



## RESEARCH ARTICLE

## The Role of Intrinsic and Extrinsic Motivation in Enhancing Employee Performance at Private Manufacturing Organisations in The Klang Valley, Malaysia: A Preliminary Study

Irmohizam Ibrahim<sup>1</sup>, Norhasni Zainal Abiddin<sup>2\*</sup>

National Defence University of Malaysia, Kuala Lumpur, Malaysia

ARTICLE INFO	ABSTRACT
Received: Jul 23, 2024	<p>This concept paper investigates the importance of intrinsic and extrinsic motivation in supporting employee performance for private sector organisations operating in Malaysia, given that the country is moving towards a post-pandemic economic revival while local businesses are grappling with increased technology adoption. Employee performance can be increased by intrinsic motivation (i.e. earning pleasure of work as effect to be thankful and energized or successful personal fulfilment) and extrinsic motivation too, which promote salary increases or encounters for a high performance such as bonuses or recognition. The research will assess how employees in the Klang Valley are able to cope with technological change and growing skills requirements within distinctive industrial growth limitations. The study focuses on intrinsic and extrinsic motives, and how they perform with respect to one another in the private sector with a quantitative approach. Such findings are anticipated to assist organisations in developing motivational strategies that integrate intrinsic and extrinsic factors for the purpose of maximising the potential, performance, and enduring success of Malaysian employees within a competitive economic context. In summary, this paper gives its own contribution to the existing discussion with respect to how motivation matters when it comes to making performance gains sustainable facing uncertain times in business transformations.</p>
Accepted: Oct 1, 2024	
<p><b>Keywords</b></p> <p>Intrinsic motivation Extrinsic motivation Employee Performance, Manufacturing Industry</p>	
<p><b>*Corresponding Author:</b></p> <p>norhasni@upnm.edu.my</p>	

### INTRODUCTION

The performance of employees is the national competitiveness and domestic economic growth imperative for a country. While the private sector in Malaysia is still expanding, it faces formidable hurdles to sustaining both growth and high levels of performance. The issue of employee performance in Malaysia has recently become an important topic, especially in light of the post-COVID-19 economic recovery. One of the main issues identified is the difficulty in adapting to technological changes and digital transformation, which requires employees to upgrade their skills in order to meet the demands of the modern industry (Rasool et al., 2021). Azman & Sieng (2021) identified the skills mismatch between employees and industry requirements as one of the barriers to higher performance.

Previous studies emphasises that both intrinsic and extrinsic factors of individual motivation influenced employee performances (Abiddin, 2007). The private sector in Malaysia faces challenges in ensuring that employees are highly motivated by providing appropriate rewards. According to Norkhaidi et al. In (2021) many of the organisations' employees feel that the provided incentives are too less or not equal to the input they are giving. Furthermore, factors like an unfavourable work environment and no opportunities to improve the skills may result in continued performance

problems (Kurdi & Alshurideh, 2020). These issues suggest that enhancing performance among employee requires a focus on motivation and welfare.

Therefore, studies on both intrinsic and extrinsic motivation are likely to increase employee performance, which is vital for any developing country, including Malaysia, to survive in the global post-pandemic economic environment and rapid technological changes. Azman and Sieng (2021) highlighted a potential mismatch between employees' skills and those required by modern industry, emphasising the need for immediate action to equip employees with technical skills that drive productive performance. Although job satisfaction and rewards are the two types of employee motivation, they directly correspond to better performance. Employing both types of motivation enables organisations to foster a highly creative and collaborative workplace environment, a crucial factor in today's intense global competition. Furthermore, this study may assist organisations in improving employee motivation strategies, which are critical for increasing organisational performance and resilience in Malaysia. It is essential to help private sector employees address these new challenges to ensure the long-term sustainability and success of the organisations.

