The Effect of Work Stress and Burnout on Job Satisfaction and Employee Performance:
A Test of Conservation of Resources Theory

Arik Prasetya*, Hafsah Khaireunnisa, Aulia Luqman Aziz
Business Administration Department, Faculty of Administrative Science
Universitas Brawijaya
Malang, Indonesia
*arik_p_fia@ub.ac.id, hafsahkhair.hk@gmail.com, aulialuqmanaziz@ub.ac.id

Abstract—The study aims to analyse the effect of work stress and burnout on job satisfaction and employee performance. This research is a form of confirmation of the Conservation of Resources Theory. The research employs explanatory research using quantitative approach. The research objects were doctors and nurses working in Dr. Sаiful Anwar General Hospital. Total samples were 92 people taken using proportional stratified random sampling technique. The data were obtained directly from respondents by distributing questionnaire. Data analysis used descriptive analysis and path analysis. The research result showed that (1) Work stress (X1) has a significant negative influence on job satisfaction (Z); (2) Burnout (X2) has a significant negative influence on job satisfaction (Z); (3) Work stress (X1) has a significant negative influence on employee performance (Y); (4) Burnout (X2) has a significant negative influence on employee performance (Y); and (5) Job satisfaction (Z) has a significant positive influence on employee performance (Y). The total Adjusted R2 yield showed that work stress (X1), burnout (X2) and job satisfaction (Z) affects 72.1% employee performance (Y) of doctors and nurses working in Dr. Sаiful Anwar General Hospital. Other variables not examined in this study influenced the remaining percentage.

Keywords—work stress, burnout, job satisfaction, employee performance

I. INTRODUCTION

The era of technology development encourages a company not to merely rely on technological advances and pay attention to human factors. Human Resources (HR) drive an organization to perform effectively and efficiently. As a result, an organization may develop well and achieve its goals.

Each organization, including hospitals, needs high performing human resources. Hospital is an organization providing public health services and is required to provide the best services. The most important human resources in a hospital are doctors and nurses. They provide services for 24 hours a day and 7 days a week. In addition, the doctor and nurses interact with patients.

The performance of doctors and nurses, as part of the health services system in hospitals, is one of the factors that determine the quality of health services. Employee performance is defined as the ability of an employee to perform a set of skills. A company creates a good and healthy work environment to increase employee performance and satisfaction. Employee satisfaction is correlated with employee performance [1]. According to Aziri [2], job satisfaction is a combination of positive or negative emotions of an employee or the individual experience during work.

An organization is responsible to maintain employee satisfaction to reduce stress and burnout level. Excessive workload, overtime, and an unsupportive environment will induce work stress. According to Siagian [3], work stress affects emotion, thought process, and physical condition. An individual experiencing work stress prefer to be alone, have unstable emotion, and feel unsettled. Each individual has their method to manage stress. However, an individual who fails to manage stress will worsen their physical and mental condition.

An individual who is unable to change work conditions will experience prolonged stress. According to Lorenz [4], stress and burnout are different. Burnout is not a symptom of stress. However, it is the result of uncontrollable work stress and is more severe compared to work stress. Masclach et al. [5] explained that burnout is a psychological syndrome consisted of three-dimension: emotional fatigue, depersonalization, and declining personal achievement, as well as self-deprecation in conducting daily tasks. The burnout level is influenced by the credibility of a company. High credibility will increase workload and indirectly cause the employee to be susceptible to burnout. On the other hand, low credibility decreases employee susceptibility to burnout.

Previous experts and researchers have discussed factors that antecedent employee performance. Sullivan et al. [6], Salami et al. [7], Kazmi et al. [8], Subha and Shakil [9], and Hidayati et al. [10] empirical research discussed the influence of work stress, burnout, and work satisfaction on employee performance.
Beyondblue and Roy Morgan Research [11] conducted a national survey. The total samples were 42,942 doctors and 6,658 medical students. The survey result showed that Australian medical students experience high psychological stress. In addition, 45% of doctors experience depression. National Safety Council [12] stated that the most stress-inducing occupation is a nurse. Doctors and nurses have numerous tasks and must interact with the patient and their families. The aforementioned work condition may induce stress. A similar condition occurs in Indonesian hospitals, especially high-profile hospitals which is frequented and referred to by the surrounding community.

