ANALYSIS OF TURNOVER INTENTION FACTORS USING THE PARTIAL LEAST SQUARE STRUCTURAL EQUATION MODELING (SEM-PLS) METHOD

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Abstract: Human resource capability and performance are crucial for the sustained success of an organization. Turnover intention among employees poses a significant risk, potentially destabilizing operations, increasing costs, and diminishing productivity and market competitiveness. Notably, PT XYZ has a high permanent employee turnover rate of 10%, according to recent surveys. Addressing the underlying causes of this trend is essential for reducing turnover rates. Thus, this study investigates the relationships between work stress, job satisfaction, compensation, commitment, work environment, and turnover intentions within an organizational context. Using the Smart-PLS software for structural equation modeling analysis, the study assesses the direct and mediated effects of these variables. The findings indicate that better compensation, higher job satisfaction, strong commitment, and an improved work environment significantly reduce work stress and turnover intentions among employees. Conversely, work stress is positively correlated with turnover intentions, suggesting that higher stress levels increase the likelihood of employees considering leaving their positions. The research confirms the negative impacts of increased work stress and the positive roles of compensation, job satisfaction, and supportive work environments in enhancing employee retention. No significant effects were found for commitment influencing work stress or turnover intentions, which suggests that commitment alone may not be a strong standalone factor in managing work stress or retention. Recommendations for organizations include adopting comprehensive strategies to improve job satisfaction, adjust compensation to industry standards, foster supportive work environments, and implement effective stress management programs. Such measures are anticipated to not only reduce work stress and turnover intentions but also enhance overall employee productivity and satisfaction. This study contributes to the existing literature by confirming known relationships and highlighting the importance of holistic organizational strategies in employee retention and satisfaction.

Keywords: compensation, commitment, job satisfaction, partial least square, turnover intention, work environment, work stress.

INTRODUCTION

Human resources (HR) are a key element that determines the success and sustainability of an organization. They act as agents of change that enable companies to design, implement, and adjust business strategies in an ever-changing environment. Armstrong (2014) emphasizes the significance of the HR role in achieving organizational goals, as they are the individuals on the front lines of strategy implementation and innovation. HR with high talent and quality can make significant contributions in enhancing

productivity, creativity, and maintaining company competitiveness.

PT XYZ operates in Batam, Indonesia, and is a subsidiary of XYZ Inc., a leading multinational company based in the United States known for its expertise in the heavy machinery and construction equipment industry. PT XYZ plays a crucial role in supporting the global operations of XYZ Inc., with a special focus on manufacturing and providing high-quality construction equipment and heavy machinery. PT XYZ specializes in the production and assembly of heavy machinery and construction equipment, including excavators, mining shovels, and

large mining trucks. These products consistently meet the high-quality standards that are a hallmark of XYZ Inc. Currently, PT XYZ is the only facility in the world that produces hydraulic mining shovels for the global market. In the context of increasingly competitive business, wise human resource management is crucial for maintaining continuity and success. However, one of the problems frequently faced and a hindrance for many organizations, including PT XYZ, is the phenomenon of "turnover," when employees leave the company they work for.

Table 1. Turnover Data PT XYZ

Year	Total Employees	Voluntary Employees	%
2020	550	1	1
2021	700	26	5
2022	1300	96	10
2023	1090	95	10

Table 1 records data that describes the pattern of employee turnover at XYZ Company over the last four years. Analysis of employee movements choosing to leave or resign from the company shows a relatively high turnover rate during this period. Although records indicate a growth in employee numbers from 2020 to 2022, attention focuses on the reality that the company's turnover rate is quite significant. This high turnover rate is not only a source of concern but also has the potential to negatively impact the company, both in terms of operational costs and workforce stability. High employee turnover has significant financial consequences for the company and can hinder the achievement of company goals. In addition, personnel changes can result in the loss of valuable skills and internal knowledge and increased costs required to recruit and train new employees (Kenny, 2007). De Connick (2009) suggests that it is

important for every organization to understand the factors causing employee turnover, as such changes carry cost consequences for the organization. These costs include promotion expenses, recruitment costs, and employee training expenses.

