship Between Self-Efficacy and Innovative Work Behaviour

Over the past four decades, the interest in self-efficacy has grown significantly in relation to people's views about their skills. In self-efficacy theory, several sources of self-effectiveness (e.g., mastery experiences, vicarious experiences, social convincing, and emotional and physiological conditions) are identified as contributing to self-effectiveness beliefs (Kanapathipillai et al., 2021).

In addition, people's motivation, actions, and other results are supposed to be determined by their sense of self-efficacy (e.g., working performance) (Shahzadi & Khurram, 2020). Interestingly, when confidence was low, self-efficacy positively impacted turnover intentions, and high confidence in the organization tamped up the effects of auto-efficacy on the intentions of leaving (Akram et al., 2016). Self-efficacy is defined as a belief in our capacity to organize and implement the action courses needed to achieve specific positive achievements (e.g., creativity and innovation) (Cherry, 2020). Such beliefs affect various areas of human activity in positive ways, such as innovative work behaviour (Kanapathipillai et al., 2021).

Based on (Kanapathipillai et al., 2021; Cetin & Askun, 2018), employees' self-efficacy and essential motivation have an intense substantial impact on positive work performance, enhancing innovative work behaviour in the organization. Moreover, (Nan-Nan & Sanamthong, 2019) have found that a rise in the degree of employees' self-efficacy is necessary to attain superior performance quality, leading to innovative work behaviour. According to research conducted on the online retailers in Malaysia by (Kanapathipillai et al., 2021), self-efficacy is positively correlated to innovative work behaviour, enhancing the retailers' job performance.

Self-efficacy also increases self-confidence in one's capacity to carry out tasks, leading to innovative work behaviour (Achyar et al., 2020), which is critical for overcoming obstacles throughout the innovation cycle. Moreover, (Vitapamoorthy et al., 2021; Purnama et al., 2020) have proven that self-efficacy positively impacts innovative work behaviour. This demonstrated that intrinsic motivation is more critical than an extrinsic incentive, particularly when increasing creativity (Adil et al., 2020). Furthermore, according to the findings of (Mielniczuk & Laguna, 2020), self-efficacy acts as a stimulant for creative behaviour, comparable to the behavior seen in predicting innovative workplace behaviour among workers. Conversely, (Lunenbergh, 2011) has found that self-efficacy creates stress among employees. As a result of stress, the employees may not undertake innovative efforts in the organisation (Bani Melhem et al., 2020; Abdullah et al., 2019).

The literature above deliberated the association between self-efficacy and innovative work behaviour of workforces and has identified gaps that need to be examined. Thus, based on the above literature, the following hypothesis is proposed:

H1: There is a statistically significant influence of self-efficacy on employees' innovative work behaviour in the telecommunication industry in Malaysia.

2.2.2 The Relationship Between Creative Process Engagement and Innovative Work Behaviour

Employees' participation in the creative process positively impacts their in-role performance, such as their involvement in innovative efforts. On the other hand, receiving assistance has a negligible impact on the aforementioned connection. Instead, the interplay between receiving and providing assistance from supervisors connects creative process involvement and innovative behaviours (Du et al., 2016).

When employees feel empowered, they are more likely to engage in creative processes. According to (Saeed et al., 2019), employees with high levels of intrinsic motivation become highly creative, which transforms into innovative work behaviours. Moreover, suppose an employee believes that his or her job responsibilities are meaningful and personally significant. In that case, he or she will devote more time and effort to understanding a problem from multiple perspectives, searching for a solution using a broad range of information from multiple sources, and developing many alternatives by connecting disparate sources of information which are all subsets of the creative process (Saeed et al., 2019). The degree of flexibility with which cognitive pathways are explored, the amount of attention devoted to specific components of the task, and the length of time that a particular route is followed in pursuit of a solution to the issue are all determined by the creative process itself. If cognitive processing is impaired, critical information will not be accessible or employed in problem-solving, resulting in a lack of creativity because of the impairment, leading to reduced innovative behaviours (Zhang & Bartol, 2010).

Additionally, based on (Sari et al., 2020; Kwon & Kim, 2019), workers must focus on creative work engagement to maintain innovative work behavior. This is parallel to (Saeed et al., 2019), who also elucidated that when employees concentrate on creative process involvement, it significantly leads to positive, innovative work behaviour. On the other hand, (Alias & Abdullah, 2021) has found that although creative process engagement of employees yields positive, innovative work behaviour, creative process engagement only moderately impacts employees' innovative work behavior. Moreover, (Alias & Abdullah, 2021) elucidated that the impact of creative process engagement on employees' innovative work behavior in Malaysia is much lower compared to its neighbouring countries.