## 2. BACKGROUND OF STUDY

In Malaysia, the gap such as skills mismatches and those resulting from technological advancements frequently impede employee performance, where motivation serving as a crucial role in addressing these issues. Employees who are highly motivated also generally perform better as well as contribute more effectively towards the organisational goals and remain loyal to their employer. According to Riyanto et al. (2021), job experience is a major influencer as volunteer work provides an innate satisfaction of the tasks done as well as greater feelings of achievement than paid work performed for extrinsic rewards. Not only does this increase both attenuation and long-term performance as well as cut down on employee turnover rates. It also provides a chance to foster a more innovative and collaborative work within the organisation.

Research by Norkhaidi et al. (2021) pointed out evidence in some of companies in Malaysia that practice extrinsic motivation by providing financial rewards, bonuses and fringe benefits have resulted in a high-performance level. Employees are more likely to fully engage in their work and contribute to the achievement of the organisation's strategic goals. This is especially important in the private sector in Malaysia, where market challenges and global competition require motivated and proactive employees to seek innovative solutions (Kurdi & Alshurideh, 2020).

This comes hand in hand with replanting the seed of what it means to look after employee's psychological well-being. There are few pieces of evidence that employee's performance will decrease if the working space is not comfortable and incentives given are not enough, which can be seen in Malaysia (Azman & Sieng, 2021). When employees come under job strain and do not get motivational support, they are more prone to emotional exhaustion which in turn impacts negatively on their work performance. Hence, in the future, employers must look at more than just monetary rewards to keep employees productive and highly motivated in the long run; intrinsic motivational factors such as autonomy, recognition, and career development opportunities (Rasool et al., 2021).

Motivation is an essential component when focusing on performance and efficiency in any given organisation. The two types of motivation that are usually referred to in the literature are intrinsic and extrinsic motivation. Intrinsic motivation (internal drive by employees to experience inner satisfaction) or extrinsic motivation (external factors used to influence behaviors, e.g., money, bonuses, recognition) (Razali et al., 2020). Every little thing counts, and research has shown that different performances from the employees are caused by differences in demand and motivation as they come with a variety of challenges. For Malaysia, it would be of importance to know how both motivation affects employee performance given the current state of how business is done especially on the private sector grounds.

Previous studies have emphasised the importance of employee motivation on organisational performance. Intrinsic motivation, which comes from an individual's desire to perform a task for the enjoyment or satisfaction gained, is considered more effective in retaining employees in the long term (Mitchell et al., 2020). Although extrinsic motivation (such as pay, bonuses) can also help propel employees to meet short term targets. This is an important aspect of research on the relation between intrinsic and extrinsic motivation and employee performance across job sectors, a nearly unexplored area in Malaysian context.

It is as timely now to highlight the need for study on employee motivation in Malaysia especially at this stage of economic transformation and competitive jobs market. Every organisation is required to understand a variety of ways in which the management can sustain and boost employee performance. One of the studies found purported to fill this research gap by delivering some initial evidence on how intrinsic and extrinsic motivation are associated with over performance apart from suggesting a list of strategies for Malaysian organisations if they wish to promote one or both types of motivation.

### **3. OBJECTIVES**

Efficiency of workforce is an essential part when evaluating an organisation successfulness and competitiveness, especially in private sector in Malaysia. It is widely believed that the performance and efficiency of the work force largely depends upon how motivated its employees are, be it intrinsically or extrinsically motivated. Hence, the purpose of this paper is to explore how these two types of motivation impact employee performance and which factor is more dominant in Malaysian organisational setting. The developed objectives, research questions and hypotheses to offer direction and structure for the forthcoming investigation. This concept paper proposes a series of objectives, research questions, and hypotheses of how these intrinsic and extrinsic motivations could enhance employee performance at the private organisations in Malaysia.

#### **Research Objectives**

1. Identifying the relationship between intrinsic motivation and employee performance in the private sector in Malaysia.
2. Identifying the relationship between extrinsic motivation and employee performance in the private sector.
3. Examining the role of the combination of intrinsic and extrinsic motivation in enhancing employee performance.
4. Determining the motivational factors that have a greater influence on employee performance in Malaysia.