Various factors drive individuals to leave or resign from their jobs, one of which is the aspect of compensation. As emphasized in the research conducted by Bikai (2023), compensation is an important factor that influences employee motivation and, subsequently, the intention to change jobs. Fair and competitive compensation practices are crucial for attracting and retaining talented individuals. Adequate compensation not only meets the basic needs of employees but also serves as a significant source of motivation and job satisfaction. When employees perceive their compensation as fair and in line with their contributions, they are more likely to

be motivated and committed to the organization. Conversely, when compensation is considered unfair or below market standards, employees may feel dissatisfied and more likely to contemplate changing jobs. Another factor is the level of satisfaction. According to research conducted by Kanchana et al. (2023), job satisfaction refers to the positive emotions, feelings, and attitudes of employees towards their work and work environment.

A positive emotional experience directly impacts a higher level of job satisfaction. In this context, higher satisfaction levels are associated with lower employee turnover rates, while lower satisfaction levels tend to result in higher turnover rates. In the study conducted by Pariascana et al. (2022), it was conveyed that organizational commitment can be identified as the extent of an individual's relationship with a particular organization. This is reflected in the level of perseverance towards the quality and goals of the organization, as well as a strong drive to support the organization. Specifically, the greater the level of responsibility borne by an employee, the higher the likelihood of employee turnover within the organization.

Employees capable of fulfilling their duties and responsibilities will tend to want to reduce changes in the work environment, which in turn can reduce the intention to change jobs. It is important to note that the work environment also plays a significant role in influencing an individual's intention to leave a job. Based on the research findings by Oktavia et al. (2022), one reason employees consider quitting is due to the inadequate quality of the work environment. Some facilities at the workplace often experience damage, while ongoing construction noise disrupts employee productivity. Additionally, in the non-physical aspects of the work environment, there are undesirable

behaviors from some employees in the company, resulting in mismatches in communication among colleagues.

From the above explanation, it is clear that in managing employees, companies need to pay attention not only to employee performance but also to their mental health. The study conducted by Lestari (2012) and the American Institute of Stress (AIS) categorized stress into two types: general stress and specific stress. General stress refers to physical, mental, or emotional tension that can be experienced by individuals in general. Conversely, specific stress is defined as a condition or feeling that arises when someone feels that the demands placed on them exceed their capacity. Work-related stress experienced by employees can impact their job satisfaction levels. Excessive job demands can cause work-related stress, which ultimately affects employee performance, reduces productivity, and may even trigger the desire to seek other employment.

Therefore, companies need to give special attention to the mental well-being of employees as an integral part of human resource management.

Based on the background explanation, the problems that can be formulated in this research are:

1. Do compensation, job satisfaction, work environment, and organizational commitment affect employee work stress at PT XYZ?

2. Do work stress, compensation, job satisfaction, organizational effort, and the work environment influence the turnover intention of employees at PT XYZ?

3. What are the recommendations for actions that can be taken to address turnover intention?

THEORETICAL REVIEW AND HYPOTHESES

Organizational Behavior

Saravanakumar (2019) defines organizational behavior as the study of human behavior in the context of organizations, highlighting three main elements: individual actions, organizational structure, and the relationship between the two. Organizational behavior demonstrates that individuals bring beliefs, values, attitudes, and personal characteristics into the organization, which interact to form the organizational setting. Managers need to understand the basic human element in the context of their work, which can be understood through three main approaches: humans as organizations, humans as resources, and humans as individuals. Humans as resources are a valuable asset within the organization, while humans as individuals highlight the needs and expectations of individuals in the work context.

Understanding organizational behavior helps managers meet the needs and expectations of employees, as well as optimize their contributions within the organization.

According to Saravanakumar (2019), the key elements in organizational behavior are people, structure, technology, and the environment in which the organization operates. People include individuals and groups working to achieve their goals. Structure reflects the formal relationships between individuals within the organization. Technology affects how people work and the tasks they perform. The external environment, which is complex, creates a context for behavior and decisions within the organization.

Turnover Intention

According to research by Mobley et al., as mentioned by Tsani (2016), the intention to change jobs can be divided into two main categories: voluntary turnover (leaving a job on one's own accord) and involuntary turnover (being dismissed from a job). Voluntary turnover occurs when an individual chooses to leave an organization, while involuntary turnover occurs when an individual is dismissed from their job, typically due to poor performance or policy violations. Several theories addressing the indications of the intention to change jobs include:

1. Rational Choice Theory: Employees decide whether to stay or leave based on a cost-benefit analysis (Marchiondo & Myers, 2022).