The literature above reflected the connection between creative process engagement and employees' innovative work behavior and has recognized gaps that need to be scrutinized. Thus, based on the above literature, the following hypothesis is suggested:

H2: There is a statistically significant influence of creative process engagement on employees' innovative work behaviour in the telecommunication industry.

2.2.3 Innovative Work Behaviour

Employees' positive emotions about their work engagement mediated the beneficial effect of supervisors expressing positive emotions about employees' work engagement.

Employees' negative emotions about their work engagement mediated the beneficial effect of supervisors expressing positive emotions about employees' work engagement. Additionally, employees' positive emotions about their work engagement mediated the beneficial effect of positive emotions about employees' work engagement on their innovative behaviour. Positive emotions expressed by employees about their work engagement served as a mediator between the beneficial effect of supervisors expressing positive emotions about employees' work engagement on their innovative behaviour and the positive emotions expressed by employees about their work engagement (Wu & Wu, 2019). The variables that influence creative work behaviours are institutional and employee-related (Alfy & Naithani, 2021; Kanapathipillai et al., 2021). Employee learning orientation is favourably associated with innovative work behaviour, and these associations are mediated by creative self-efficacy (Atitumpong & Badir, 2018). In other words, employees with this kind of work-related personality are more adaptable to organizational change and may thrive in various organizations (Abukhait et al., 2020).

Intrinsic drive towards creativity leads to a greater degree of learning orientation at the individual level (the acquisition of new knowledge and inclination towards mastery of tasks). Professional development orientation is related to an employee's desire for demanding activities and learning, improving the creative resolution of problems, and turning issue solutions into innovation (Nakano & Wechsler, 2018). Employee participation in the creative process and its relationship to innovative work behaviour practices are investigated in this research. In this research, the creative process involved is seen as an influence that may help employees be more inventive at work.

Furthermore, innovative teamwork necessitates a true team-based environment in which connections are established via collaboration and social time. This environment will foster innovation by enabling ideas and inspiration to flow freely across departments of an organization (Kustanto et al., 2020). This idea provides room for further investigation into how the individual variable of self-efficacy interacts with creativity. As a result, this research will attempt to determine if the employees' self-efficacy and creative process in the telecommunication industry have a good connection with and encourage innovative work behaviour.

2.8 Proposed Conceptual Framework

The proposed conceptual framework in this research is to assess if self-efficacy and creative process engagement influence innovative work behaviour in the telecommunication industry. Figure 1 depicts the conceptual framework for this study.

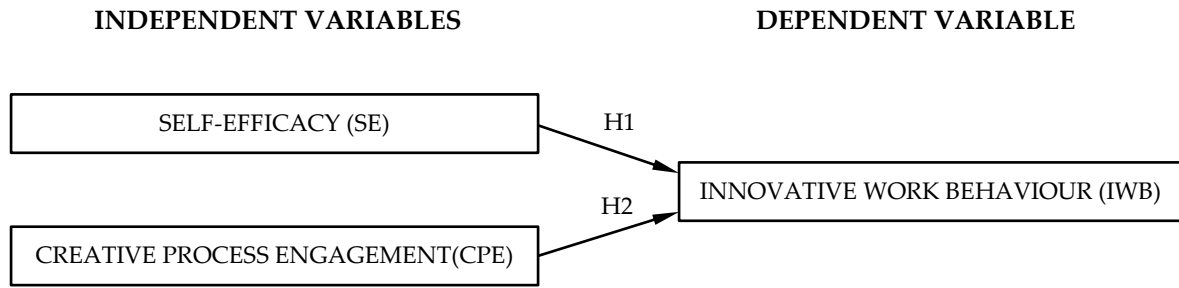


Figure 1: Proposed Conceptual Framework

3. Methodology

Table 1: Reliability Analysis

Variables	Cronbach's Alpha	No of Items
Self-Efficacy (SE)	0.731	5
Creative Process Engagement (CPE)	0.867	5
Innovative Work Behaviour (IWB)	0.814	5

Based on Table 1, the value of Cronbach's Alpha for self-efficacy is 0.731 with 5 items, and the second variable is the creative process engagement, which showed Cronbach's alpha value of 0.867 with 5 items. Finally, Cronbach's alpha value of innovative work behaviour is 0.814. All the Cronbach's values have shown more than 0.7, which means the construct is adequate for this study.

