

## INNOVATIVE WORK BEHAVIOR IN THE MALAYSIAN MANUFACTURING COMPANY: WHAT REALLY MATTERS?

Ummi Naiemah Saraih<sup>1,2\*</sup>, Hanim Hamdan<sup>1</sup>, Tiffany Tijang Sim<sup>1</sup>, Junaid Ansari<sup>3</sup>, Mohd Hazmuni Saidin<sup>4</sup>,  
and Nur Syafiqah A. Rahim<sup>5</sup>

<sup>1</sup>*Faculty of Business & Communication, Universiti Malaysia Perlis*

<sup>2</sup>*Center of Excellence for Social Innovation & Sustainability, Universiti Malaysia Perlis*

<sup>3</sup>*Institute of Business Management, Korangi Creek*

<sup>4</sup>*SilTerra Malaysia Sdn Bhd, Kulim Hi-Tech Park*

<sup>5</sup>*Faculty of Social Sciences & Humanities, Universiti Teknologi Malaysia*

### ABSTRACT

Employees' innovative work behaviors (IWB) are essential for the organization as a whole to achieve high development and a competitive advantage in the market. Every firm must develop its system for boosting its employees' IWB as part of subsequent planning to attain the goal, particularly through HRM practices. We might have less information about which practices matter or how much they will correlate with IWB, but existing literature proves that they can have a significant impact on employees' IWB. The current study, therefore, addresses two aspects of HRM: training and development and rewards, to determine which aspect is most helpful in predicting an employee's IWB. The best HRM practices for boosting IWB should also be identified, along with the theoretical justifications for these methods and the relationship between HRM practices and IWB. We used a questionnaire survey to gather information from 170 employees of a manufacturing company in Penang, Malaysia, in order to analyze this research. The connections between all variables were examined using SPSS. In this study, the means for each variable were also presented. According to this research, a high mean indication with the values of  $\mu=4.74$  for rewards,  $\mu=4.36$  for training and development, and  $\mu=4.70$  for rewards IWB was found. The highest correlation between IWB and training and development was found in the Pearson correlation data ( $r=.362$ ,  $p=.000$ ), followed by rewards ( $r=.767$ ,  $p=.000$ ). The study's conclusions can help human resource practitioners design an HRM system that promotes inventive employee behavior and fosters an innovative workplace.

**Keywords:** Innovative Work Behaviours, Training and Development, Rewards, Manufacturing Industry

### 1.0 INTRODUCTION

In today's rapidly growing and competitive business world, innovation is critical for survival in the fast-paced evolution of global markets. Innovation, in this context, can encompass anything new or a modification to an existing product, idea, or field. In the workplace, fostering innovation is crucial as it provides businesses with a competitive advantage, enabling them to capture markets more swiftly and establish stronger connections with growing markets. This, in turn, can lead to greater prospects, especially in developed countries like Malaysia.

As reported by the Department of Statistics Malaysia Official Portal (DOSM, 2021), the manufacturing sector in Malaysia contributes 24.3% to the National GDP, marking a significant acceleration of 9.5% from a negative 2.7% in 2020.

It is imperative for the country to sustain this positive trend in its contribution to the national economy. One effective strategy to achieve high development and competitive advantage in the industry is by enhancing the element of Innovative Work Behaviors (IWB) among manufacturing employees. Given the limited information available regarding the impact of two key HRM factors, namely training and development, and rewards, on employees within the Malaysia.

As reported by the Department of Statistics Malaysia Official Portal (DOSM, 2021), the manufacturing sector in Malaysia contributes 24.3% to the National GDP, marking a significant acceleration of 9.5% from a negative 2.7% in 2020. It is imperative for the country to sustain this positive trend in its contribution to the national economy. One effective strategy to achieve high development and competitive advantage in the industry is by enhancing the element of Innovative Work Behaviors (IWB) among manufacturing employees. Given the limited information available regarding the impact of two key HRM factors, namely training and development, and rewards, on employees within the Malaysian manufacturing industry, this study aims to contribute new insights to the existing literature.