1. Job Satisfaction Theory: The relationship between job satisfaction and turnover intention, influenced by factors such as salary, recognition, and work-life balance (Jiang et al., 2021).
2. Commitment Theory: The relationship between an employee's commitment to the organization and turnover intention, related to emotional and normative bonds (Allen et al., 2020).
3. Negative Affect Theory: Factors such as conflict or dissatisfaction can increase the intention to change jobs (Lee et al., 2021).

Factors influencing the intention to change jobs, as explained by Rekha and Kamalanabhan (2012), include job satisfaction, organizational commitment, perceptions of organizational justice, and perceptions of organizational support. Job satisfaction is influenced by various factors such as compensation, promotion opportunities, interpersonal relationships, and satisfaction with job

tasks. Organizational commitment is reflected in the attachment to the goals and values of the organization. Perceptions of organizational justice involve the fair distribution of rewards and consistent treatment of employees.

Meanwhile, perceptions of organizational support include support from superiors, career development opportunities, work flexibility, and work-life balance. The higher the perceptions of support and organizational justice and the level of job satisfaction and commitment to the organization, the lower the likelihood of an individual intending to change jobs.

Compensation

Compensation refers to the form of reward given to employees as an appreciation for their achievements in work (Nurjaman, 2014). Fairness in providing compensation commensurate with the workload of employees is crucial for every company (Hasibuan, 2014).

Compensation includes various forms of reparation or reward for individuals as a recompense for their actions, efforts, or losses experienced (Hasibuan, 2014). Several factors that influence the amount of compensation include:

1. Experience and Qualifications (Newman et al., 2019).
2. Industry and Geographic Location (Henderson, 2007).
3. Role and Job Responsibilities (Newman et al., 2019).
4. Work performance (Noe et al., 2019).
5. Negotiation and Communication Skills (Newman et al., 2019).
6. Company Policies (Henderson, 2007).
7. Labor Market Competition (Noe et al., 2019).
8. Economic Factors and Inflation (Henderson, 2007).

Job Satisfaction

Job satisfaction is a crucial concept in human resource management that reflects the degree of employees' contentment with their roles within an organization. According to Robbins and Judge (2013), job satisfaction is a positive feeling towards one's job that arises after evaluating various job characteristics. This concept encompasses several indicators and factors that can potentially affect the level of employee job satisfaction.

Luthans (2011) points out that job satisfaction can be influenced by key factors, including:

1. Job Description: Work that matches the skills, interests, and experiences of the employee.
2. Pay: The compensation received by employees.
3. Promotion: Opportunities for advancement or promotion within the organization.
4. Supervision: The quality of oversight or supervision from superiors.
5. Workgroup: The interpersonal relationships and cooperation with colleagues.
6. Working Conditions: comfortable and safe working conditions, including facilities and the environment.

Commitment

According to research by Mowday et al. (as cited in Dey et al., 2014), organizational commitment is the extent to which an individual identifies with an organization and is involved in its activities. Another perspective, described by Gibson et al. (2013), portrays organizational commitment as feelings of identification, loyalty, and engagement that employees show towards their organization or its units.

Factors influencing organizational commitment, according to research by Camilleri (2002), include:

1. Education: The level of education of an individual can affect organizational commitment. Employees with higher education levels may have a better understanding of organizational values and can pursue better career opportunities.

2. Position: An employee's position within the organizational hierarchy can impact commitment. Employees in managerial positions or with significant responsibilities tend to have higher levels of commitment due to their greater influence in decision-making.

3. Personality: Individual personality traits, including stability, openness, emotional intelligence, and self-confidence, can influence organizational commitment. People whose personalities are more stable and align with a particular organizational culture tend to have a strong commitment to the organization.

Work Environment

The work environment is a vital factor influencing employee well-being and productivity. According to Robbins and Judge (2017), a conducive work environment can foster creativity, collaboration, and high performance. Factors such as the physical design of the workspace, organizational culture, and managerial support can significantly affect employees' happiness and job satisfaction (Robbins & Judge, 2017).

Factors affecting the physical work environment include temperature, lighting, noise, and spatial layout (Sundstrom et al., 1996). Uncomfortable temperatures can disrupt concentration, poor lighting can cause eye fatigue, excessive noise can hinder communication, and a well-designed spatial layout can enhance efficiency and reduce the risk of accidents.

Work environment indicators include (Nurwibowo, 2016):

1. Work atmosphere: The general impression employees have of the organizational atmosphere and culture, which affects motivation and satisfaction (Smith & Davis, 2020).