3.2 Population, Sampling and Measurements

This research aims to learn about the impact of self-efficacy and creative process engagement on the innovative work behaviour of employees in the telecommunication industry in Malaysia. Hence, the selected respondents are the employees of the telecommunication companies established in Malaysia's southern and western parts. According to the 2019 industrial insight report, 45,093 employees work for 214 companies (HRDF, 2021). The respondents come from different ages, academic levels, and positions. Based on the aims of this study, the (Krejcie & Morgan, 1970) table furnished the estimated sample size. Therefore, a suitable sample size based on (Krejcie & Morgan, 1970) tabulation is 381.

To reach a more significant and diverse audience, questionnaires were circulated through multiple media platforms such as email services, WhatsApp, Telegram, and QR codes. A total of 500 sets of questionnaires were distributed to the employees in the telecommunication companies. The response was 424, which is approximately an 84.8 percent response rate. Therefore, the response rate was deemed excellent and adequate for this study.

4. Findings and Interpretation

The following section provides the findings of this study, including the respondents' demographic profiles, factor analysis, descriptive analysis, correlation, and regression analysis.

4.1 Demographic Profile of Employees

The profile of the respondents studied is displayed in Table 2.

Table 2: Demographic Profile of Respondents (N=424)

Demographics	Category	Frequency	Percentage
Gender	Female	85	20%
	Male	339	80%
Age	18-30	200	47.2%
	31-40	137	32.3%
	41-50	58	13.7%
	>50	29	6.8%
Educational Background	High-school	1	0.2%
	Diploma	108	25.5%
	Degree	263	62.0%
	Master Level	50	11.8%
	PhD Level	2	0.5%
Position	Management	64	15.1%
	Administration	37	8.7%
	Engineering	296	69.8%
	Finance / Accounting	5	1.2%
	R&D	12	2.8%
	Other	10	2.4%

The demographic profile of the respondents surveyed in this research is shown in Table 2. The study indicates that a majority of 339 or (80.0%) of the respondents are males. The survey displays that the majority of (47.2%) of the respondents were between (18 - 30) years old. In terms of educational background, a majority of 263 or (62.0%) of the respondents have obtained an undergraduate degree. Finally, A majority of (69.8%) of the respondents are engineers in the telecommunication industry.

4.2 Mean and Standard Deviation

The descriptive statistics in Table 3 show the mean and standard deviation (SD) values of this research.

Table 3: Descriptive Statistics (N=424)

Factors	Mean	SD
Self-Efficacy (SE)	4.788	0.389
Creative Process Engagement (CPE)	4.798	0.403
Innovative Work Behaviour (IWB)	4.794	0.419

From Table 3, the creative process engagement (CPE) factor indicates the highest mean value of 4.798 ± 0.403 . The lowest mean value is self-efficacy (SE), 4.788 ± 0.389 . The means of all the items computed are more than 3.00. It reveals that most of the respondents agree with each item and have indicated the significance of self-efficacy (SE) and creative process engagement (CPE) on innovative work behaviour (IWB).

4.3 Correlation Analysis

To study how the variables are correlated, the correlation analysis is shown in Table 4: Correlation Matrix.

Table 4: Correlation Matrix (N=424)

Factors	SE	CPE	IWB
Self-Efficacy (SE)	1		
Creative Process Engagement (CPE)	0.858**	1	
Innovative Work Behaviour (IWB)	0.923**	0.836**	1

** Correlation is significant at the 0.01 level (2-tailed)

Based on the correlation matrix shown in Table 4, it was observed that the data significantly supported the measurement model. The correlation matrix recorded that the variable self-efficacy (SE) highly and significantly correlated with the variable creative process engagement (CPE) ($r = 0.858$; $p < 0.001$) and highly and significantly correlated with innovative work behaviour (IWB) ($r = 0.923$; $p < 0.001$). The variable creative process engagement (CPE) highly and significantly correlated with the variable innovative work behaviour (IWB) ($r = 0.836$; $p < 0.001$).

Therefore, it can be concluded that there is a strong positive association between the variable self-efficacy and creative process engagement. Additionally, the variable self-efficacy indicates a strong positive association with innovative work behaviour. Moreover, a strong positive correlation can be observed between creative process engagement and innovative work behaviour.

4.4 Regression Analysis

The regression procedure was used to test the relationship between the independent and dependent variables in this research (Bevans, 2020).

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.927 ^a	0.860	0.859	0.157

a. Predictors: (Constant), SE, CPE

From Table 5 Model Summary, $R = 0.927$ indicates the multiple correlation coefficient value, which exhibits a high degree of predictive accuracy. The $R^2 = 0.860$. This implies that 86% of the variation in the dependent variable (innovative work behaviour) can be explained by the independent variables (creative process engagement and self-efficacy).

