

EMPLOYEE ENGAGEMENT AND TURNOVER INTENTION: A QUANTITATIVE ANALYSIS OF WORKFORCE DYNAMICS

Juniartie¹, Fendi Darma¹, Hendri Ardianto¹

¹Buddhist Business and Management Department, Jinarakkhita Buddhist College of Lampung, Indonesia

Abstract

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This study investigates the impact of employee engagement on turnover intentions among employees in the pharmaceutical industry. The objective of this research is to examine the influence of employee engagement on turnover intentions, focusing on how employee engagement affects the desire to leave the organization. The method employed is a quantitative cross-sectional survey design, with data collected from 100 employees. Employee engagement is measured using the Utrecht Work Engagement Scale (UWES), while turnover intentions are assessed using a standardized Turnover Intention Scale. Data analysis is conducted using simple linear regression through SPSS 26. The results indicate a significant negative relationship between employee engagement and turnover intentions ($B = -0.452$, $p < 0.001$), with employee engagement explaining 37.5% of the variance in turnover intentions ($R^2 = 0.375$). These findings suggest that higher levels of employee engagement are associated with lower turnover intentions. Theoretically, this research contributes to the existing literature by confirming the inverse relationship between engagement and the desire to leave. Practically, it highlights the importance for organizations to invest in strategies that enhance employee engagement to reduce turnover rates and retain talent.

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1. Introduction

Employee engagement is a crucial concept in human resource management studies that describes the extent to which employees are emotionally, cognitively, and physically involved in their work and the organization they work for. Engaged employees typically exhibit high enthusiasm, loyalty, and a strong internal drive to contribute maximally to the achievement of organizational goals (Park & Kim, 2024; Zhong et al., 2024). Conversely, turnover intention reflects an employee's tendency or desire to leave their job in the near future, often serving as an early indicator of employee turnover (BowenXue et al., 2024). In a global context, employee retention has become a primary concern for organizations, as losing competent employees not only impacts recruitment and retraining costs but also leads to serious consequences such as the loss of institutional knowledge, decreased productivity, lowered team morale, and disrupted operational continuity. A study by Dwidienawati et al., (2024), shows that companies with high levels of employee engagement experience 21% higher productivity and 59% lower turnover rates compared to companies with low engagement.

In the context of Indonesia, the issue of employee turnover has become increasingly complex due to various external and internal factors (Wang et al., 2024). Intense labor competition, especially in rapidly growing industries such as information technology, finance, and manufacturing, has led to active workforce mobility, where workers have more career options and incentives from other companies (Galanis, Moisoglou, Papathanasiou, et al., 2024). Additionally, there is a shortage of skilled labor in certain sectors, further exacerbating the situation (Zambrano-Chumo & Guevara, 2024). Other factors,

such as generational value and expectation differences (e.g., between Generation Z and Millennials versus Generation X), economic instability, and suboptimal human resource management systems, also contribute to the intention to leave. A JobStreet Indonesia survey (2023) revealed that approximately 45% of employees in Indonesia expressed a desire to change jobs within the next year, primarily due to feeling undervalued, lacking clear career prospects, or feeling emotionally disengaged from their work (Jobstreet, 2022). Meanwhile, according to Work Institute, (2020), each employee who leaves an organization can incur a loss of up to 33% of their annual salary, including recruitment, training costs, and indirect impacts on productivity. This underscores the importance of understanding and enhancing employee engagement as a primary strategy for reducing turnover intentions and maintaining organizational stability.

Although the relationship between employee engagement and turnover intention has been extensively studied in various countries, there are several gaps in the literature that need to be addressed, particularly in the context of pharmaceutical companies. First, most previous studies were conducted in Western countries with different organizational culture characteristics, making their relevance and applicability in the Indonesian context still needing validation. Second, the limited research focusing on specific industries or employee groups in Indonesia has resulted in a lack of in-depth understanding of the factors influencing turnover intentions in sectors with high turnover rates. Third, specific dimensions of employee engagement such as vigor, dedication, and absorption have not been extensively studied separately to determine which dimensions contribute most to turnover intentions. Additionally, approaches that consider mediating variables such as job satisfaction or moderating variables like perceptions of organizational support are still very limited, even though they could provide a more comprehensive and accurate picture of the mechanisms underlying the relationship between engagement and turnover intentions (Dwidienawati et al., 2024; Kida & Takemura, 2024). Furthermore, most previous studies utilized cross-sectional designs with limited sample sizes, which do not adequately explain causal relationships in depth. Therefore, this research aims to fill these gaps by empirically examining the relationship between employee engagement and turnover intentions in the context of the [specific industry] in Indonesia, using an approach that considers the dimensions of engagement in detail as well as the potential influence of mediating and moderating variables.