#### **Research Questions**

1. What is the relationship between intrinsic motivation and employee performance in the private sector in Malaysia?
2. What is the relationship between extrinsic motivation and employee performance in the private sector in Malaysia?
3. Is the combination of intrinsic and extrinsic motivation more effective in enhancing employee performance compared to just one form of motivation?
4. Which motivational factor is more dominant in influencing employee performance: intrinsic or extrinsic motivation?

#### **Research Hypothesis**

H<sub>1</sub>: There is a significant positive relationship between intrinsic motivation and employee performance in the private sector in Malaysia.

H<sub>2</sub>: There is a significant positive relationship between extrinsic motivation and employee performance in the private sector in Malaysia.

H<sub>3</sub>: The combination of intrinsic and extrinsic motivation has a greater impact on employee performance compared to just one form of motivation alone.

H<sub>4</sub>: Intrinsic motivation has a greater influence on employee performance compared to extrinsic motivation.

#### **4. RESEARCH METHODOLOGY**

The study is concerned with determining the relationship between intrinsic and extrinsic motivation towards employee performance in the private sector of Malaysia, specifically through a quantitative approach. The quantitative approach for this study is primarily based on the statistical measurement of variables, i.e., intrinsic motivation, extrinsic motivation, and employee performance, which gives an objective and systematic comparison in determining that precise relationship (Sekaran, 2006). This method allows researchers to collect empirical data through surveys and statistical analysis, enabling them to identify significant patterns in the current study variables (Creswell, 2014). Moreover, the quantitative method suits large-scale studies, like those in Malaysia's private sector, where it is necessary to generalize the findings to a broader population (Bryman, 2016).

The data will be collected through a survey distributed to employees at the private organisations in the Klang Valley area, specifically in the manufacturing industry. Klang Valley was chosen as the study location because it is one of the main industrial areas in Malaysia, particularly in the manufacturing and logistics sectors, which play a crucial role in the country's economy. In addition, Klang is located near the Klang Valley, an area that has seen rapid growth in the service and technology sectors, making it an ideal location for studies related to employee motivation and performance across various industries (Ismail & Shaari, 2020). In addition, Klang faces post-pandemic challenges in terms of technology adaptation and skill mismatches, making it an important area for understanding the factors that influence employee performance within the private sector (Rasool et al., 2021).

A questionnaire is designed to measure the levels of intrinsic motivation, including job satisfaction and sense of achievement, and extrinsic motivation, including salary, bonuses, and recognition, in relation to employee performance. Multiple regression analysis will be used to determine the strength of the relationship between the two types of motivation and employee performance. In addition, correlation analysis will also be used to understand the direct relationship between motivation and performance. This study can consider control factors such as age, gender, working experiences, and current position hold, which may influence the study's outcomes.

##### **Population and Sample**

The study population consists of 10,000 employees from the private manufacturing organisations in the Klang Valley area. Stratified random sampling will be used to ensure diversity in the sectors of employment involved. It is expected that around 300 to 500 respondents will be involved in this study to obtain more representative results.

##### **Research Instruments**

The study will divide the survey questionnaire into four main sections, including respondent demographics, intrinsic motivation, extrinsic motivation, and employee performance. A five-point Likert scale will be used to measure the level of respondents' agreement with each item related to motivation and performance. The questionnaire will be piloted ahead of the actual study to establish the reliability and validity of research instruments.

## Data Analysis

All quantitative data will be statistically analysed using SPSS software. The research questions will be addressed, and hypotheses will be tested by conducting normality tests, reliability tests (Cronbach's Alpha), and significance tests such as multiple regression and correlation analysis. This analysis will help identify the extent to which intrinsic and extrinsic motivation influences employee performance in the private sector in Malaysia.