Based on the background of the study, this research aims to assess the Conservation of Resources theory focused on the influence of work stress and burnout on job satisfaction and performance of doctors and nurses working in Dr. Saiful Anwar General Hospital, Malang, Indonesia.

II. RELATED WORK

A. Conservation of Resources Theory

Conservation of Resources (COR) is a stress theory which illustrates motivation that encourages human to maintain existing resources and pursue new resources [13]. COR theory is a reliable basis to understand the processes involved in experiencing and coping with stress [14]. COR theory explains that individuals are motivated to protect their current resources (conservation) and acquire new resources (acquisitions). Resources are defined as objects, circumstances, conditions, and other things that people value [13]. The value of resources varies among individuals and is related to their personal experiences and situations. For example, time with family can be viewed as a valuable resource for one person. However, others may value time with family differently or perceive it as a threat to other resources.

Hobfoll suggests that psychological distress occurs in three instances: the threat of loss of resources, the actual loss of resources, and lack of resources after expenditure. Based on this perspective, resources are defined as things that are valued, especially objects and conditions [15]. COR states that the loss of resources will push an individual to a certain level of stress [13].

Resources are anything that individual values and can be divided into four categories: objects (e.g., home, telephone), conditions (e.g., stable job, good health), personal characteristics (e.g., optimism, hope), and energy (e.g. knowledge) or someone. According to the COR theory, stress occurs when individual resources are threatened, depleted, or when investment in new resources is not increased adequately [13,16].

B. Work Stress

Work stress is defined as the harmful physical and emotional responses that occur when job requirements do not match the worker’s capabilities, resources, and needs [17].

Sinambela [1] stated that work stress is the depressed feeling of an employee during work. Fahmi [18] stated that work stress is a condition that pushes an individual beyond their capability. Without providing a solution, the condition would affect the health of an individual. Mangkunegara [19] stated that work stress is the feeling of depression experienced by an employee during work. Work stress causes unstable emotions, unsettled feelings, insomnia, incapability to relax, anxiousness, tenseness, nervousness, and increased blood pressure.

Excessive workload, overtime, and an unsupportive work environment cause work stress. According to Luthans [20], stress at the organizational level occurs due to organizational structure formed through existing organizational design. For instance, the conflict between employees and an unsupportive environment.

C. Burnout

Wilcockson [21] defined burnout as fatigue caused by prolonged and overwhelming stress. According to Maslach [5], burnout is the discrepancy between the character/hope of an individual with existing work conditions. The burnout consists of emotional fatigue, depersonalization, and low self-achievement. Burnout is a mental condition of an individual experiencing prolonged stress. However, burnout is not a symptom of work stress. It is the result of unmanaged work stress [22].

<table>
<thead>
<tr>
<th>TABLE I. DIFFERENCE BETWEEN STRESS AND BURNOUT [23]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stress</strong></td>
</tr>
<tr>
<td>Excessive emotion</td>
</tr>
<tr>
<td>Causes depressed conditions and excessive actions</td>
</tr>
<tr>
<td>Loss of energy</td>
</tr>
<tr>
<td>Causes anxiety</td>
</tr>
<tr>
<td>Damage to the physical condition</td>
</tr>
</tbody>
</table>

Table 1 shows the difference between stress and burnout. An employee experiencing burnout tends to be helpless due to loss of motivation. On the other hand, employees experiencing stress tend to be emotionally aggressive. An employee experiencing stress and burnout face a similar problem at work. However, they exhibit different responses. Prolonged stress potentially becomes burnout. On the contrary, stress does not necessarily cause burnout.