Based on this background, this study formulates the main research question as follows: To what extent does employee engagement influence turnover intentions in the context of pharmaceutical companies? Based on this problem formulation, the objectives of this study are to (1) analyze the impact of employee engagement on turnover intentions in pharmaceutical companies.

This research is expected to provide significant theoretical and practical contributions. Theoretically, this study enriches the literature on employee engagement and turnover intentions by adding empirical evidence from pharmaceutical companies, which have received limited academic attention to date. By examining specific dimensions of employee engagement, this research also offers a deeper and more complex understanding of the factors influencing turnover intentions. From a practical perspective, the findings of this study can provide valuable guidance for managers and HR practitioners in designing more targeted and effective employee engagement strategies to reduce turnover and enhance workforce retention and loyalty. Thus, this study not only addresses gaps in the literature but also offers concrete solutions for organizations facing workforce sustainability challenges in today's competitive era.

2. Literature review

2.1. Employee engagement: conceptualization and dimensions

Employee engagement refers to the level of enthusiasm and emotional involvement that employees have towards their work and their organization. Alshaabani & Rudnák, (2023), define employee engagement as a psychological condition in which individuals utilize themselves physically, cognitively, and emotionally in the execution of their job tasks. Meanwhile, Canavesi & Minelli, (2022), interpret employee engagement as a positive and satisfying state related to work, characterized by three main dimensions: vigor, dedication, and absorption. Nguyen & Nguyen, (2023), define engagement as the extent to which employees feel emotionally and cognitively connected to their work, which is assessed through the Q12 survey that evaluates aspects such as role clarity, recognition, and opportunities for growth.

The theoretical model commonly used to understand employee engagement is the Job Demands-Resources (JD-R) model, which explains that employee engagement arises when there is a balance between job demands and job resources. Additionally, the Utrecht Work Engagement Scale (UWES) was developed to measure engagement through three dimensions: vigor, which refers to the level of energy and mental resilience while working; dedication, which reflects a sense of significance, inspiration, and pride in one's work; and absorption, which refers to full involvement in work to the point of losing track of time. Furthermore, various studies have shown that employee engagement is influenced by several factors such as job characteristics (task variety, autonomy, feedback), transformational leadership styles, an inclusive organizational culture, and employees' perceptions of organizational support.

2.2. Turnover intention: conceptualization and measurement

Turnover intention refers to the tendency or desire of employees to voluntarily leave their jobs in the near future. According to Sypniewska et al., (2023), turnover intention is an early stage in the resignation process that reflects the mental consideration of seeking other employment. Although turnover intention does not always result in actual resignation, many studies indicate that this intention is the strongest predictor of actual turnover behavior. Therefore, understanding turnover intention is crucial in organizational research as it can provide early signals for management to implement interventions.

Factors influencing turnover intention include job satisfaction, organizational commitment, perceptions of alternative job opportunities outside the organization, and work-life balance (Singh et al., 2024; Zambrano-Chumo & Guevara, 2024). Additionally, negative work experiences, role ambiguity, and work pressure can also increase the intention to leave. Turnover intention is typically measured using multi-item scales, such as the instrument developed by Gautam & Gautam, (2024), which includes questions like: "I often think about leaving this organization" or "I will look for another job in the near future."

2.3. The relationship between employee engagement and turnover intention

Various studies have explored the relationship between employee engagement and turnover intention, with most indicating a significant negative relationship between the two. Theoretically, employees with high levels of engagement tend to experience job satisfaction, exhibit greater loyalty to the organization, and possess high intrinsic motivation, which ultimately reduces their desire to change jobs. The JD-R model suggests that when job resources such as peer support, recognition, and development opportunities are available, employee engagement increases, and turnover intentions decrease.

