https://doi.org/10.52970/grdis.v5i1.820

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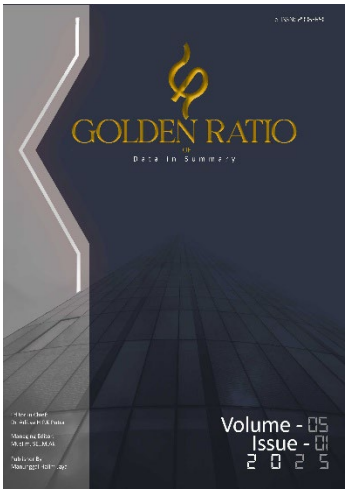
ISSN [Online]: 2776-6411



Received: November 14, 2024
Revised: December 30, 2024
Accepted: February 12, 2025

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DATA IN SUMMARY | ACCOUNTING, MANAGEMENT, BUSINESS, ECONOMIC

The Effect of Employee Resilience, Work Flexibility, and Gamification Training Program as Intervening Variables on Employee Performance

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Abstract: This study aims to determine how the influence of employee resilience, work flexibility, and gamification training programs as intervening variables on employee performance at PT Nusareka Prima Engineering. This research uses quantitative methods with incidental sampling techniques and involves 109 respondents as samples. Data were analyzed using Structural Equation Modeling (SEM) with SmartPLS software version 4.0. The results showed that employee resilience did not have a significant effect directly on employee performance, with a significance level of 0.074 (>0.05). However, work flexibility has a significant direct effect on gamification training programs with a significance level of 0.005 (<0.05), although work flexibility has no direct effect on employee performance (0.566 > 0.05). Gamification training program as an intervening variable significantly affects employee performance with a significance level of 0.002 (<0.05). Employee resilience through the gamification training program also significantly affects employee performance with a significance level of 0.041 (<0.05). Work flexibility through the gamification training program significantly affects employee performance with a significance level of 0.028 (<0.05). This study concludes that the gamification training program is an important intervening variable in improving employee performance. Work flexibility has a significant influence on the success of the gamification training program, which has an impact on improving employee performance.

Keywords: Employee Performance, Resilience, Work Flexibility, Gamification Training Program.

1. INTRODUCTION

Companies engaged in project management services, such as PT Nusareka Prima Engineering, demand reliable human resources to achieve company goals. Human resources are the workforce or employees who have an important role in realizing the company's vision and mission. PT Nusareka Prima Engineering is constructing power plants, project management services, and industrial supplies. Improving employee performance is a significant concern to ensure company success and organizational well-being. Therefore, employees are expected to perform well. Performance is one of the main factors that influence the company's progress. Employee performance is the actual work employees do in carrying out their duties. Performance is also related to the quality and quantity of work employees perform by the assigned tasks. According to Jufrizen et al. (2020), performance results from work employees achieve based on ability, experience, seriousness, and time. This is in line with the research of Nadirah et al. (2023), which confirms that employee performance determines the quality of the company's output, which in turn will have implications for the overall quality of the company. Factors that can affect employee performance include resilience and work flexibility. Employee resilience is the ability to rise from adversity and remain productive in facing challenges. Meanwhile, work flexibility refers to the ability of employees to adjust their workplace and time

https://doi.org/10.52970/grdis.v5i1.820

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according to their needs, which can help employees achieve work-life balance. In addition, innovation in employee training programs also plays an important role in improving performance. One emerging method is gamification-based training, where game elements are applied in the context of employee training to increase their motivation and engagement. Gamification-based training programs have been shown to increase employee engagement in the training process and significantly affect their performance. This study aims to analyze how employee resilience, work flexibility, and gamification training programs can affect the performance of PT Nusareka Prima Engineering employees, with gamification training programs as an intervening variable.

2. LITERATURE REVIEW

2.1. Employee Resilience

Resilience is an individual's ability to recover from problems and remain enthusiastic about doing his job. According to Putra et al. (2022), resilience is the ability to face challenges, which appears when individuals who experience difficult experiences know how to overcome them and adapt to these circumstances. Resilience is important in the work environment, especially in dealing with various daily challenges in the workplace.

