Work Stress, Job Satisfaction, and Turnover Intention in Public Telecommunication Company

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Abstract—Telecommunication industry faced continuous challenges. Their employees play important role to help them to survive. The organization needs to develop a program that able to retain excellent employees. Turnover is become problem in many industries. It is believed that high turnover rate will harm the organization performance. This study aim to examine the relation of work stress, job satisfaction, and turnover intention in Telecommunication Company. The study conducted in Yogyakarta using 104 participants. Data was collected using questionnaire and analyzed using regression with PROCESS to identify the relation and the mediation. The result reveals that work stress affect turnover directly and indirectly through job satisfaction. Thus job satisfaction has a mediation role in the relation of work stress and turnover intention. Organization should focus on their human resources program to minimize the stress level in order to increase the satisfaction level while in the same time decreasing the intention to leave. This study using only one branch of the company means that any generalizations to the entire organization or telecommunication industry should discussed with caution. The cross-sectional approach also only highlights the relationships between variables and it limit thorough analysis.

Keywords—work stress; job satisfaction; turnover intention; mediation

I. INTRODUCTION

Every part of the business boils down to people [1]. By understanding the human aspect organization become more profitable, effective, can create brand loyalty, do better work, and achieve higher performance. Therefore it is believed that organizations which manage their human resources better will have greater chance of success. The effectiveness of human resource development is an important issue for the organization [2]. The practice of human resource management (recruitment, training, career development) will encourage the improvement of the quality of employees. Ivancevic and Konopaske argued that one of criteria in measuring organization effectiveness is turnover [3]. They also stated that such effectiveness should measure by a combination of goals achievement, efficient recruitment, and maintaining the influx and retention of well-trained and motivated employees. Companies that achieve turnover rates below their industry average are thus likely to enjoy greater competitive advantage than those whose rates are relatively high [4]. Recent studies also support the importance of managing employee turnover in organization. Organizations which can find ways to proactively reduce voluntary turnover in their present workforce will be much better prepared to meet these challenges [5].

Because of its importance, human resources in any organization should manage employee’s turnover. Retaining valuable employees has become big challenges for human resources [6]. Turnover is serious problem in managing human resources [7]. The negative impact of high turnover in increasing organization costs (recruitment, training, loss of sales, productivity) also confirmed [8]. Studies from Spain reveal the negative impact of turnover on performance [9]. Employee’s turnover could harm the individual and organization achievement. Discussing turnover can be started by examining whether there is intention to quit. The emergence of this intention could indicate the magnitude or the number of employees who will resign. The increasing intention should be identify by the organizations. Turnover intention influenced by various factors. Work stress and job satisfaction were predicted turnover intention in banking employees [10]. The negative effect of appreciation, remuneration, welfare, career development, and organizational justice towards turnover intention [11]. Others factors affecting employees turnover were; work-life conflict [12], perceived organizational support [13], work-life balance [14], organizational commitment [15], organizational citizenship behavior [16], compensation [17], learning culture [18], trust [19], leader member interactions [20], leadership style [21], and human resources practices [22].

This study explore the effect of work stress and job satisfaction in a public telecommunication company. Based on previous studies, work stress and job satisfaction had the greatest influence on turnover intention. Organization faced with fierce competition need to rely their advantage on their people. They need to recruit and retain talented employees. Recruiting is one thing, but to retain good employees become quite a challenge. Organization need to provide work environment and job description which suit the need of their people. Workers in telecommunication industry which are classified as knowledge workers have special interest to stay in one organization. They want their job provide enough challenges, give opportunity to develop, have meaningful result. In the other hand, they also want to balance their private life and their job. Human resources department should pay
attention closely and set up program that can meet with the expectation. The organization had provided quite interesting compensation, but, since employee thought that work was not only a matter of financial compensation, human resources should identify their way to reduce or lessen the turnover intention. The conformity between the expectation and reality can help employees to minimize their stress level and enhance job satisfaction and in the end will decrease turnover intention.

II. LITERATURE REVIEW

A. Work Stress and Job Satisfaction

Work stress is a dynamic condition on which an individual think that he could find opportunities, demands, or resources which are met their individual needs and which are so important for him, however they are still uncertain [23]. This condition will generate psychological uncomfortable pressure that came from environment. Work stress can caused by heavy workload, tight deadlines, bad relations, abusive supervisor, or others. Job satisfaction defined as a person’s evaluation of their job and work context [24]. While Kinicki and Fugate, viewed job satisfaction as an affective or emotional response from employees toward various facets of their job [25]. They introduce five predominant model of job satisfaction which are: need fulfillment, met expectation, value attainment, equity, and genetic aspect. In order to make employee satisfy, organization need to understand how to manage these aspects. One of job attitude, perceived stress, has been identify to have correlation with job satisfaction [25]. Stress which come from work and was not addressed will reduce job satisfaction.