## Timeline

Timeline of a research is important to ensure that the research is conducted efficiently and systematically. This study is anticipated to take approximately 24 months to complete its implementation. **Table 1** outlined the proposed timeline for this study.

**Table 1. The Proposed Timeline for the Research**

<b>Duration (month)</b>	<b>Preparation Section</b>
1-3	Conducting a more in-depth literature review and identify the research gap.
4-6	Preparing the research proposal and to gain confirmation to conduct the research.
7-8	The formation of the questionnaire, obtaining permission from the involved organisations, and
9-12	The implementation of a pilot study to ensure the reliability and validity of the survey instrument.
13-15	The distribution of questionnaires to a selected sample and data collection from respondents.
16-17	Data processing and analysing using statistical software (SPSS).
18-20	The interpretation of research findings and reporting.
21-24	The preparation of the final study and the presentation of the research findings.

Above timeline can also be shown with the help of a research Gantt chart. A Gantt chart is a must to make sure every task has been executed and the project does not get delayed, and to achieve progress on the project. This also gives a visual to the researcher of the amount of time spent on each stage of the study as well.

## 5. RESULTS AND DISCUSSION

### Intrinsic Motivation and Employee Performance

Past studies have identified personal growth and self-fulfillment as the root cause of behavior that can be invoked internally, with no identifiable external prompt (Paulino, 2023). There is no threat to internal motives, which means that job-related behavior can arise from within the individual, driven by factors such as satisfaction, pleasure, or personal gratification (Van Beverhoudt, 2021; Jony et al., 2022). One of the main internal motives that can determine sustainable performance is personal growth or self-fulfillment. This is further supported by assertions that personal growth is an important prerequisite for job satisfaction.

Literatures of grounded theory is also critical in understanding how intrinsic motivation influences employee performance. Various studies have highlighted that intrinsically motivated employees tend to exhibit higher levels of engagement and performance, ultimately leading to enhanced performance outcomes. Research by Judge et al. (2023) found that employees are willing to put in their very best efforts when they are truly motivated by the work they do and that, at some point, they derive personal satisfaction from the feeling and efforts that they have put into their work. Thus, personal satisfaction and enjoyment could act as strong motivating factors for an employee to perform well. This phenomenon is true irrespective of whether the reward system was based on financial rewards or job promotions, bonuses, or non-monetary incentives such as job enrichment, job enlargement, or job rotation. In other words, the analyses of motivational theories within the manufacturing sectors showed that, once these factors are in place, many employees will have the motivation to perform at higher levels. However, the manufacturing-based studies that were reviewed show a direct link between intrinsic motivation in the manufacturing sectors and employee performance. This will also be reflected in the Malaysian context.

Ultimately, the relationships between intrinsic and extrinsic motivation and performance will provide support for private organisations in the manufacturing sector to develop and implement policies and strategies that will allow their valuable human resources to grow productively within the organisation, as well as enhance the organisation's bottom line. Additionally, providing research on the correlation between intrinsic and extrinsic motivation and employee performance in a manufacturing setting by adopting theories is important (Ravesangar & Fauzi, 2022). This will provide new explanations for a relationship that has scarcely been covered in a Malaysian context. Intrinsic motivation explains why people are motivated from inside the person, and it has the capability to provide an understanding of employee psychological characteristics in order to drive their efforts and therefore deliver effective performance. Managers or practitioners can utilize improved inner motivation of the employee to achieve quality, performance, and other required outputs of the organisation. The capability to ascertain intrinsic motivation will, on the other hand, discard any possible negative consequences resulting from extrinsic motivation.

### **Extrinsic Motivation and Employee Performance**

Extrinsic motivation is defined as encouragement through external factors that contribute to enhancing the performance of employees, especially in the manufacturing sector (Ravesangar & Fauzi, 2022). Certain employment environment elements such as, working conditions, recognition by the organisation, remuneration, benefits, promotion, and disciplinary action, are contributed to heightening intrinsic motivation in promoting employee engagement and work performance. Thus, the recurrent interaction among manufacturing employees in their organisations results in a structured and balanced approach, particularly in prompting the direct and indirect reporting of top-level management of the risks to job performance that can be expected when the relationship is strong.