2. Relationship with Colleagues: Positive relationships enhance collaboration and productivity (Johnson, 2018).

3. Work Facilities: The physical and technical aspects that enable employees to work efficiently and comfortably, which can improve well-being and performance (Jones & Brown, 2019).

Work Stress

According to Robbins (2006), work stress is the physical and emotional tension that arises when job demands exceed an individual's ability to cope. Nurhendar (2007) adds that factors such as job pressure and interpersonal conflicts can cause work stress. The causes of work stress, as identified by Luthans in Umam (2010), consist of four main components.

1. Extra Organizational Stressors: Stress factors from outside the organization that affect employees (Smith, J. & Johnson, A., 2022).

2. Organizational Stressors: Factors within the work environment that cause stress to employees (Brown & Davis, 2023).

3. Group stressors: stress factors within the context of a group or team (Brown & Davis, 2023).

4. Individual Stressors: Pressures and

tensions experienced by individuals in their work (Garcia & Lee, 2022).

METHODOLOGY

This research aims to analyze the effects of compensation, job satisfaction, commitment, and work environment on turnover intention, with work stress acting as a mediator. Conducted at XYZ Company in Batam, this study uses a quantitative method through surveys to obtain facts from existing symptoms and to factually explore information from a group or region.

This research is explanatory research, which aims to explain causal relationships between variables through hypothesis testing. The research paradigm includes a mindset that shows the relationship between the variables studied, the type and number of problem formulations that need to be answered through research, the theories used to formulate hypotheses, the number and types of hypotheses, and the statistical analysis techniques to be used.

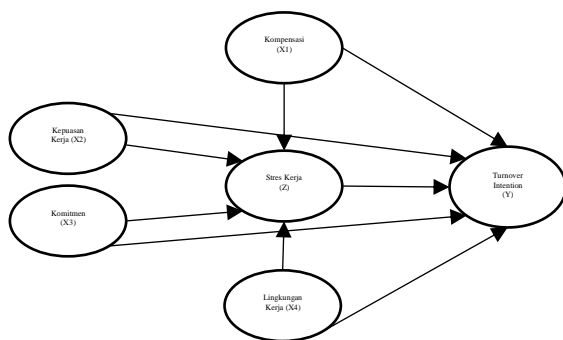Referring to the research analysis, the research design is depicted in Figure 1.

Figure 1 Research Methodology

Research Hypotheses

H1: Compensation affects work stress in employees of PT XYZ

H2: Job satisfaction affects work stress in employees of PT XYZ

H3: Organizational commitment affects work stress in employees of PT XYZ

H4: Work environment affects work stress in employees of PT XYZ

H5: Work stress affects the turnover intention of employees at PT XYZ

H6: Compensation affects the turnover intention of employees at PT XYZ

H7: Job satisfaction affects the turnover intention of employees at PT XYZ

H8: Commitment affects the turnover Intention of employees at PT XYZ

H9: Work environment affects the turnover intention of employees at PTXYZ

H10: Compensation affects turnover intention through work stress in employees of PT XYZ

H11: Job satisfaction affects turnover intention through work stress in employees of PT XYZ

H12: Commitment affects turnover intention through work stress in employees of PT XYZ

H13: Work environment affects turnover intention through work stress in employees of PT XYZ

Population and Sample

In this study, the population consists of 1,400 employees of PT XYZ. The sampling technique used is purposive sampling, where samples are selected based on specific considerations and criteria, namely employees who have worked at least one year at the company.

Based on recommendations from Ghozali & Latan (2015) and Hair et al. (2006), the recommended sample size for PLS-SEM and correlational research ranges from 30 to 100 cases. In this study, given that there are five independent variables (compensation, job satisfaction, commitment, work environment, and work

stress), the sample size calculation formula is used, where the number of samples (n) is 15 times the number of independent variables (k): n=(15) x k = 15 x 5 = 75 Thus, this study will use a sample of 75 respondents.