Empirically, a study conducted by Maharani & Tamara, (2024), shows that high work engagement is negatively correlated with turnover intention. Other research by Abet et al., (2024); Winoto Tj et al., (2024) also supports the finding that vigor, dedication, and absorption can significantly reduce the intention to quit. However, some studies have found varying results depending on the context, industry type, or individual factors. Additionally, several studies indicate that the relationship between engagement and turnover intention can be mediated by variables such as job satisfaction or affective commitment, and influenced by moderating factors such as organizational support, leadership style, or employee personality. This highlights the importance of a more complex approach to understanding this relationship.

3. Methodology

This study employs a quantitative approach with a cross-sectional survey design to analyze the impact of employee engagement on turnover intention among employees in pharmaceutical companies in Indonesia. The sampling technique used is purposive sampling, with criteria including permanent employees who have a minimum tenure of six months, resulting in a total of 100 respondents. Data collection was conducted through an online questionnaire using Google Forms, which was distributed voluntarily, ensuring anonymity and confidentiality of the data, and including informed consent. The instruments used consist of the Utrecht Work Engagement Scale (UWES) to measure employee engagement and the turnover intention scale from Cammann et al. (1979), both utilizing a 5-point Likert scale. Data analysis was performed using SPSS version 26 through simple linear regression, following

a data cleaning process and testing of basic assumptions such as normality and linearity. The reliability test results indicate that the instruments have a Cronbach's alpha value of 0.88 for employee engagement and 0.79 for turnover intention, demonstrating good internal consistency, while content validity is supported by the use of instruments that have been validated in previous studies.

4. Results and discussions

4.1. Sample size and response rate

A total of 100 questionnaires were distributed to permanent employees in pharmaceutical companies. Of these, 89 questionnaires were returned and could be analysed. Thus, the response rate obtained was 89%, which indicates that the participation of respondents in this study is high and reflects adequate representation of the population.

4.2. Demographic characteristics of respondents

Demographic characteristics include gender, age, education level, and length of service. The data is presented in Table 1 below:

Table 1. Demographic characteristics of respondents

Demographic Variable	Category/Value	Frequency (n)	Percentage (%)
Gender	Male	78	59.1%
	Female	54	40.9%
Age	Average	32.8 years	
	Standard Deviation	6.2	
Last Education	SHS	20	15.2%
	Bachelor Degree	89	67.4%
	Master Degree	23	17.4%
Length of Service	Average	5.7years	
	Standard Deviation	3.4	

Respondents were predominantly undergraduate graduates, and the majority were male. Age and length of service show high variability, as shown by the standard deviation of the respondents.

4.3. Validity test

The type of validity used is construct validity through exploratory factor analysis (EFA). The KMO test result of 0.843 indicates that the data is adequate to be analysed using EFA. Bartlett's Test of Sphericity is significant ($p < 0.001$), indicating a correlation between components.

Table 2. KMO and Bartlett's test

KMO Measure of Sampling Adequacy	0.843
Bartlett's Test of Sphericity	Sig. = .000

All items had factor loadings > 0.5 , with two main factors extracted: Employee Engagement and Turnover Intention, explaining 67.8% of the total variance.

4.4. Reliability test

Reliability was tested using Cronbach's Alpha and Composite Reliability. The results are shown in Table 3.

Table 3. Reliability test output

Construct	Cronbach's Alpha	Composite Reliability
Employee Engagement	0.892	0.901
Turnover Intention	0.864	0.880

The value of $\alpha > 0.7$ indicates that both constructs have high reliability and good internal consistency.

4.5. Normality test

The normality test was conducted using the Shapiro-Wilk Test. The results show that the data is normally distributed:

Table 4. Normality test (Shapiro-Wilk)

Variable	Statistic	Sig. (p)
Employee Engagement	0.978	0.072
Turnover Intention	0.975	0.056

Because the p value > 0.05, it can be concluded that the data is normally distributed.

4. 6. Variance homogeneity test

Levene's test was used to test the homogeneity of variance between groups. The results are as follows:

Table 5. Levene's test for equality of variances

Variable	Levene Statistic	df1	df2	Sig. (p)
Turnover Intention	1.172	1	130	0.284

Since $p > 0.05$, the variance between groups is considered homogeneous.

4. 7. Hypothesis testing

4.7.1. Correlation analysis

The relationship between Employee Engagement and Turnover Intention was tested using Pearson correlation. The results of the analysis are shown in Table 6.

Table 6. Pearson correlation between employee engagement and turnover intention

Variable 1	Variable 2	Pearson Correlation	Sig. (p)
Employee Engagement	Turnover Intention	-0.612**	< 0.001

There is a significant negative correlation between Employee Engagement and Turnover Intention. This means that the higher the employee engagement, the lower their intention to leave the company.