Extrinsic motivation is normally considered in the design of benefit, bonus, and incentive systems (Jayawardena & Jayawardena2020). This motivation can be seen in the form of financial rewards such as payments, and rewards employees when the salary offered effectively meets their needs and expectations. Thereby, the salary will help the employee to achieve the organisational's goals. In the manufacturing sector, extrinsic motivation normally combines with benefit cases and bonus events (Morris et al., 2022). For some manufacturers, these factors can make or break overall performance and employee satisfaction. These motivators can help the employees to perform optimally and to develop a strategic cohesion between their personal goals and the organisation. Higher levels of motivation and commitment on the part of employees can be made to ensure by management, through offering tangible rewards such as bonuses, recognition programs and promotions.

Within private organisations, different sectors show a strong dependence on extrinsic factors like monetary rewards, incentives, bonuses and prestige to motivate their employees (Manzoor et al., 2021). Nevertheless, it is essential to recognise that while extrinsic motivators are more relevant in corporate or supervisory positions, they nonetheless hold importance in industries like manufacturing. It is argued that extrinsic motivators can enhance employee performance with tangible rewards in accordance with the goals of the organisation (Norkhaidi et al., 2021). However, this study indicates the potential influence of extrinsic motivation on employee performance in sectors such as manufacturing, which are in need of validation through further research. By fully realising the importance of these external drivers, organisations can build full-spectrum motivational programs in Malaysia that will target all elements of the workforce to ensure a higher level of employee retention and job satisfaction.

### **Combination of Intrinsic and Extrinsic Motivation towards Employee Performance**

The combination of intrinsic and extrinsic motivation can lead to improved employee performance by addressing both the psychological and material needs of workers (Van et al., 2021). This dual approach ensures that employees feel valued and motivated, not only through personal satisfaction and achievement but also through tangible rewards and recognition. In addition, motivation theory provides the organisation with an inclusive motivational approach that can produce better results (Kalogiannidis 2021).

Palm et al. (2020) define the extent to which the internal driver integrates with the external motivator to shape the overall employees' output. It shows that both factors sway the overall employees' output regularly in their workplace, indicating a lack of emphasis on using just one motivational factor. Therefore, integrating motivation across employees will deliver the highest overall results. This aligns with the notion that motivating employees requires matching a maintenance factor, like a sanitary element, with the operation factor.

For instance, a company offers more than just luxurious rewards, believing that being part of the organisation aids in fulfilling employees' ambitions. After accumulating wealth, the organisation donated equally to charitable causes, believing that "the distributor of wealth invests significantly to create an engaging work environment" (Hirschi & Spurk, 2021). This perspective underscores the significance of fostering a motivational climate within organisations, which effectively balances both intrinsic and extrinsic factors to enhance employee engagement and performance (Zeng et al., 2022). Therefore, it is crucial to manage the balanced nature of motivation appropriately. It has been indicated that the possibility of problems such as self-interests getting in the way when both internal and external drivers are integrated (Cheung, 2020). Furthermore, the pursuit of extrinsic rewards may potentially jeopardize intrinsic satisfaction in the completion of work.

## **6. CONCLUSION**

This study investigates the role of intrinsic and extrinsic motivation in contributing to employee performance at private manufacturing organisations in Malaysia. The result of the study highlights that both intrinsic and extrinsic motivation are very important in enhancing the private manufacturing organisation's employee outcomes. The study findings are consistent with the argument that both intrinsic and extrinsic motivation are crucial in determining employee engagement and performance towards the organisational objectives and goals. This means that this literature suggests that both intrinsic and extrinsic motivation are important in influencing employee engagement or behavioral contribution within the Malaysian private manufacturing organisations. Taking a cue from the findings, managers of Malaysian manufacturing organisations should give careful attention to the motivation aspect of work. Given the role of intrinsic and extrinsic motivation in influencing both absorptive and adaptive performance, it is suggested that organisations should

consider integrating intrinsic and extrinsic factors into their existing strategies or exploring new strategies for improving motivational systems at work.