Table 6: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	63.821	2	31.911	1291.110	0.000 ^b
Residual	10.405	421	0.025		
Total	74.226	423			

a. Dependent Variable: Innovative Work Behaviour (IWB)
 b. Predictors: (Constant), Self-Efficacy (SE), Creative Process Engagement (CPE)

Table 6 ANOVA shows that the independent factors statistically and substantially predict the dependent variable ($F=1291.110$, $p < 0.001$). Therefore, the regression model fit is good. Thus, the independent variables (creative process engagement and self-efficacy) can be used to predict the dependent variable (innovative work behaviour)

Table 7: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.048	0.096		0.500	0.617
CPE	0.180	0.038	0.167	4.716	0.000
SE	0.810	0.037	0.780	21.957	0.000

Dependent Variable: innovative work behaviour (IWB)

Table 7 Coefficients, show that creative process engagement (CPE) ($B = 0.180$; $p < 0.001$) and self-efficacy (SE) ($B = 0.810$; $p < 0.001$) are statistically significant.

Thus, this implies a significant relationship between the predictor variables (creative process engagement; self-efficacy) and the dependent variable (innovative work behaviour).

Based on Table 7 Coefficients, the linear regression equation is as follows:

$$IWB = 0.048 + 0.180 (CPE) + 0.810 (SE)$$

where:

IWB = Innovative Working Behaviour,

CPE = Creative Process Engagement,

SE = Self-Efficiency.

The result indicates that with a one-unit increase in creative process engagement (CPE), there is an increase in innovative work behaviour (IWB) by 0.180 units. Similarly, one unit increase in self-efficacy will increase the employees' innovative work behaviour by 0.810.

Additionally, the outcome of multiple regression analysis rates the influence of independent factors on the dependent variable. The stronger the standardization coefficient, the more significant the influence of the predictor variables on the employees' innovative work behaviour. With a standard coefficient (Beta = 0.780), the predictor

variable self-efficiency (SE) contributes the most to the variance in innovative work behaviour, and creative process engagement (CPE) follows with (Beta = 0.167).

5. Discussion

The first objective of this research was to examine the relationship between self-efficacy and innovative work behaviour of employees in the telecommunication industry in Malaysia. To realize this objective, it was hypothesized that there is a statistically significant influence of self-efficacy on employees' innovative work behaviour in the telecommunication industry in Malaysia.

The multiple regression analysis was applied to determine the relationship between self-efficacy and innovative work behaviour. The results showed a positive influence of self-efficacy on innovative work behaviour, and the relationship is statistically significant ($\beta = 0.810$ $p < 0.001$). This shows that the results are consistent with the literature, suggesting that self-efficacy is a significant determinant of innovative work behaviour. Therefore, H1 is supported by data.

The findings of this study are parallel to the discoveries of (Vitapamoorthy et al., 2021; Kanapathipillai et al., 2021; Mielniczuk & Laguna, 2020; Purnama et al., 2020; Achyar et al., 2020; Shahzadi & Khurram, 2020; Na-Nan & Sanamthong, 2019; Cetin & Askun, 2018) who have found that a rise in the degree of employees' self-efficacy is necessary for the attainment of superior performance quality which leads to innovative work behaviour. Moreover, self-efficacy is positively correlated to innovative work behaviour, and this enhances the quality of all the tasks undertaken by the employees in an organisation, leading to heightened confidence and superior job performance. Furthermore, the findings of this study negate previous findings by (Lunenberg, 2011), who elucidated that self-efficacy creates stress among employees, which hinders the employees from displaying innovative work behaviour in the organisation.

The second objective of this research was to examine the relationship between creative process engagement and innovative work behaviour of employees in the telecommunication industry in Malaysia. To realize this objective, it was hypothesized that there is a statistically significant influence of creative process engagement on employees' innovative work behaviour in the telecommunication industry in Malaysia. The multiple regression analysis was applied to determine the relationship between creative process engagement and innovative work behaviour. The results showed a positive influence of creative process engagement on innovative work behaviour, and the relationship is statistically significant ($\beta = 0.180$ $p < 0.001$). This shows that the results are consistent with the literature, suggesting that creative process engagement is a significant determinant of innovative work behaviour. Therefore, H2 is supported by data.