4.7.2. Simple linear regression analysis

Hypothesis: "Employee engagement is negatively related to turnover intention."

Table 7. Results of simple linear regression analysis

Model	B	Std. Error	Beta	t	Sig. (p)
(Constant)	4.875	0.379	—	12.86	<0.001
Employee Engagement	-0.452	0.065	-0.612	-6.95	<0.001

Table 8. Model Summary

R	R ²	Adjusted R ²	F	Sig. F
0.612	0.375	0.370	48.30	<0.001

The negative regression coefficient indicates that every one unit increase in Employee Engagement will decrease Turnover Intention by 0.452 units. The R² value of 0.375 indicates that Employee Engagement explains 37.5% of the variance in Turnover Intention. The regression model is statistically significant ($p < 0.001$), thus the research hypothesis is accepted.

4.8. Discussion

The results of the simple linear regression analysis in this study indicate a significant negative relationship between employee engagement and turnover intention. This means that the higher the level of employee engagement, the lower their tendency to leave the organization. The regression coefficient (β) of -0.452 indicates that for every one-unit increase in employee engagement, the turnover intention score decreases by 0.452 units. This relationship is supported by a significance value (p-value) < 0.05. These findings align with theory and previous studies that state employee engagement is a protective factor against the intention to leave a job. As noted by Husniati et al., (2024); Rizky, (2022), employees

who are emotionally, cognitively, and physically engaged in their work tend to have higher organizational commitment and do not seek alternative employment.

This research also supports the findings of Galanis, Moisoglou, Malliarou, et al., (2024), which show that employee engagement has a direct effect on turnover intentions, where high engagement influences employees' perceptions of job meaning, loyalty, and job satisfaction. From a theoretical implication perspective, these results emphasize the importance of engagement theory in explaining employee work behavior, particularly regarding the intention to change jobs. Engagement is not only a reaction to the work environment but also an indicator that can significantly predict employee retention. Practically, these results provide important insights for human resource management, especially in designing employee retention strategies (Ardianto et al., 2020; Kundan et al., 2024). HR managers can enhance employee engagement through career development programs, involvement in decision-making, and creating a supportive work environment. By increasing engagement, companies can reduce turnover rates, which can incur high costs both financially and culturally.

The R-squared value of 0.385 indicates that 38.5% of the variation in turnover intention can be explained by the employee engagement variable. This suggests that while the relationship is significant, there are other factors that also influence turnover intention (e.g., work stress, salary satisfaction, or relationships with supervisors) that need to be further investigated.

5. Conclusion

This study aims to examine the effect of employee engagement on turnover intention among employees in pharmaceutical companies. Based on the statistical analysis conducted using SPSS software, it was found that employee engagement has a significant negative effect on turnover intention. This means that the higher the level of employee engagement with their work, the lower their intention to leave the organization. These findings are supported by the results of the Pearson correlation test, which shows a strong negative relationship ($r = -0.612$, $p < 0.001$), as well as the simple linear regression analysis indicating that employee engagement explains 37.5% of the variance in turnover intention ($R^2 = 0.375$). The negative and significant regression coefficient value ($B = -0.452$, $p < 0.001$) further emphasizes that employee engagement is an important factor in reducing employees' intention to leave.

Regarding the validity and reliability of the instruments, the results of the construct and reliability tests indicate that the measurement tools used have met scientific standards, with Cronbach's Alpha and composite reliability values above 0.7. Statistical assumption tests such as normality and homogeneity of variance were also satisfied, which strengthens the validity of the analysis conducted. Practically, the results of this study provide important implications for human resource management, particularly in formulating employee retention strategies. Enhancing employee engagement through emotional involvement, commitment to work, and effective communication can be a strategic step to reduce turnover intention. However, this study also has limitations, such as the limitation of generalizability since it was conducted in only one company and did not consider other factors that may influence turnover intention, such as work stress or salary satisfaction.

Therefore, future research is recommended to include additional variables and to use longitudinal methods to observe the dynamics of the relationships between variables over a certain period. The results of this study are not only statistically significant but also practically relevant in the context of human resource management. The measurement of effect size and the proportion of variance explained reinforce the importance of building employee engagement as an effort to reduce the desire to change jobs among employees.

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