## **2.0 LITERATURE REVIEW**

The original concepts of Innovative Work Behaviors (IWB) can be nurtured with the support of innovation, providing the inventor with a proactive and confident mindset to take risks and accomplish tasks. While the creative process may not always be straightforward, a company with an innovative culture is likely to experience rapid expansion. Although traditional methods are reliable, venturing into new approaches is a worthwhile endeavor. Organizations that strive to remain sustainable, successful, and competitive in a dynamic business environment have consistently embraced innovation (Peters & Waterman, 1982). Previous studies have emphasized the necessity for focused research on IWB at the employee level (De Jong & Den Hartog, 2010). Employees, being in constant contact with processes and products, can identify potential improvements and new development prospects promptly, making their involvement in activities focused on creating and executing innovative ideas crucial. Consequently, management must understand how to shape and stimulate IWB. The Global Innovation Index 2017 asserts that a country capable of developing competitive innovation will succeed further (Dutta, Lanvin & Wunsch-Vincent, 2017). Malaysia is no exception to facing these transformative and challenging phases. Any organization neglecting the importance of innovation risks becoming the ultimate cause of the decline and destruction of existing firms.

To address these challenges, organizations heavily depend on the capabilities of their own members and the Human Resource Management (HRM) ability to develop and promote them effectively. While many studies have found support for a link between HRM and innovation (Messersmith & Guthrie, 2010; Jiménez-Jiménez & Sanz-Valle, 2008; Shipton et al., 2006), they often link HRM to innovation at the organizational level. However, employees' innovative behaviors are critical to an organization's innovative capacity since individuals form the foundation of all innovation. Each HRM practice plays a constructive role in developing an individual's competencies, which is essential in enhancing IWB among employees. While various HRM practices have been studied in previous research, no comparisons have been made to determine which practices have the most significant correlation in fostering IWB among employees. Therefore, this research focuses on comparing the effectiveness of two HRM practices, namely training and development, and rewards, in influencing IWB.

However, despite the importance of these practices, not all organizations are able to execute them due to their incapability to trigger Innovative Work Behaviors (IWB) in employees. Gaining a

deeper understanding of the factors that influence IWB and how they do so is critical, as it will provide a more coherent picture of the relationship between HRM practices and IWB. This paper aims to explain which HRM practices are most effective and identify practices that enhance innovation, specifically employees' IWB. The systematic review of the HRM practices-IWB literature is based on several articles whose content has been carefully analyzed to identify the best HRM practices for boosting IWB.

On the other hand, training and development have been studied by many researchers in the past, revealing a linkage in boosting IWB in employees (e.g., Knol & van Linge, 2009; Pratoom & Savatsomboon, 2012). All these studies found a direct positive effect. Bysted and Jespersen (2014) specified that training and development, as a competence development action, improves competent employees to trigger IWB. While many employees nowadays tend to secure jobs based solely on academic performance and receive training and development later on or not at all due to time-consuming factors, past research has contradicted this, proving that training and development significantly enhances the capability of boosting IWB.

The second HRM practice is rewards. The role of rewards in boosting employee creativity and innovation has been less investigated by past researchers (Ma, Y., & Corter, 2019). Through a rewards system, motivation is enhanced, and worker commitment is increased, playing a significant role in motivating employees to engage in improving their IWB. When employees are rewarded, they become more committed and generate innovative ideas for the company's proficiency (Iqbal Khan et al., 2022).

In addition, the socio-economics of Malaysia are heavily influenced by human resources activities in both the public and private sectors. The government plays a crucial role in encouraging efforts to motivate all sectors, both private and public, to boost Innovative Work Behaviors (IWB) in workers. Consequently, the government has structured development plans for Malaysia, especially in the field of human resources. However, the country's efforts to promote the importance of HRM practices to boost IWB appear insufficient and are not taken seriously into account. This indicates a gap in research in this particular field, prompting this study to provide a deeper insight. Moreover, it could benefit the nation by emphasizing the importance of enhancing IWB through HRM practices in terms of the economy. Businesses become better equipped to respond to challenges and capitalize on new products and market opportunities as a result. Despite the growing research interest in firm-level innovation, there is a lack of knowledge regarding how to stimulate creativity at the individual level. Such information is crucial for businesses to develop creative strategies and align employee behavior with those plans.