Thus we propose hypothesis H1 that work stress will have significant negative effect on job satisfaction.

B. Work Stress and Turnover Intention

Stress has psychological/attitudinal, behavioral, cognitive, and physical health consequences or outcomes. Stress can produce individual and organizational consequences. Regarding individual outcome stress can decreasing job satisfaction [25]. From organizational outcome, work stress can increases the intention to leave [26]. Research to identify the relation of work stress and turnover intention has often been done. Over twenty individual papers studied, all reveal the positive correlation between these variables. Eksi et al. conducted study in nine various industries in Turkey and found that work stress positively influenced turnover intention [27]. The positive relation had been found on various studies using different industries. Tongchaiprasit and Ariyabuddhiphongs [28], and Hwang et al. [29], in South Korea revealed that work stress can predict turnover intention. Study in healthcare industries in Iran [30] and Australia [31] also support previous result. While results from South Africa [32] and China [33] confirm the same correlations. Furthermore, two dimensions of stress investigated Jaramillo et al. which confirmed that role conflict and role ambiguity can predict turnover intention [34]. Another study from Sri Lanka argued that time availability could impact turnover intention [35]. Excessive workload experienced by employee influence their intention to leave organization. Many studies also support the notion that work stress has positive relation with turnover intention [10,36-40].

The above discussion leading to the hypothesis H2 that work stress has a positive significant influence to turnover intention.

C. Job Satisfaction and Turnover Intention

McShane and Von Glinow explain the impact of satisfied employees which one of them are less likelihood to quit their jobs [24]. Turnover is the employee's resignation rate [41]. Snell and Bohlander defines it as the movement of employees out of the company [42]. Turnover intention described as a tendency of employees to leave their current organization to look for new opportunities [43]. By understanding turnover intention management can identify the extent to which employees will leave within a certain period of time. Several factors affect turnover intention. This study explore the effect of job satisfaction toward turnover intention. Most research regarding the correlation between job satisfaction and turnover intention showed negative correlation. Valentine et al. who studied healthcare and sales employees argued that job satisfaction associated with decreased turnover intention [44]. Many authors published their findings and support the negative correlation between job satisfaction and turnover intention [10,14,45-50]. Based on previous research this study determined that hypothesis H3 is that job satisfaction has significant negative impact on turnover intention. The last hypothesis regarding the mediation is that job satisfaction is a mediator in a relation between work stress and turnover intention. The research model showed in figure 1.

![Research model](image)

Fig. 1. Research model.

III. METHODOLOGY

A. Participants

Data was collected from Telkom Witel Yogyakarta office. Questionnaires were distributed to all 105 employees. The response rate was 99%. The high return rate was due to the fact that we personally knew the human resources and ask his favor specifically regarding the survey. As shown in table 1, the participants’ distribution in gender, age, and tenure were quite similar. Regarding the position, it is usual in an organization that officer exceed the upper managerial level. Most of participants have an undergraduate level of education. (52%). All participants work at Telkom Witel Yogyakarta which had at least three branches.
C. Measurements

There were 34 items asked in the questionnaire. Job satisfaction consists of 20 items adapted from Pras et al. [56]. While 8 items for work stress and 6 items for turnover intention adapted from Masihabadi et al. [57]. Each items has 6 alternative answer from 1 (strongly disagree) to 6 (strongly agree). Cronbach Alpha value for job satisfaction was 0.902, work stress was 0.829, and for turnover intention was 0.878. Sample items for job satisfaction was ‘I have the opportunity to develop my career’, for work stress was ‘my job demands a lot of time & energy’, and for turnover intention was ‘Actively look for new job alternative opportunities’.

IV. RESULTS AND DISCUSSION

Means, standard deviations, and correlations were reported in table 2. The correlation pattern was consistent with hypothesized relationships between variables. A negative correlation was found in the relation of work stress and job satisfaction and between job satisfaction and turnover intention. On the other hand, work stress and turnover intention was found to have a positive correlation. According to Wegner correlation of work stress and job satisfaction was weak (-0.033) and the direction was negative [58]. Meanwhile, correlation value between job satisfaction and turnover intention (-0.502) and between work stress and turnover intention (0.554) were strong.