2.2. Work Flexibility

Work flexibility is the ability to carry out tasks with flexibility, both in terms of time and place, and reporting work results. According to Mustakim et al. (2021), work flexibility allows employees to adjust their work schedules and locations to balance work and personal life, ultimately increasing productivity and performance.

2.3. Gamification Training Program

Gamification is the application of game elements in a non-game context to increase employee motivation and engagement. Hanifah and Adopsi (2019) stated that gamification in training aims to motivate and improve employee performance. Indicators of a gamification training program include motivation, performance, and overall training outcomes.

2.4. Employee Performance

According to Chasanah and Rustiana (2019), employee performance is the actual work employees do in carrying out their duties according to their responsibilities. Employee performance indicators include:

- Quality: How well the results achieved are up to standard.
- Reliability: The ability to do a job well and consistently.
- Collaboration Skills: Teamwork skills

3. RESEARCH DESIGN AND METHOD

This research uses a quantitative approach. According to Sugiyono (2019), quantitative research assumes that symptoms can be classified and that the relationship between symptoms is causal (cause and effect), so this research focuses on several main variables. This study uses the Structural Equation Modeling (SEM) model operated with SmartPLS version 4.0.

The population in this study were all employees of PT Nusareka Prima Engineering, with a total population of 150 people. The number of samples was determined using the Slovin formula with an

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error rate of 5%, so a sample of 109 people was obtained. The sampling technique used is Incidental Sampling, where the sample is taken based on anyone who happens to meet the researcher and is considered suitable as a data source.

4. RESULT AND DISCUSSION

Table 1. Respondents by Age

Age of Respondent	Total	Percentage
20-30 Years	50	45,87%
30-40 Years	32	29.36%
>40 Years	27	24,77%
Total	109	100%

Based on Table 1, respondents with an age range of 20-30 years were 50 employees with a percentage of 45.87%, respondents with an age range of 30-40 years were 32 employees with a percentage of 29.36%, and respondents with an age of > 40 years were 27 employees with a percentage of 24.77%. Based on the results of the above recapitulation, respondents are dominated by respondents aged 20-30 years with a percentage of 45.87%.

Table 2. Respondents Based on Gender

Gender	Total	Percentage
Male	103	94,50%
Female	6	5,5%
Total	109	100%

Based on Table 2, it can be seen that the number of male respondents is 103 employees with a percentage of 94.50%, while women are six employees with a percentage of 5.5%. Based on the results of the above recapitulation, the respondents were dominated by men 94.50%.

Table 3. Respondents Based on Length of Service

Length of Service	Total	Percentage
1-10 Years	45	41,28%
10-20 Years	50	45,87%
>20 Years	14	12,85%
Total	109	100%

Based on the results of responses from respondents with a length of work of 1-10 years, there were 45 employees with a percentage of 41.28%, respondents with a length of work of 10-20 years totaled 50 employees with a percentage of 45.87%, while respondents with a length of work of> 20 years totaled 14 employees with a percentage of 12.85%. Based on the results of the above recapitulation, respondents are dominated by respondents with a tenure of 10-20 years, with a percentage of 45.87%.

4.1. Validity Test

Convergent validity can measure the amount of correlation between constructs and latent variables. In evaluating convergent validity by examining individual item reliability, it can be seen from the standardized loading factor. The standardized loading factor describes the correlation magnitude between each measurement item (indicator) and its construct. The correlation is valid if it has a value> 0.7 (Ghozali, 2016).