D. Job Satisfaction

Handoko [24] stated that job satisfaction is an emotional condition of an employee in response to their work in an organization. Siagian [3] stated that job satisfaction has different connotations. Each connotation is relevant to job satisfaction when work result and reward are adequate and fair. However, there is no benchmark of job satisfaction as each
employee has different satisfaction standards. Employee satisfaction is relatively good when the employees have good work discipline and moral in the work unit and low employee turnover.

E. Performance

Mangkunegara [19] stated that performance is the work result of an employee by adhering to predetermined criteria. Sinambela [1] defines employee performance as the capability of the employee in conducting a certain task. Employee performance is an important factor in determining employee capability to perform tasks. For this reason, it is necessary to maintain a clear and measurable criterion to be set as a reference.

III. METHODOLOGY

This research employs explanatory research using a quantitative approach. This research was conducted in Dr. Saiful Anwar General Hospital. This hospital has 14 clinics of Outpatient Installation, 7 classes of Inpatient Installation, and Emergency Departments. The research population was doctors and nurses working in Dr. Saiful Anwar General Hospital, Malang, Indonesia. The research population was 27 IPD doctors, 8 pulmonologists, 10 dermatologists, 13 neurologists, 6 psychiatrists, and 969 nurses. The total population was 1,033 people. The sample determination used the Proportional Stratified Random Sampling technique. The total population was 1,033 at the 0.1 significance level. Therefore, the total sample was 92 people, divided into 6 doctors and 86 nurses.

This research employed primary data and secondary data. The research instrument was a questionnaire consisting of written questions. The data collection used surveys and documentation. The data analysis used descriptive analysis and path analysis.

The hypothesis is formulated as follow:

H1: There is a significant influence of employee work stress (X1) on employee job satisfaction (Z).

H2: There is a significant influence of employee burnout (X2) on employee job satisfaction (Z).

H3: There is a significant influence of employee work stress (X1) on employee performance (Y).

H4: There is a significant influence of employee burnout (X2) on employee performance (Y).

H5: There is a significant influence of employee job satisfaction (Z) on employee performance (Y).

IV. RESULTS AND DISCUSSION

A. Frequency Distribution

Based on data analysis using frequency distribution analysis, the work stress variable has a grand mean of 2.41, indicating that doctors and nurses have a low level of work stress. The burnout variable obtained a grand mean of 2.22, indicating that doctors and nurses have a low level of burnout. The job satisfaction variable has a grand mean of 3.54, indicating that doctors and nurses have a high level of job satisfaction. The employee performance variable has a grand mean of 3.78, indicating that that doctors and nurses have a high level of performance.

B. Path Analysis

1) The Influence of Work Stress (X1) on Employee Job Satisfaction (Z): Table 2 shows the path coefficient value of -0.461 for the influence of work stress on job satisfaction.

![Table 2](source: Processed Primary Data (2020))

The negative coefficient value indicates that high work stress decreases job satisfaction. The t-count value is -4.968 and t-table (α = 0.05; df residual = 88) value is 2.632. Furthermore, t-count < t-table at -4.968 < 2.632 and sig value < alpha value at 0.000 < 0.005.

2) The influence of Burnout (X2) on Employee Job Satisfaction (Z): Table 3 shows the beta coefficient value of -0.340.

![Table 3](source: Processed Primary Data (2020))

The negative coefficient value indicates that a high burnout level decreases job satisfaction. The t-count value is -3.661 and t-table (α = 0.05; df residual = 88) value is 2.632. The t-count < t-table at -3.661 < 2.632 and sig value < alpha value at 0.000 < 0.005.

3) The Influence of Work Stress (X1) on Employee Performance (Y): Table 4 shows the path coefficient value -0.192 for the influence of work stress on employee performance.

![Table 4](source: Processed Primary Data (2020))
The negative coefficient value indicates a high level of work stress reduces employee performance. The t-count value is -2.440 and t-table value (a = 0.05; df residual = 88) is 2.632. The t-count < t-table at -2.440 < 2.632 and sig value < alpha value at 0.000 < 0.05.