B. Data Analysis

Data collected from the survey were input and processed using SPSS. Correlation analysis was conducted to identify the relation between variables. To verify the effect of independent variables on dependent variable, regression analysis was used. Furthermore, this study examine the mediation of job satisfaction in the relation between works stress and turnover intention. In this regard, Hayes assessment of the mediation effect using the bootstrap test was employed [51]. The mediation effect is believed to be significant if both the upper limit and lower limit value of the bootstrap confidence interval does not include 0 (zero). The calculation was done using SPSS with PROCESS. This technique was suitable method for analyzing influences among variables and identifying mediation elements. PROCESS avoid compulsion to meet normality element by utilizing bootstrapping confidence intervals [52]. Previous studies using the same method were [46,53-55].

### TABLE I. DEMOGRAPHIC PROFILE

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>66</td>
<td>58%</td>
</tr>
<tr>
<td>Female</td>
<td>44</td>
<td>42%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25 Years</td>
<td>20</td>
<td>19%</td>
</tr>
<tr>
<td>25 – 30 years</td>
<td>20</td>
<td>19%</td>
</tr>
<tr>
<td>&gt; 30 – 35 years</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>&gt; 35 – 40 years</td>
<td>17</td>
<td>16%</td>
</tr>
<tr>
<td>&gt; 40 – 45 years</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>&gt; 45 – 50 years</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>&gt; 50 years</td>
<td>19</td>
<td>18%</td>
</tr>
<tr>
<td>Tenure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 years</td>
<td>13</td>
<td>13%</td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>24</td>
<td>23%</td>
</tr>
<tr>
<td>&gt; 3 – 5 years</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>&gt; 5 – 10 years</td>
<td>24</td>
<td>23%</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>32</td>
<td>31%</td>
</tr>
<tr>
<td>Position</td>
<td></td>
<td></td>
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<tr>
<td>Officer and Administration</td>
<td>73</td>
<td>70%</td>
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<tr>
<td>Supervisor</td>
<td>26</td>
<td>25%</td>
</tr>
<tr>
<td>Manager</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Education</td>
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<tr>
<td>High School</td>
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<tr>
<td>Diploma</td>
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<td>26%</td>
</tr>
<tr>
<td>Under Graduate</td>
<td>52</td>
<td>50%</td>
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<tr>
<td>Post Graduate</td>
<td>2</td>
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</tr>
</tbody>
</table>

### TABLE II. MEAN, DEVIATION STANDARD, AND CORRELATION

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Age</th>
<th>Tenure</th>
<th>Position</th>
<th>Stress</th>
<th>Satisfaction</th>
<th>Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>3.7019</td>
<td>2.13105</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>3.3654</td>
<td>1.44180</td>
<td>.85**</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position</td>
<td>3.4862</td>
<td>5.7063</td>
<td>.365**</td>
<td>.317**</td>
<td>1</td>
<td>-.252**</td>
<td>.039</td>
<td>1</td>
</tr>
<tr>
<td>Stress</td>
<td>3.4811</td>
<td>6.3171</td>
<td>-.271**</td>
<td>-.315**</td>
<td>-.239**</td>
<td>.554**</td>
<td>-.502**</td>
<td>1</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>3.3879</td>
<td>5.3498</td>
<td>.144</td>
<td>.069</td>
<td>.163</td>
<td>-.330**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Turnover</td>
<td>2.4781</td>
<td>7.5978</td>
<td>-.423**</td>
<td>-.315**</td>
<td>-.239**</td>
<td>.554**</td>
<td>-.502**</td>
<td>1</td>
</tr>
</tbody>
</table>

*a* Correlation is significant at the 0.05 level (2-tailed)

*b* Correlation is significant at the 0.01 level (2-tailed)

Regression analysis using SPSS and PROCESS program was used to test hypothesis. Table 3 shows summary of SPSS and PROCESS results related to H1 to H3 hypothesis. The results indicate that H1 is accepted; work stress has significant negative influence on job satisfaction (coefficient -0.280, p<0.00). Hypothesis H2 also accepted (coefficient 0.524, p<0.00), that is work stress has significant positive effect on turnover intention. Employees with higher stress level tend to leave the organization. The hypothesis H3, job satisfaction has significant negative impact to turnover intention is also accepted (-0.508, p<0.00). Satisfied employee will remain in the organization.
Hypothesis H4 examined job satisfaction as a mediator between work stress and turnover intention. SPSS and PROCESS program were also used to measure and analysis this hypothesis [51]. Table 4 showed that the Lower Level Confidence Interval (LLCI) and Upper Level Confidence Interval (ULCI) value for indirect effect (through job satisfaction) did not contain 0 which means H4 was accepted. Job satisfaction is a mediator for work stress and turnover intention. Employee with low work stress level will have high satisfaction level and they will remain within the company in the long run. Job satisfaction will leverage the strength of the effect. As seen also in table 4 that total effect is bigger than direct effect. Figure 2 showed the model of work stress impacts to turnover intention and the mediation role of job satisfaction.