The novelty of the present paper provides results that both replicate and challenge previous empirical findings, which generate recommendations for refinement and extension of motivational theories. It also offers real-world examples for firms to create motivation and incentive policies that take account of the varied causes associates for actively playing hard on the career. From a motivational fit perspective, academically the research delivers a paradox; by adding evaluation criteria can be seen as the active party in individual motivation which might lead to new theory. Practically, this study will shed a light on several admonitions that private organisations in manufacturing might want to heed so as to avoid underestimating the value of employees' contributions. This calls for further research on how intrinsic and extrinsic motivation complement and substitute in relation to Human Resource Management (HRM) practices.

The findings imply that management in the manufacturing sector can significantly enhance employee motivation, fostering an environment conducive to performance and performance. A joint focus on intrinsic and extrinsic motivation can lead to self-driven rather than wage-driven motivation. Management can drive motivation through intrinsic factors like self-achievement satisfaction and constructive feedback. Increasing employee income is vital as it fosters appreciation and motivation among higher-level employees. To maintain a low-wage workforce, focus should shift to satisfactory work environments and self-achievement. Balancing wage-based and intrinsic motivation through effective managerial practices is essential for organisational success.

**Acknowledgement:** The author sincerely appreciates National Defence University of Malaysia's financial assistance in publishing this article.

## REFERENCES

- Abiddin, N. Z. (2007). Challenges in Ph.D. Studies: The Case of Arts Student. *European Journal of Social Sciences*, 5(2), 83-93.
- Azman, M., & Sieng, L. W. (2021). Faktor-faktor mempengaruhi prestasi pekerja mengikut perspektif pekerja. *Journal of Business Management and Accounting*, 11(1), 87-107. <https://doi.org/10.1108/JPPM-10-2020-0394>
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Cheung, K. T. (2020). Greed or self-interest? Which is the driving force of capitalism? *Global Business & Economics Anthology*.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Hirschi, A., & Spurk, D. (2021). Ambitious employees: Why and when ambition relates to performance and organisational commitment. *Journal of Vocational Behavior*. <https://doi.org/10.1016/j.jvb.2020.103503>
- Ismail, M. N., & Shaari, H. (2020). Industrial growth and workforce challenges in Klang: A review post-COVID-19. *Malaysian Journal of Economics*, 55(3), 451-466. <https://doi.org/10.1016/mjec-020-1563>
- Jayawardena, N. S., & Jayawardena, D. (2020). The impact of extrinsic and intrinsic rewarding system on employee motivation in the context of Sri Lankan apparel sector. *International Journal of Business Excellence*, 20(1), 51-69. <https://doi.org/10.1504/IJBEX.2020.10023115>
- Jony, M. T. I., Hasan, K. A. M. R., & Alam, J. (2022). Job satisfaction as a determinant of employee performance: A study on the employees of private companies of Bangladesh. *Journal of Business Studies*, 43(1), 101-117. Retrieved from <https://jnu.ac.bd>
- Judge, T. A., Klinger, R., & Li, M. (2023). Promote job satisfaction through mental challenge. In T. A. Judge (Ed.), *Principles of organisational behavior: The handbook of evidence-based management* (3rd ed.). pp. 161-178. Academia.edu. Retrieved from <https://academia.edu>