Penang, as one of the states in Malaysia, contributes significantly to the country's income, focusing on the development of industries such as manufacturing and tourism. According to reports, Penang aims to achieve a gross domestic product (GDP) growth of 5.4% by 2025, driven by sound economic fundamentals and a robust manufacturing sector, supported by a recovering services sector. The state plans to meet this growth projection through the goals outlined in its Penang Vision 2030. Penang has also been among the top contributors to the country, with RM7.9 billion in approved manufacturing investments between January and June 2022 (Malay Mail, 2023). This underscores the importance of finding innovative ways to sustain the performance of Penang's manufacturing workforce. This research aims to fill the knowledge gap by conducting a systematic assessment of the literature on the relationship between HRM practices and IWB at the employee level. Employees must actively participate in activities focused on creating and executing ideas for innovation to emerge. Consequently, management must understand how to shape and stimulate IWB. Increased IWB can lead to a higher level of innovation, contributing not only to the company's profit but also to the country's GDP. Among all factors, the design of HRM practices has been identified as a determinant of IWB (Messersmith & Guthrie, 2010; Jiménez-Jiménez & Sanz-Valle, 2008; Shipton et al., 2006).

### **3.0 METHODOLOGY**

This quantitative research utilized Statistical Package for the Social Sciences (SPSS) for data analysis. SPSS facilitates the calculation of frequency or statistics, providing accurate figures for data interpretation. A survey is a method of study involving the collection and analysis of data. It gathers data from a select group of people as respondents, focusing on their experiences and perspectives through sampling and questionnaire distribution.

This research specifically targeted engineers working in the company. A sample of 170 respondents was obtained from the population using the table of Krejcie and Morgan (1970). The sample size was chosen to evaluate and analyze the specific study objectives. In total, 159 questionnaires were returned from the respondents. The target population in this research consists of employees from a manufacturing company in Penang, Malaysia. Out of the 170 questionnaires distributed to the company's employees, 159 were returned.

The questionnaires comprised several sections, including Sections 1 to 3, to gather data on demographics and the tested variables. A 5-point Likert scale was used to collect responses from respondents. The items for all tested variables were adapted from previous authors (Zemuruka & Dangarembizi, 2020; Hamzah & Matkhairuddin, 2022; Scott & Bruce, 1994) and included the following: training and development (5 items), rewards from an extrinsic perspective (8 items), and Innovative Work Behaviors (IWB) (6 items).

### **4.0 RESULTS AND FINDINGS ANALYSIS**

#### **4.1 Demographic Analysis of Respondents**

This survey was distributed to a total of 159 employees in the company. Based on the feedback and responses received, it was observed that 61.44% (equivalent to 94 participants) are male, while 40.88% (equivalent to 65 participants) are female. Consequently, the company has a higher representation of male employees compared to females. In terms of age, the majority of employees fall within the 31–40 years range, constituting 49.06% (78 participants) of the company's workforce.

On the racial aspect, the company has employees from four different races. Malays make up 11.95% (19 participants), Indians contribute 2.52% (4 participants), and the Chinese exhibit the highest representation with 84.91% (135 participants). The "others" category has the lowest representation, with only one participant, contributing to 0.63% of the total workforce.

In relation to marital status, the majority of employees are single, accounting for 55.35% (88 participants). Married employees constitute 42.14% (67 participants). A smaller percentage is widowed, with 1.89% (3 participants), and divorced, with 0.63% (1 participant).

Regarding education, the results indicate that tertiary education (Undergraduate Degree) has the highest representation, accounting for 81.76% (equivalent to 130 people) of the workforce.

#### **4.2 Mean Analysis of the Study Variables**

Table 1 presents the mean values for the tested variables in the research, with a range of means reported from 4.36 to 4.74. Descriptively, these findings indicate that the means for all variables fall into the high indication category. The classifications for different mean levels based on the composite/average score for each variable are as follows: High (3.34 to 5.00); Medium (1.67 to 3.33); and Low (1.00 to 1.66).

As observed in Table 1, high mean scores were found for training and development ( $\mu = 4.36$ ) and rewards ( $\mu = 4.74$ ). Similarly, the mean for Innovative Work Behaviors (IWB) is reported as high, with  $\mu = 4.70$ .

**Table 1.** Mean Analysis

Variable	Mean
Training and Development	4.36
Rewards	4.74
Innovative Work Behavior	4.70

### 4.3 Reliability Analysis of the Study Variables

The reliability analysis involves various scales and ratings to assess the acceptance of the data. Generally, alpha values in the range of 0.66 and above are considered good and acceptable. In Table 2, the values of Cronbach's Alpha for the independent variables are presented, with training and development having a value of 0.733 and rewards having a value of 0.934. Similarly, the Cronbach's Alpha value for the criterion variable (IWB) is reported as 0.856. These values indicate that the reliability of the scale in this study is acceptable, as they surpass the suggested threshold mentioned earlier.