**TABLE III. REGRESSION COEFFICIENT, STANDARD ERROR, AND MODEL SUMMARY**

<table>
<thead>
<tr>
<th></th>
<th>Coeff</th>
<th>SE</th>
<th>p-value</th>
<th>Coeff</th>
<th>SE</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.280</td>
<td>0.089</td>
<td>0.000</td>
<td>-0.508</td>
<td>0.114</td>
<td>0.000</td>
</tr>
<tr>
<td>Stress</td>
<td>4.268</td>
<td>0.254</td>
<td>0.000</td>
<td>2.549</td>
<td>0.567</td>
<td>0.000</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE IV. THE EFFECT OF WORK STRESS ON TURNOVER INTENTION**

<table>
<thead>
<tr>
<th></th>
<th>Effect</th>
<th>SE</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>0.524</td>
<td>0.097</td>
<td>0.333</td>
<td>0.716</td>
</tr>
<tr>
<td>Through Job Satisfaction</td>
<td>0.142</td>
<td>0.047</td>
<td>0.065</td>
<td>0.257</td>
</tr>
<tr>
<td>Total Effect</td>
<td>0.667</td>
<td>0.099</td>
<td>0.470</td>
<td>0.863</td>
</tr>
</tbody>
</table>

**Fig. 2. Mediation role of job satisfaction.**

The findings reflect that work stress has direct effect on turnover intention. While job satisfaction acts as mediator which reinforced work stress the effect on turnover intention. Nowadays it is hard to retain good employees. Business competition causes companies to attract outstanding employees. No wonder if your organization has such employees, they will constantly have persuaded by headhunter to move out. It is the responsibility of human resources and manager to manage their human assets. Organization can help their employee to manage the stress level. Stress can come from various sources. In case of employees it came from work and non-work environment. Not all stress were bad, eustress which associate stress with positive outcome is an example. Even without stress some individual cannot achieve optimal performance. Areas that should be look out to help manage stress including job demands, work overload or under load, unattractive job, role conflict and ambiguity. Regarding non-work factors, employees face many problems with their personal life, economic pressure, and family. Providing safety environment to work, setting up wellness program, arrange flexible work schedule, implementing policy and action based on fairness, promoting balance in private life and work, and show some empathy. By attending such matters organization helping employee to reduces their stress. They also enhance their satisfaction. While some of previous method to reduce stress could also help increase satisfaction, organization can add new factors such as give more control to employee, promote healthy lifestyle, introduce program that build strong bonds with co-workers, develop challenging career opportunity, and let the employee to find new ways to do their job better. With comprehensive policy, organization has various alternatives to manage the turnover intention. They still need to identify what are the causes of stress. They have to discuss this in person. Without personal approach, they program will not bring positive result.

**V. CONCLUSION**

The results provide comprehensive information regarding the relation of work stress, job satisfaction, and turnover intention. On the basis of three relations, our results were consistent with the findings of previous studies from various countries and industries. There is a positive significant effect of work stress on turnover intention. These finding answer hypothesis H1, H2 and H3. Further conclusion regarding mediation role, H4, it is found that job satisfaction has mediation role in relation between work stress and turnover intention. Turnover indeed is costly and can seriously impact business performance. High turnover rates may reduce the capability to perform. The present findings can suggest the types of interventions required to solve the turnover problems. Organization can focus on enhancing job satisfaction and minimizing work stress. There are some ways to do that and they just need to pick the right methods. This study provides a useful starting point to further examine broader workforce regarding of turnover, work stress, and job satisfaction in Indonesia. However, this study also had limitation which caused by relatively small sample. This limitation creates difficulty to make generalization based on this study alone. This research used self-report for answering the questionnaire which perhaps can be manipulated by employees. Suggestion for future research is to use bigger sample from various industries to achieve an optimal result in confirming the theory and to contribute to the practitioners. Meanwhile, to increase data accuracy, researcher can use interview method which is supervised, which will confirm respondent responds. Furthermore, longitudinal data used is suggested to increase.
interpretation accuracy that related to the research result obtained.

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REFERENCES


The Direct and Indirect