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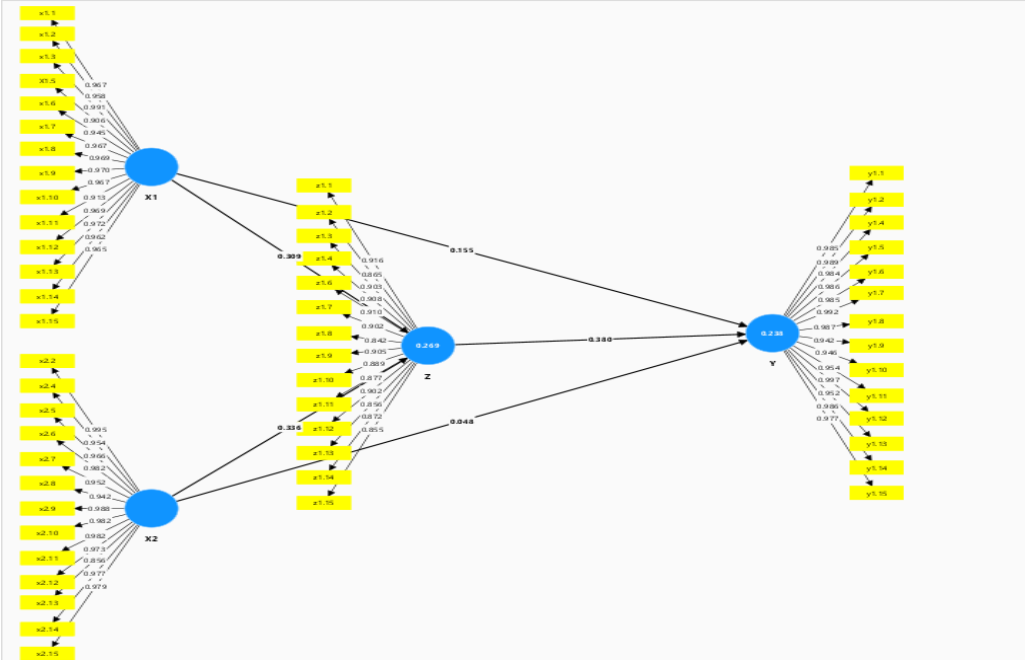

Figure 1. Convergent Validity Test Results

Based on Fig 1, it can be seen that the outer loading value of all indicators of variables X1, X2, Z, and Y is more significant than 0.7, so it is said to be valid. Then the arrows X1 to Y show the result of 0.155, X2 to Y shows the result of 0.043, Z to Y shows the result of 0.330, X1 to Z shows the result of 0.309, and X2 to Z shows the result of 0.336. Comparing discriminant validity and square root of average variance extracted (AVE) values. The measurement model is assessed based on the measurement of cross-loading with the construct. Suppose the correlation of the construct with each of its indicators is more significant than the size of the other constructs. In that case, the latent construct predicts its indicators better than the other constructs. Good discriminant validity is achieved if the AVE value is higher than the correlation value between the constructs. It is highly recommended if the AVE is more significant than 0.5 (Ghozali, 2016).

Table 4. Discriminant Validity Test

	Cronbach's alpha	Composite constraint (rho_a)	Composite constraint (rho_c)	Average variance extracted (AVE)
X1	0,993	0,994	0,994	0,919
X2	0,994	0,994	0,994	0,930
Z	0,996	0,997	0,996	0,953
Y	0,979	0,980	0,981	0,785

4.2. Reliability Test

a) Composite Reliability

If the composite reliability value ρc> 0.8 it can be said that the construct has high reliability or reliability and ρc> 0.6 is said to be reasonably reliable.

b) Cronbach Alpha

In PLS, the reliability test is strengthened by Cronbach's Alpha, where each answer's consistency is tested. Cronbach alpha is said to be good if α ≥ 0.5 and is said to be sufficient if α ≥ 0.3.

Table 5. Reliability test results

	Cronbach's alpha	Composite constraint (rho_a)	Composite constraint (rho_c)	Average variance extracted (AVE)

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X1	0,993	0,994	0,994	0,919
X2	0,994	0,994	0,994	0,930
Z	0,996	0,997	0,996	0,953
Y	0,979	0,980	0,981	0,785

4.3. Structural Model or Inner Model

The inner model (inner relation, structural model, and substantive theory) describes the relationship between latent variables based on substantive theory. Assessing the model with PLS starts by looking at the R-square for each dependent latent variable. Changes in the R-square value can be used to assess the effect of certain independent latent variables on the dependent latent variable and whether it has a substantive effect (Ghozali, 2016).