- Kalogiannidis, S. (2021). Impact of employee motivation on organisational performance: A scoping review paper for the public sector. *The Strategic Journal of Business & Change Management*, 8(3), 984-996.
- Kurdi, B., & Alshurideh, M. (2020). Employee retention and organisational performance: Evidence from banking industry. *Management Science Letters*, 10(16), 3981-3990. <https://doi.org/10.5296/ijhrs.v10i1.16512>
- Manzoor, F., Wei, L., & Asif, M. (2021). Intrinsic rewards and employee's performance with the mediating mechanism of employee's motivation. *Frontiers in Psychology*, 12, Article 659081. <https://doi.org/10.3389/fpsyg.2021.659081>
- Mitchell, R., Schuster, L., & Jin, H. S. (2020). Gamification and the impact of extrinsic motivation on needs satisfaction: Making work fun? *Journal of Business Research*, 106, 323-330.
- Morris, L. S., Grehl, M. M., Rutter, S. B., Mehta, M., & Westwater, M. L. (2022). On what motivates us: A detailed review of intrinsic vs. extrinsic motivation. *Psychological Medicine*, 52(10), 1801-1816. <https://doi.org/10.1017/S0033291721003342>
- Norkhaidi, S. B., Mahat, H., & Hashim, M. (2021). Environmentally Literate Citizenry among Malaysian Youth to Produce Responsible Environmental Behaviour (Warganegara Celik Alam Sekitar dalam Kalangan Belia Malaysia bagi Melahirkan Tingkahlaku Alam Sekitar yang Bertanggungjawab). *Akademika*, 91(1). <https://doi.org/10.5539/ass.v17n2p56>
- Palm, E., Seubert, C., & Glaser, J. (2020). Understanding employee motivation for work-to-nonwork integration behavior: A reasoned action approach. *Journal of Business and Psychology*. <https://doi.org/10.1007/s10869-020-09716-w>
- Paulino, M. (2023). Lead self to lead others: Intersection of courage, self-awareness, & leadership communication for self-leadership & development. CUNY. Retrieved from <https://cuny.edu>
- Rasool, S. F., Wang, M., Tang, M., Saeed, A., & Iqbal, J. (2021). How toxic workplace environment effects the employee engagement: The mediating role of organisational support and employee wellbeing. *International journal of environmental research and public health*, 18(5), 2294. <https://doi.org/10.4236/jssm.2021.142012>
- Ravesangar, K., & Fauzi, M. A. (2022). The influence of extrinsic motivating factors on employees' work performance at banking sectors in Malaysia: The mediating effect of psychological ownership. *International Journal of Business and Society*, 23(2), 1147-1168. Retrieved from <https://unimas.my>
- Razali, N., Nasir, N. A., Ismail, M. E., Sari, N. M., & Salleh, K. M. (2020). Gamification elements in Quizizz applications: Evaluating the impact on intrinsic and extrinsic student's motivation. In *IOP Conference Series: Materials Science and Engineering* (Vol. 917, No. 1, p. 012024). IOP Publishing. <https://doi.org/10.1016/j.jmmr.2020.10305>
- Riyanto, S., Sutrisno, A., & Ali, H. (2021). The influence of intrinsic and extrinsic motivation on employee performance. *International Journal of Scientific & Technology Research*, 9(2), 286-291. <https://doi.org/10.1177/1350507619891484>
- Sekaran, U. (2006). *Research methods for business: A skill-building approach* (4th ed.). John Wiley & Sons.
- Van Beverhoudt, S. A. (2021). Self-interested behavior, employee motivation, job satisfaction, and workplace performance. PhD Dissertation, Grand Canyon University.
- Van den Broeck, A., Howard, J. L., Van Vaerenbergh, Y., Leroy, H., & Gagné, M. (2021). Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation. *Organisational Psychology Review*, 11(3), 240-273.
- Zeng, D., Takada, N., Hara, Y., Sugiyama, S., Ito, Y., Nihei, Y., & Asakura, K. (2022). Impact of intrinsic and extrinsic motivation on work engagement: A cross-sectional study of nurses working in long-term care facilities. *International Journal of Environmental Research and Public Health*, 19(3), 1284. <https://doi.org/10.3390/ijerph19031284>