**Table 2.** Reliability Analysis

Variable	Cronbach's Alpha
Training and Development	0.733
Rewards	0.934
Innovative Work Behavior	0.856

### 4.4 Correlation Analysis of the Study Variables

As presented in Table 3, the correlation analysis aimed to illustrate the strength of the relationships between all of the tested variables and to indicate the degree of association between these variables. This analysis was conducted to estimate the association between the independent variables (training and development, rewards) and the dependent variable (innovative work behaviors). In detail, a very strong and highly significant correlation was observed between rewards and innovative work behaviors ( $r=.767$ ,  $p<0.01$ ). Additionally, the analysis revealed a moderate correlation between training and development and innovative work behaviors ( $r=.362$ ,  $p<0.01$ ). Thus, based on this research, the strongest association was found between rewards and innovative work behaviors.

**Table 3.** Correlation Analysis

Variables	Innovative Work Behavior
Training and Development	0.362**
Rewards	0.767**

## 5.0 DISCUSSIONS

According to Ghauri and Grønhaug (2005), reliability refers to the stability of the measure used to study the relationship between variables. The primary objective of this research is to investigate the relationship between two HRM practices and IWB among employees in the manufacturing industry. The correlation analysis suggests that HRM practices, particularly in training and development, and rewards, play a crucial role in enhancing IWB among employees.

The research findings indicate that IWB is significantly correlated with the improvement of knowledge and skills of employees in their daily work life. After identifying the best HRM practices for IWB, the researchers delved into the theoretical underpinnings of the HRM-IWB relationship, exploring the how and when. The study reveals that ability and opportunity enhancement through HRM practices have a favorable impact on both performance and IWB. This research is essential for enhancing employee performance and contribution to the company. For instance, rewards show a highly positive correlation with IWB ( $r=0.934$ ). This suggests that management in the manufacturing industry can take various actions to boost employee satisfaction with rewards, such as providing competitive salaries, determining appropriate methods for salary increases, and ensuring fairness in promotions.

Similarly, training is positively correlated with IWB ( $r=0.733$ ), indicating ways in which manufacturing management can enhance this HRM element in the company. Moreover, these HRM practices not only benefit the company but also act as soft skills that contribute to a better future for employees themselves. They determine an individual's ability to improve their own skills and commitment to their work. Therefore, this study aims to test the development and triggering of employees through various HRM practices. In today's fast-paced and challenging world, where "ideas burnout" is common, employers seek individuals with high motivation in innovative thinking skills. This research emphasizes the importance of finding and nurturing employees who are willing to invest in themselves to become more innovative in the workplace.

In the challenging corporate world, survival necessitates greater creativity than others, as markets crave new things that can capture attention. This requires a high level of IWB to stand out. Increased IWB not only produces high-quality work results but also enhances employment opportunities. Employment opportunities are crucial, contributing to income generation and economic growth. Therefore, this research aids employees in understanding the importance of improving their IWB to remain competitive in the industry and how HRM practices can help trigger their innovation.

Knowledge, skills, and the enhancement of IWB play pivotal roles as criteria for employees to achieve better work performance. Employees who lack IWB may struggle to contribute to the company, making it challenging to meet market demands on time. Slow progress from employees can significantly impact the company's performance in the industry.

Conversely, this study can assist employees in preparing and training themselves to improve, as they are the backbone of the company, carrying it toward success with their ideas and IWB. Through the current study, employees can learn and attend training and development courses to increase their knowledge and skills. This, in turn, provides them with a higher opportunity for increased IWB based on the knowledge and skills they acquire.

## 6.0 CONCLUSION

This research aims to study the impact of training and development, as well as rewards, on developing innovation skills among employees in the company. The use of SPSS software

facilitated a thorough analysis of the data, providing insights into the degree to which the findings confirm the linkage and relationship between HRM practices, such as training and development and rewards, and IWB among employees in the manufacturing industry.

Moreover, future studies are encouraged to incorporate a broader range of HRM practices, such as selection and recruitment, to gain a better understanding of the predictors of IWB among employees in the manufacturing industry.

While this study employed a quantitative approach to investigate the association between HRM practices and IWB, the researchers suggest that future studies might consider utilizing a qualitative research approach to design their studies. This could provide a more in-depth exploration of the experiences and perceptions of employees regarding HRM practices and their impact on innovative behaviors.