The findings of this study are parallel to the discoveries of (Sari et al., 2020; Kwon & Kim, 2019; Saeed et al., 2019), who confirm that to maintain innovative work behaviour, employees must converge on creative work engagement. Therefore, employees' engagement in the creative process positively impacts their in-role performance, such as

their immersion in innovative efforts. Additionally, the findings of this study have also invalidated the findings of (Alias & Abdullah, 2021), who discovered that although creative process engagement of employees yields positive, innovative work behaviour, it only moderately impacts innovative work behaviour.

The connection between self-efficacy and creative process involvement was statistically and positively significant in the sample group examined in this research. The majority of employees polled maintained that self-efficacy and creative process involvement encouraged innovative work behaviour in their organisation. Thus, this study reinforced that Self-Efficacy Theory and Creative Process Engagement Theory can be used to impact innovative work behaviour in any sample group positively. However, it is unlikely to promote innovative work behaviour in a strict, less flexible workplace.

6. Conclusion and Managerial Implications

Firstly, this study was able to show the significant influence of self-efficacy and creative process engagement on employees' innovative work behaviour in the telecommunication industry in Malaysia. This research observed that self-efficacy incontrovertibly supports Bandura's Self-Efficacy Theory (Bandura & Adams, 1977). This research noted that self-efficacy is a highly effective element that induces innovative work behaviour among employees of the telecommunication industry. Additionally, the statistical inferences applied in this study also support the discoveries of previous scholars (Kanapathipillai et al., 2021; Mielniczuk & Laguna, 2020; Purnama et al., 2020), who elucidated that self-efficacy influences employees' choice of activities and behavioural settings and as the results boost workplace creativity.

Secondly, this study has proven the significant impact of creative process engagement on employees' innovative work behavior in the telecommunication industry in Malaysia. This research strongly supports the Creative Process Engagement Theory illuminated by (Zhang & Bartol, 2010). Additionally, this research has provided solid statistical evidence on the significance of creative process engagement on innovative work behaviour, supporting previous researchers' breakthroughs (Sari et al., 2020; Kwon & Kim, 2019). Moreover, engaging in creative processes, for instance, identifying and understanding problems, gathering all vital information, or considering too few alternatives, will yield positive and quality innovative work behaviour (Saeed et al., 2019). Furthermore, (Castillo-Vergara & Garca-Pérez-de-Lema, 2021) mentioned that organizations that successfully engage in creativity would be able to implement their creative intent and innovate their companies faster and more efficiently.

In terms of the implications, management should engage employees in creative thinking, leading to innovative work behaviour. Employees from different teams should actively employ innovative work behaviour themselves. If managers want to enhance their organization's innovation performance, they should look at ways to enhance innovation. Furthermore, leaders should lead by example and not publicly criticize subordinates. Another noteworthy feature is the involvement of team members' opinions

and how the presence of a collaborative atmosphere may assist the innovative process and encourage new ideas.

Employees who are confident in their ability to complete challenging jobs and multitask have a favourable connection with innovative thinking. As previously said, creative process involvement comes before innovation since innovation is concerned with the actual application of new ideas and products.

Moreover, employees' self-efficacy is a good element for boosting innovation since creative behaviour is strongly linked to innovativeness. Therefore, to increase innovation in telecommunication companies, self-efficacy, and creative process engagement should be undertaken by team members, and they work together to improve team self-belief. By doing so, employees of the telecommunication companies will be more confident in their ability to achieve complex goals, improve creativity, and expand the possibilities for innovation.

Finally, this research was able to bridge the gap in the literature and bring to light the significant influence of self-efficacy and creative process engagement on employees' innovative work behavior in the telecommunication industry in Malaysia.

7. Limitations and Further Research

Without a doubt, the population examined is a major restriction of the relevant study. The bulk of respondents is telecommunications sector experts. As a result, this sample is not typical of the broader population from various industries. Furthermore, the framework developed to assess innovative work behaviour may not be the most representative of the population to whom the relevant questionnaire is sent. Another constraint to think about is the sample size. It might be higher, even if it is appropriate for such research. Finally, the way the questions are framed in the questionnaire and the Likert scale used to collect the responses may obscure the possibility that the respondents have varied views on the scales, which could impact the study's findings.

Acknowledgements

The authors would like to express their genuine appreciation to all the respondents in the telecommunication companies for allowing the authors to conduct this research and value the time they have spent answering the questionnaire.

Conflict of Interest Statement

The authors of this research would like to assert that there are no conflicts of interest linked with this research, and this research was not supported by anyone that could have influenced its results. As the researchers of this study, the authors authenticate its originality, accentuate that this research has not been published previously, and validate that it is not presently intended for publication elsewhere.

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