Data Analysis Stages

Data from the survey questionnaire will be analyzed using two statistical software tools: SPSS and Partial Least Squares-SStructural Equation Modeling (SEM-PLS). SPSS will be employed to manage data and perform complex statistical analyses. According to Jogiyanto (2011), PLS analysis is a suitable multivariate statistical technique for comparing multiple dependent and independent variables in situations where the sample size is relatively small or there are specific constraints in the data. PLS can produce stable parameters without the need for resampling. In this study, PLS was chosen because it is suitable for situations with small sample sizes, as indicated by Ghazali (2009). This approach will provide a comprehensive understanding of the relationships between the variables studied in the research.

a) Descriptive Statistics

Descriptive analysis is a statistical method used to summarize and describe information from a population or sample. It involves the concise presentation of data and can include transforming raw data into more easily understood statistics (Zikmund et al., 2010; Groenewald, 2010). In this study, descriptive analysis will be used to present statistics, frequencies, and percentages in tables and data visualizations to provide a clearer picture.

b) Validity Test

The validity of an instrument is how well it measures what it is intended to measure.

For a measuring tool with high validity, the results correspond to the measurement objectives and provide an accurate depiction of the data being measured. In the context of construct validity measurement using Partial Least Squares (PLS), there are two methods to assess validity: convergent and discriminant. Convergent validity is assessed through the average variance extracted (AVE), which is calculated using the formula:

$$\text{AVE} = \frac{(\sum_{i=1}^{n} \hat{\lambda}_i)^2}{\sum_{i=1}^{n} \hat{\lambda}_i^2 + \sum_{i=1}^{n} \text{var}(\hat{\varepsilon}_i)}$$

Convergent validity is assessed by examining the factor loadings and the average variance extracted (AVE). If the loading factor of an indicator is greater than 0.5 and the AVE of the construct is also greater than 0.5, then the indicator is considered valid (Vinzi et al., 2010). Discriminant validity involves comparing the AVE of each construct with the correlations among other constructs in the model. Discriminant validity is deemed adequate if the AVE of each construct is greater than the correlations between constructs.

Reliability Test

Cronbach's alpha is a commonly used method in reliability analysis to measure the internal consistency of a measuring instrument. It indicates how well the items in the instrument are related to each other. Alpha can be calculated using the composite reliability (ρ), which ideally should be more than 0.6 to indicate good reliability. The equation to calculate (ρ) is:

$$\hat{\rho} = \frac{(\sum_{i=1}^{n} \hat{\lambda}_i)^2}{(\sum_{i=1}^{n} \hat{\lambda}_i)^2 + \sum_{i=1}^{n} \text{var}(\hat{\varepsilon}_i)}$$

a) PLS Analysis

PLS analysis involves two main stages: designing the measurement model (outer model) and designing the structural model (inner model).

- Designing the Measurement Model (Outer Model): At this stage, measurement indicators can be either reflective or formative. The basis of these measurements affects the validity testing of constructs. The measurement model can be developed based on previous research theories or rational logic.
- Designing the Structural Model (Inner Model): The evaluation of the structural model is conducted with specific criteria, including R-Square (R2) and Path Coefficient

Furthermore, the assessment of the goodness of fit criteria in PLS involves evaluating both the outer and inner models. The outer model tests the viability of the constructed constructs, while the inner model examines the relationships between latent variables. Hypothesis testing is performed by examining the t-statistic values from the inner model. The relationships between latent variables are considered significant if the t-statistic value is greater than 1.96 at a 5% significance level.

Research results and discussion.

Descriptive Analysis Results

Table 2. Descriptive Analysis Results

	High	Medium	Low
Compensation	22.7%	65.3%	12.0%
Job Satisfaction	18.7%	69.3%	12.0%
Commitment	17.3%	56.0%	26.7%
Work Environment	14.7%	72.0%	13.3%
Work Stress	17.3%	68.0%	14.7%
Turnover Intention	16.0%	68.0%	16.0%

Table 2 displays the descriptive analysis results for the variables Compensation, Job Satisfaction, Commitment, Work Environment, Work Stress, and Turnover Intention across high, medium, and low categories. From the table, it can be observed that the majority of respondents place themselves in the medium category for all variables except commitment, where most are in the low category. This indicates that most respondents find their levels of compensation, job satisfaction, work environment, work stress, and intention to turnover to be sufficient or adequate.

However, when it comes to commitment to their organization, the majority of respondents place themselves in the low category, suggesting that most do not feel strongly attached or loyal to their workplace.

The significance of this finding is that low levels of commitment can be a warning signal for companies. Employees who are less committed are more likely to consider leaving, which can lead to turnover issues within the company. Therefore, management needs to pay attention to factors that affect employee commitment levels, such as reward

policies, recognition, career development opportunities, or a supportive company culture.