Table 6. Structural Model Test Results or Inner Model

	R-square	Adjusted R-square
Y	0,238	0,216
Z	0,269	0,255

R-Square of path model I = 0.238. This means that the ability of the X1 and X2 variables to explain Y is 23.8%, which means it is pretty weak. R-Square of path model II = 0.269. This means that the ability of the X1 and X2 variables to explain Z is 26.9%, which means it is pretty weak.

4.4. Hypothesis Testing

Hypothesis testing can be seen through the Path Coefisien calculation value when testing the inner model. Then, if the hypothesis can be accepted if the P-value value <0.05, it can be said to be significant and vice versa; if the P-value> 0.05, it can be declared insignificant (Ghozali, 2016).

Table 7. Path Coefisien Test Results

	Original Sample (O)	Sample average (M)	Standard deviation (STDEV)	T statistic (|O/STDEV|)	P values
X1 → Y	0,155	0,155	0,087	1,785	0,074
X1 → Z	0,309	0,300	0,111	2,779	0,005
X2 → Y	0,048	0,049	0,084	0,574	0,566
X2 → Z	0,336	0,331	0,089	3,782	0,000
Z → Y	0,380	0,377	0,121	3,133	0,002

Based on the table 7, it can be concluded as follows:

X1 → Y = P-Value 0.074 > 0.05 (not significant) (H1)
X1 → Z = P-Value 0.005 < 0.05 (significant) (H2)
X2 → Y = P-Value 0.566 > 0.05 (not significant) (H3)
X2 → Z = P-Value 0.000 < 0.05 (significant) (H4)
Z → Y = P-Value 0.002 < 0.05 (significant) (H5)

Likewise, the following hypothesis testing is carried out using Indirect Effect Analysis, which helps test the hypothesis of the indirect effect of an influencing variable on the influenced variable mediated by an intervening variable. When the hypothesis can be said to be significant / have a role if the P-value value <0.05, the hypothesis can be significant, and vice versa; if the P-value> 0.05, it can be declared insignificant.

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Table 7. Test Results of Indirect Effect Analysis

	Original Sample (O)	Sample average (M)	Standard deviation (STDEV)	T statistic (|O/STDEV|)	P values
X1 → Z → Y	0,117	0,114	0,057	2,047	0,041
X2 → Z → Y	0,128	0,127	0,058	2,191	0,028

Based on the table 8, it can be concluded as follows:

X1 → Z → Y = P-Value 0.041 < 0.05 (significant) (H6)

Meaning: Employee Resilience can significantly influence the Gamification Training Program on Employee Performance. In other words, Employee Resilience plays an intervening/mediating role in the relationship between the Gamification Training Program variable and Employee Performance.

X2 → Z → Y = P-Value 0.028 < 0.05 (significant) (H7)

Meaning: Work Flexibility can significantly influence the Gamification Training Program on Employee Performance. In other words, Work Flexibility plays an intervening/mediating role in the relationship between the Gamification Training Program variable and Employee Performance.

4.5. Discussion

4.5.1 The Effect of Employee Resilience Directly on Employee Performance

Based on the results of this study, the Employee Resilience variable is directly insignificant to employee performance, with a significance level of 0.074 <0.05. Thus, the first hypothesis is rejected. This aligns with research (Tokan, 2023), which states that employee resilience is a skill in overcoming something and finding ways to manage the situations they face. The result of this study is that employee resilience is directly insignificant to employee performance. However, it is inversely proportional to research (Putra et al., 2022), which says that employee resilience is the ability to face challenges; resilience will appear when someone faces a difficult experience and knows how to deal with or adapt to it. Apart from this, the result of this study is that employee resilience is directly significant to employee performance so that an employee's life improves.

4.5.2 The Effect of Employee Resilience Directly on Gamification Training Programs

Based on the results of this study, the Employee resilience variable is directly significant to the gamification training program with a significance level of 0.005 <0.05. Thus, the hypothesis is accepted. This aligns with research (Sabdillah, 2022), which says that resilience is a person's ability to adjust and survive difficult situations to get the job done.