## REFERENCES

- Bysted, R., & Risom Jespersen, K. (2014). [Exploring managerial mechanisms that influence innovative work behaviour: Comparing private and public employees](https://doi.org/10.1080/14719037.2013.806576). *Public Management Review*, 16(2), 217-241. <https://doi.org/10.1080/14719037.2013.806576>
- DeDe Jong, J., & Den Hartog, D. (2010). Measuring Innovative Work Behaviour. *Creativity and Innovation Management*, 19, 23-36.
- Department of Statistics Malaysia Official Portal, Economic by State 2021. Retrieved at [https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=491&bul\\_id=L3NnMU44VnA0YjRxVXhuYUpZTmVnZz09&menu\\_id=TE5CRUZCblh4ZTZMODZlbnk2aWRRQT09](https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=491&bul_id=L3NnMU44VnA0YjRxVXhuYUpZTmVnZz09&menu_id=TE5CRUZCblh4ZTZMODZlbnk2aWRRQT09)
- Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (2017). The global innovation index 2017: Innovation feeding the world (10<sup>th</sup> Eds.), Cornell University, INSEAD, and WIPO, Ithaca, Fontainebleau, and Geneva. Retrieved at [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2017.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2017.pdf)
- Ghauri, P. N., & Grønhaug, K. (2005). Research methods in business studies: A practical guide. London: Pearson Education.
- Hamzah, N. M., & Matkhairuddin, S. (2022). Extrinsic rewards and job satisfaction among employees in RISDA Selangor. *e-Academia Journal of UiTM Cawangan Terengganu*, 1(2), 201-213. <http://dx.doi.org/10.24191/e-aj.v1i1i2.20444>
- Iqbal Khan, K., Azeem Naqvi, S. M. Q., Ghafoor, M. M., & Nayab, G. (2022). Effect of reward system on innovative work behaviour through temporary organisational commitment and proficiency: Moderating role of multiculturalism. *International Journal of Management Research and Emerging Sciences*, 10(2), 96-108. <https://doi.org/10.56536/ijmres.v10i2.87>
- Jiménez-Jiménez D., & Sanz-Valle, R. (2008). Could HRM support organizational innovation? *The International Journal of Human Resource Management*, 19(7), 1208-1221. <https://doi.org/10.1080/09585190802109952>
- Knol, J. & Van Linge, R. (2009). Innovative behavior: The effect of structural and psychological empowerment on nurses. *Journal of Advanced Nursing*, 65(2), 359-370. <https://doi.org/10.1111/j.1365-2648.2008.04876.x>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Ma, Y., & Corter, J. E. (2019). The effect of manipulating group task orientation and support for innovation on collaborative creativity in an educational setting. *Thinking Skills and Creativity*, 33. <https://doi.org/10.1016/j.tsc.2019.100587>
- Malay Mail. Penang aims to hit 5.4pc GDP growth by 2025. Retrieved at <https://www.malaymail.com/news/malaysia/2023/03/14/penang-aims-to-hit-54pc-gdp-growth-by-2025/59559>
- Messersmith, J. G., & Guthrie, J. P. (2010). High performance work systems in emergent organizations: Implications for firm performance. *Human Resource Management*, 4(2),

241–264. <https://doi.org/10.1002/hrm.20342>

Peters T. J., & Waterman R. H. (1982). *In search of excellence: Lessons from America's best run companies*, New York: Harper & Row.

Pratoom, K., & Savatsomboon, G. (2012). Explaining factors affecting individual innovation: The case of producer group members in Thailand. *Asia Pacific Journal of Management*, *Vol. 29*(4), 1063–1087. <https://doi.org/10.1007/s10490-010-9246-0>

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behaviour: A path model of individual innovation in the workplace. *Academic Management Journal*, *37*, 580–607. <https://doi.org/10.2307/256701>

Shipton, H., West, M. A., Dawson, J., Birdi, K., & Patterson, M. (2006). HRM as a predictor of innovation. *Human Resource Management Journal*, *16*(1), 3–27. <https://doi.org/10.1111/j.1748-8583.2006.00002.x>

Zemburuka, I., & Dangarembizi, F. (2020). An assessment on the impact of training and development on employees' performance in the Namibian Defence Force at Okahandja. *International Journal of Human Resource Studies*, *Vol. 10*(3), 153–189. <https://doi.org/10.5296/ijhrs.v10i3.17496>