Furthermore, attention should also be given to the compensation and job satisfaction variables. Even though the majority of respondents categorize themselves as medium for these two variables, there is still a small proportion that feels dissatisfied or undercompensated. This could be an area requiring further attention from management to ensure that employees feel valued and satisfied with their working conditions.

SEM-PLS Test Results

The parameter assessment results of the model in Figure 1, conducted through the PLS-SEM algorithm, are as follows:
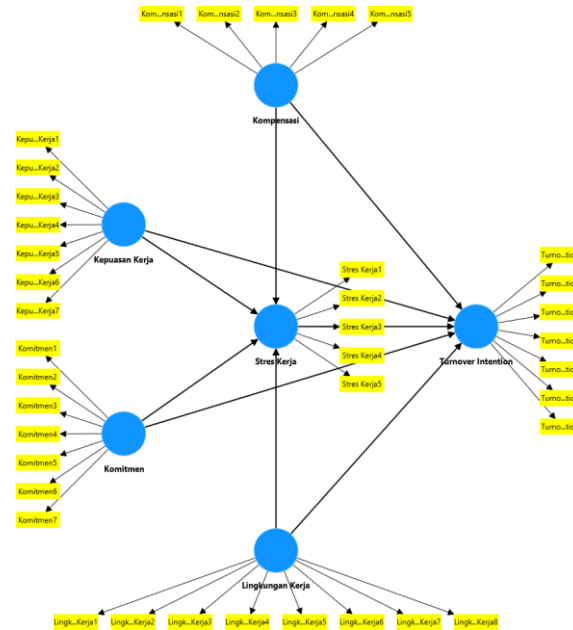

Figure 2. Output of Research Algorithm Calculation

This study uses factor loading (FL), average variance extracted (AVE), composite reliability (CR), and Cronbach's alpha (A) to assess convergent validity.

Table 3. SEM-PLS Output Results

	FL	AVE	CR	A
	0.765	0.586	0.906	0.883
Commitment	0.899	0.809	0.985	0.961
Compensation	0.740	0.548	0.795	0.794
Work Environment	0.742	0.506	0.906	0.868
Work Stress	0.806	0.649	0.880	0.860
Turnover Intention	0.899	0.639	0.925	0.906

Based on Table 3, it can be seen that all research variables are valid. This is evidenced by the AVE values in all variables being greater than 0.5 and Cronbach's alpha in all variables being greater than 0.5.

Table 4. SEM-PLS Output Results

	R-Square
Work Stress	0,716
Turnover Intention	0,794

From the analysis of R-square results, it is observed that the work stress variable has an R-square value of 0.716. This indicates that about 71.6% of the variability in work stress can be explained by the exogenous variables in the model, while the remaining 28.4% is explained by other variables outside the research model. Meanwhile, for the turnover intention variable, the R-square value is 0.794. This indicates that about 79.4% of the variability in turnover intention can be explained by the exogenous variables in the model, while the remaining 20.6% is explained by other variables outside the research model.

Based on the results obtained using the Smart-PLS software, the effects and values of each variable's influence are presented in the following Table 5:

Table 5. Direct and Indirect Effects between Variables

	Original sample (O)	T statistics ($|O/STDEV|$)
Compensation → Work Stress (H_1)	-0.364	3.607
Job Satisfaction → Work Stress (H_2)	-0.148	2.983
Commitment → Work Stress (H_3)	-0.052	0.471
Work Environment → Work Stress (H_4)	-0.593	5.180
Work Stress → Turnover Intention (H_5)	0.638	6.169
Compensation → Turnover Intention (H_6)	-0.146	2.429
Job Satisfaction→ Turnover Intention (H_7)	-0.177	2.071
Commitment→Turnover Intention (H_8)	-0.088	1.056
Work Environment -> Turnover Intention (H_9)	-0.223	2.075
Compensation → Work Stress →Turnover Intention (H_{10})	-0.232	3.186
Job Satisfaction → Work Stress → Turnover Intention (H_{11})	-0.194	2.276
Commitment → Work Stress → Turnover Intention (H_{12})	-0.033	0.478
Work Environment → Work Stress → Turnover Intention (H_{13})	-0.378	3.978

Based on the given T statistics and the significance threshold of 1.96, the interpretation of the results from the above table 5 would be as follows:

1. **Compensation -> Work Stress (H_1):** The effect is significant with a T statistic of 3.607. Compensation negatively influences work stress, suggesting that higher compensation is associated with lower work stress. Hypothesis accepted.

