



The Effect of Workload and Work Fatigue on Turnover Intention with Job Stress as an Intervening Variable

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Abstract: *This research investigates how workload and work fatigue influence employees' turnover intention, with job stress serving as a mediating factor, focusing on the Digital H3i Division of PT Indosat Tbk Semarang. Employing a quantitative approach with an explanatory design, the study involved 100 respondents chosen through a saturated sampling technique due to the limited and accessible population. Data were gathered using questionnaires and analyzed using Structural Equation Modeling (SEM) through the Partial Least Square approach in SmartPLS 4. The findings reveal that both workload and work fatigue significantly and positively affect job stress, which in turn significantly impacts turnover intention. Additionally, workload and work fatigue also directly and significantly influence employees' intention to leave. Job stress acts as a key mediator linking workload and fatigue to turnover intention. These results suggest that increasing workload and fatigue elevate stress levels, which subsequently heighten employees' desire to resign. The study highlights the need for PT Indosat Tbk's management to ensure workload balance, allow adequate rest periods, and promote a supportive work environment to mitigate stress and reduce turnover. Proper stress management can help the company maintain a stable, motivated, and loyal workforce*

Keywords: *Workload, Work Fatigue, Job Stress, Turnover Intention*

Introduction

Human resources (HR) are a crucial element in ensuring the sustainability and success of a company. High-quality human resources not only generate comparative value but also create competitive, generative, and innovative advantages by utilizing higher-order energies such as intelligence, creativity, and imagination (Hartono, 2020). Therefore, human resource management is a strategic program focused on acquiring, developing, maintaining, and utilizing human capital to support organizational goals. Competent employees represent a key factor in building a company's competitive advantage, as they directly influence organizational effectiveness and goal achievement.

A high level of turnover intention is one of the main indicators of problems within a company. Turnover intention refers to an individual's awareness and deliberate intention to leave the organization (Kustinah, 2022). Although it remains at the intention stage, a high number of employees with such inclinations must be taken seriously, as it often serves as an early sign of actual resignation. One major cause of turnover intention is work stress, a

psychological and emotional pressure resulting from an imbalance between job demands and individual capacity (Chaudhry, 2012; Fauji, 2013).

Work stress frequently arises from workload that exceeds employees' capacity. Workload refers to the responsibilities assigned to an employee that must be completed within a specific time frame to achieve organizational objectives (Fauzi, 2021). An imbalance between assigned tasks and individual capabilities can lead to both physical and mental exhaustion (Lysaght & F.-T., 2012). This condition may cause job fatigue, characterized by decreased energy, emotional exhaustion, and reduced motivation (Silasusti, 2016; Tarwaka, 2014).

Previous studies have shown varying relationships among workload, job fatigue, work stress, and turnover intention. (Farida, 2019; Handaru, 2020; Salsabila, 2022), found that workload has a positive and significant effect on turnover intention, whereas Sutikno (2020) reported a negative influence. Similarly, (Ardiyanti, 2019; Exacta, 2022; Vania & &., 2023) that job fatigue significantly affects turnover intention, while Ratnasari (2021) found the opposite. Discrepancies also exist in the relationship between work stress and turnover intention: (Mawadati, 2017) reported a positive and significant effect, but (Sarbullah & P, 2022) and (Suganda, 2023) found a negative one.

This phenomenon is evident at PT Indosat Tbk Semarang (Indosat Ooredoo Hutchison), where employees face high workloads, tight project deadlines, and demanding digital transformation targets. Observations revealed complaints about work pressure, insufficient rest, and overwhelming targets. Some employees even expressed the desire to seek jobs that provide a better work-life balance. These findings indicate a rise in turnover intention caused by excessive workload and work stress in a fast-paced digital environment.

Therefore, this study aims to examine the effect of workload and job fatigue on turnover intention, with work stress as an intervening variable. The research is expected to contribute theoretically to the development of human resource management studies and provide practical insights for PT Indosat Tbk in formulating effective strategies for managing workload, reducing job stress, and enhancing employee retention.

Methodology

This study employs an explanatory research approach, which aims to explain causal relationships among variables and examine the influence of independent variables on dependent variables to gain both theoretical and practical understanding (Ghozali, 2023). The population consists of 100 employees of Digital H3i PT Indosat Tbk Semarang (Ghozali, 2023). Since the population is relatively small and fully accessible, the study uses a saturated sampling technique, meaning all population members are included as respondents (Sugiyono, 2019). This sample size meets the minimum requirement for analysis using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4. Data were collected through closed-ended questionnaires distributed both directly and online.

The study utilizes primary and secondary data. Primary data were obtained directly from respondents through questionnaires, while secondary data were gathered from company reports, official publications, and relevant literature to strengthen the theoretical foundation (Ghozali, 2023). The research instrument applies a five-point Likert scale,

ranging from “Strongly Disagree (1)” to “Strongly Agree (5),” to measure respondents’ attitudes and perceptions quantitatively. The research variables include: workload (X1) with indicators of work targets, job conditions, time utilization, and work standards (Jannah, 2021; Putra, 2012); work fatigue (X2) measured through physical fatigue, reduced effectiveness, decreased work capacity, weakened activity, and loss of motivation (Gibson, 2009); work stress (Z) represented by authority and responsibility, physical or health conditions, work pressure, and conflict (Hasibuan, 2014; Julvia, 2016); and turnover intention (Y) indicated by increased absenteeism, lack of motivation, rule violations, protests against supervisors, and unusual positive behavior (Mawarni, 2016).

Result and Discussion

The inner model (structural model) evaluates the relationships among latent constructs using R-square, path coefficients, and F-square, with significance determined by the *t*-statistic and *p*-value.