4.5.3 The Effect of Work Flexibility Directly on Employee Performance

Based on the results of this study, the Work Flexibility variable is directly insignificant to employee performance, with a significance level of 0.566> 0.05. Thus, the hypothesis is rejected in line with research (Siskayanti & Sanica, 2022), which says that work flexibility is directly insignificant to employee performance. However, it is inversely proportional to research (Findriyan & Parmin, 2021), which says that work flexibility is defined as the ability of workers to control the duration of employee work, working from any place based on the schedule that has been given. Thus, it can be concluded that work flexibility is directly significant to team member performance.

4.5.4 The Direct Effect of Work Flexibility on Gamification Training Programs

https://doi.org/10.52970/grdis.v5i1.820

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Based on the results of this study, the Work Flexibility variable is directly significant to the gamification training program with a significance level of 0.000 <0.05. Thus, the hypothesis is accepted. This research is supported by the results of research (Setiawan, 2021), which states that work flexibility is a way of working used by several companies by looking at the abilities of their employees. Due to this flexibility, wages are given according to the employee's ability to work. However, if the employee can reach the target given by the company, he will get a bonus according to the provisions given by the company.

4.5.5 The Effect of Gamification Training Program Directly on Employee Performance

Based on the results of this study, the Gamification Training Program variable is directly significant to employee performance with a significance level of 0.002 <0.05. Thus, the hypothesis is accepted. This research is supported by the results of research (Pratomo, 2018), which says that the gamification training program is a process of applying elements that exist in work to motivate and increase user involvement. Thus, it can be concluded that the gamification training program is directly significant to employee performance.

4.5.6 The Effect of Employee Resilience on Employee Performance Through the Gamification Training Program as an Intervening Variable

Based on the results of this study, the variable Employee Resilience through the Gamification Training Program as an intervening variable is significant to team member performance with a significance level of 0.041 <0.05. Thus, the hypothesis is accepted. This research is supported by the results of research (Steven & Prihatsanti, 2017) saying team member resilience is the ability of employees to survive or overcome difficulties at work or unpleasant events, control emotions, adapt to changes in the workplace, and find meaning and purpose in work. The conclusion is that team member resilience through the gamification training program as an intervening variable is significant to employee performance.

4.5.7 The Effect of Work Flexibility on Employee Performance Through the Gamification Training Program as an Intervening Variable

Based on the results of this study, the Work Flexibility variable through the Gamification Training Program as an intervening variable is significant to employee performance with a significance level of 0.028 <0.05. Thus, the hypothesis is accepted. This research is supported by the results (Malayuja et al., 2022) stating that work flexibility gives employees more personalized control over the hours they work each day. The conclusion is that work flexibility through the gamification training program as an intervening variable is significant to employee performance.

5. CONCLUSION

Based on the results of data analysis and testing that has been carried out on 109 employee respondents, the following conclusions are made:

a. The employee resilience variable directly has a positive but insignificant effect on the performance of PT Nusareka Prima Engineering employees. This is evidenced by the significance result of 0.074> 0.05.
b. The Employee Resilience variable directly has a positive and significant effect on the Gamification Training Program of PT Nusareka Prima Engineering. This is evidenced by the significance result of 0.005 <0.05.

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c. The Work Flexibility variable directly has a positive but insignificant effect on the performance of PT Nusareka Prima Engineering employees. This is evidenced by the significance result of 0.566> 0.05
d. The Work Flexibility variable positively and significantly affects the Gamification Training Program as an intervening variable of PT Nusareka Prima Engineering. This is evidenced by the significance result of 0.000 <0.05.
e. The Gamification Training Program variable as an intervening variable directly has a positive and significant effect on the performance of PT Nusareka Prima Engineering employees. This is evidenced by the significance result of 0.002 <0.05.
f. Employee Resilience variable through Gamification Training Program as an intervening variable has a positive and significant effect on employee performance of PT Nusareka Prima Engineering. This is evidenced by the significance result of 0.041 <0.05.
g. Work Flexibility variable through the Gamification Training Program as an intervening variable has a positive and significant effect on employee performance of PT Nusareka Prima Engineering. This is evidenced by the significance result of 0.028 <0.05.

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