2. **Job Satisfaction -> Work Stress (H_2):** The effect is significant with a T statistic of 2.983. This indicates that higher job satisfaction is associated with lower work stress. Hypothesis accepted.

3. **Commitment -> Work Stress (H_3):** The effect is not significant, as the T statistic is 0.471, which is below the threshold. Hypothesis rejected.

4. **Work Environment -> Work Stress (H_4):** The effect is significant with a T statistic of 5.180, indicating a strong negative influence of a good work environment on work stress. Hypothesis accepted.

5. **Work Stress -> Turnover Intention (H_5):** This relationship is significant with a T statistic of 6.169. It suggests that higher work stress leads to a higher turnover intention. Hypothesis accepted.

6. **Compensation -> Turnover Intention (H_6):** The effect is significant with a T statistic of 2.429. This indicates that higher

compensation is associated with lower turnover intentions. Hypothesis accepted.

7. **Job Satisfaction -> Turnover Intention (H₇):** The effect is significant, with a T statistic of 2.071. Higher job satisfaction reduces turnover intentions. Hypothesis accepted.

8. **Commitment -> Turnover Intention (H₈):** The effect is not significant, as the T statistic is 1.056, which is below the threshold. Hypothesis rejected.

9. **Work Environment -> Turnover Intention (H9):** The effect is significant with a T statistic of 2.075, suggesting that a better work environment reduces turnover intentions. Hypothesis accepted.

10. **Compensation -> Work Stress -> Turnover Intention (H₁₀):** This path is significant with a T statistic of 3.186, indicating that the indirect effect of compensation on turnover intentions through work stress is significant. Hypothesis accepted.

11. **Job Satisfaction -> Work Stress -> Turnover Intention (H₁₁):** The effect is significant with a T statistic of 2.276, suggesting that job satisfaction indirectly reduces turnover intentions by lowering work stress. Hypothesis accepted.

12. **Commitment -> Work Stress -> Turnover Intention (H₁₂):** The effect is not significant, as the T statistic is 0.478. Hypothesis rejected

13. **Work Environment -> Work Stress -> Turnover Intention (H₁₃):** This path is significant with a T statistic of 3.978, indicating that a better work environment significantly reduces turnover intentions by lowering work stress. Hypothesis accepted.

CONCLUSIONS

Here are the conclusions from the relationships among the variables investigated:

1. Negative effects:
   - Work stress: compensation, job satisfaction, commitment, and work environment negatively influence work stress. This means that the better the compensation, job satisfaction, commitment, and work environment, the lower the level of work stress.
   - Turnover Intention: Work stress, job satisfaction, compensation, work environment, and commitment all have a negative impact on the intention to quit. This suggests that improvements in these areas tend to decrease employees' intentions to leave.

2. Positive Effect: Work stress has a positive effect on turnover intention. This means the higher the work stress experienced by employees, the higher their intention to leave the job.

3. Rejected Hypotheses: No significant effect was found between commitment to work stress and commitment to turnover intention with work stress as a mediator.

These conclusions highlight the importance of improving compensation, job satisfaction, commitment, and work environment to reduce stress and prevent employee turnover. Recommendations for actions companies should take include:

1. Compensation: Increase wage scales to align with industry standards and decent living levels, which can reduce employees' stress related to financial issues. Provide performance-based incentives and bonuses to motivate employees and show appreciation for their hard work.

2. Job satisfaction: improve communication between management and employees to ensure that expectations are clear and employees feel valued and understood. Offer regular professional training and development to help employees advance their careers and feel more satisfied with their work.

3. Commitment: Develop a supportive and

inclusive company culture to strengthen employees' commitment to the organization. Implement employee loyalty programs such as long-term awards to enhance retention and commitment.

4. Work Environment: Improve the physical conditions of the workplace, such as lighting, ergonomics, and rest facilities, to create a comfortable and safe environment. Promote work-life balance by implementing flexible policies related to working hours or the possibility of working from home.

5. Work Stress: Offer stress management programs, such as meditation sessions, yoga, or counseling, to help employees manage daily stress. Identify and address causes of workplace stress through regular surveys and feedback sessions with employees.

6. Turnover Intention: Evaluate and adjust HR policies to ensure that recruitment, retention, and promotion processes support employee retention. Review the career paths offered to ensure clear opportunities for growth and development within the company.

Implementing these suggestions can help reduce work stress levels and minimize turnover intentions, while also enhancing overall employee productivity and satisfaction.

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