Table 1. R-Square Test

Variable	R-Square
Work Stress	0.794
Turnover Intention	0.886

Source: Processed Primary Data, 2025

Work stress is explained by independent variables by 79.4%, while turnover intention is explained by 88.6%.

Table 2. F-Square Test

Relationship	F ² Value	Interpretation
Workload → Work Stress	0.810	Strong
Work Fatigue → Work Stress	0.782	Strong
Work Stress → Turnover Intention	0.548	Strong
Workload → Turnover Intention	0.210	Moderate
Work Fatigue → Turnover Intention	0.139	Weak

Source: Processed Primary Data, 2025

The strongest influence is found in the relationship between workload and work stress (0.810).

Hypothesis testing was conducted using **bootstrapping** in SmartPLS. A path is considered significant if *t*-statistic > 1.96 and *p*-value < 0.05.

Table 3. Path Coefficient Test

Relationship	t-Statistic	p-Value	Result
Workload → Work Stress	7.842	0.000	Significant
Workload → Turnover Intention	4.273	0.000	Significant
Work Fatigue → Work Stress	7.399	0.000	Significant
Work Fatigue → Turnover Intention	3.851	0.000	Significant
Work Stress → Turnover Intention	7.200	0.000	Significant

Source: Processed Primary Data, 2025

All hypotheses (H1–H5) are accepted, indicating significant relationships among variables.

Table 4. Specific Indirect Effects

Indicator	Original Sample (O)	Sample Mean (M)	Std. Deviation (STDEV)	t-Statistic (O/STDEV)	p-Value
Workload → Work Stress → Turnover Intention	0.278	0.276	0.052	5.386	0.000
Work Fatigue → Work Stress → Turnover Intention	0.274	0.274	0.054	5.043	0.000

Source: Processed Primary Data, 2025

Both indirect effects are significant ($t > 1.96; p < 0.05$), confirming that work stress mediates the effect of workload and work fatigue on turnover intention.

1. The Effect of Workload on Job Stress

Workload—reflected through achievement targets, job conditions, time utilization, and work standards—has a positive and significant effect on job stress. High targets, complex tasks, time pressure, and performance standards without adequate support increase employees’ psychological strain. This result is consistent with previous studies (Darmasari, 2022; Riznanda, 2023). The descriptive results also support this finding, with an average workload score of 3.92 (high) and a job stress score of 3.51 (high).

2. The Effect of Work Fatigue on Job Stress

Work fatigue—characterized by physical exhaustion, reduced effectiveness, decreased work capacity, weakened activity, and loss of motivation—has a positive and significant effect on job stress. Heavy workloads and long working hours worsen employees’ physical and psychological conditions, leading to higher stress levels if not balanced with effective time management and workplace support. This finding is in line with previous research (Pohan & S, 2023; Ramadhan & K, 2022). Descriptively, the average score for work fatigue is 3.44 (high), while job stress averages 3.51 (high).

3. The Effect of Job Stress on Turnover Intention

Job stress—including authority and responsibility, physical or health conditions, job pressure, and conflict—has a positive and significant effect on turnover intention. The imbalance between job demands and individual capabilities, as well as an uncondusive work environment, reduces satisfaction and commitment, thereby increasing employees’ intention to leave. This result is consistent with prior studies (Oktafiani & Pantawis, 2024; Ratnasari, 2024). Descriptive data show a job stress score of 3.51 (high) and turnover intention score of 2.56 (low), yet the relationship remains positive.

4. The Effect of Workload on Turnover Intention

Workload has a positive and significant effect on turnover intention. High targets, complex duties, strict standards, and lack of managerial support raise dissatisfaction and drive employees to consider leaving. This finding reinforces previous studies (Hak & K, 2024; Sinaga & K, 2024). Descriptive analysis shows workload = 3.92 (high) and turnover intention = 2.56 (low), with a consistently positive direction of influence.

5. The Effect of Work Fatigue on Turnover Intention

Work fatigue has a positive and significant effect on turnover intention. Diminished activity, decreased capacity and motivation, and lower effectiveness weaken performance and workplace relations, creating tension and prompting intentions to resign. These results are aligned with earlier studies (Kuntoro H & W, 2025; Setiawan & S, 2024). Descriptive data indicate work fatigue = 3.44 (high) and turnover intention = 2.56 (low).

6. The Effect of Workload on Turnover Intention through Job Stress

Workload increases job stress, which in turn mediates the rise in turnover intention. Poor time management, imbalanced authority and responsibility, high work standards without adequate support, excessive targets, declining physical health, and workplace conflict all intensify stress eventually heightening employees' desire to leave.

7. The Effect of Work Fatigue on Turnover Intention through Job Stress

Work fatigue elevates job stress, which indirectly increases turnover intention. Declines in work capacity, effectiveness, and motivation along with health problems and workplace conflicts intensify stress, leading to withdrawal behavior and the pursuit of more comfortable employment. These results confirm the mediating role of job stress in the relationship between work fatigue and turnover intention.

Conclusion

Based on the research findings discussed in Chapter IV, it can be concluded that workload, work fatigue, and job stress each have a **positive and significant effect** on turnover intention among employees of PT Indosat Ooredoo Hutchison Semarang, Digital H3i Division. Workload and work fatigue were found to increase job stress, which in turn heightens employees' desire to leave the company, while job stress itself directly influences turnover intention. Furthermore, workload and work fatigue both exert **indirect effects** on turnover intention through job stress, confirming its role as a mediating variable. Managerially, these results highlight the need for proportional workload distribution, adequate rest, supportive work environments, and stress management programs to maintain employee well-being and reduce turnover intention. However, this study is limited to one division and relies on perception-based questionnaire data. Future research is recommended to include variables such as job satisfaction, compensation, and leadership style, using a longitudinal approach for a deeper understanding of how stress and turnover intention evolve over time.

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