4) The Influence of Burnout (X2) on Employee Performance (Y): Table 5 shows the path coefficient value - 0.176 for the influence of burnout on employee performance.

| TABLE V. PATH COEFFICIENT TEST OF BURNOUT ON EMPLOYEE PERFORMANCE |
| Independent Variable | Standardized Coefficient (Beta) | T | Sig | Description |
| Burnout | -0.176 | -2.351 | 0.000 | Significant |

The negative coefficient value indicates that a high level of burnout decreases employee performance. The t-count value is -2.351 and t-table (a = 0.05; df residual = 88) value is 2.632. The t-count < t-table at -2.351 < 2.632 and sig value < alpha value at 0.000 < 0.005.

5) The Influence of Employee Job Satisfaction (Z) on Employee Performance (Y): Table 6 shows a path coefficient value of 0.585 for the influence of employee job satisfaction on employee performance.

| TABLE VI. PATH COEFFICIENT TEST OF EMPLOYEE JOB SATISFACTION ON EMPLOYEE PERFORMANCE |
| Independent Variable | Standardized Coefficient (Beta) | T | Sig | Description |
| Employee Job Satisfaction | 0.585 | 7.341 | 0.000 | Significant |

The positive coefficient value indicates that a high level of employee satisfaction increases employee performance. The t-count value is 7.341 and t-table (a = 0.05; df residual = 88) value is 2.632. The t-count 7.341 > 2.632 and sig value < alpha value at 0.000 < 0.005.

C. Discussion

1) The influence of work (X1) on employee job satisfaction (Z): Based on the result of path analysis (figure 1), the beta coefficient value is -0.668, sig value < alpha value at 0.000 < 0.005 and t-count value of -8.517. This indicates that the work stress variable (X1) has a negative significant influence on employee job satisfaction (Z). The research result supports Purdini [25] and Subha and Shakil [9] stating that work stress has a negative significant influence on job satisfaction.

Doctors and nurses experience work stress due to excessive workload and deadline. The superior constantly increase workload without providing incentives, therefore decreasing job satisfaction. Fahmi [18] stated that superiors often force the employee to work according to or exceed the set target. This condition will induce stress when the employee fails to meet the set target.

2) The Influence of burnout(X2) on employee job satisfaction (Z): Based on the result of path analysis (figure 1), the beta coefficient value is -0.621, sig value < alpha value at 0.000 < 0.005, and the t-count value of -7.511. It indicates that the burnout variable (X2) has a negative significant influence on employee job satisfaction (Z). This research supports Asi (2013) stating that burnout has a negative significant influence on job satisfaction.

Doctors and nurses experience burnout due to work fatigue, causing them to do mistakes and be easily offended. The emotional fatigue indicator mean is 2.4, which is the highest indicator mean for the burnout variable. Freudenberg [26] defined burnout as “mental and physical fatigue caused by an individual professional life”. Work fatigue is psychological exhaustion caused by unchallenging work, inducing weariness, and boredom. This condition causes doctors and nurses to be frustrated, decreasing job satisfaction as a result.

3) The influence of work stress (X1) on employee performance (T): Based on the result of path analysis (figure 1), the beta coefficient value is -0.691, sig value < alpha value at 0.000 < 0.005, and t-count of -9.068. It indicates work stress...
variable (X1) has a negative significant influence on employee performance (Y). This research supports Salami et al. [7] and Subha and Shakil [9] stating that work stress has a negative significant influence on employee performance. Excessive workload surpassing employee capability will induce stress and decrease performance. In turn, doctors and nurses will assign the workload to others. Sinambela [1] stated that internal and external stress factors of the work environment influence work performance. Excessive workload surpassing an employee capability is a stress factor in a work environment. Doctors and nurses may react to the condition in a positive and negative manner. When the doctors and nurses react positively, they will increase performance to achieve the maximum result. However, doctors and nurses who react negatively will decrease work performance.

4) The influence of burnout (X2) on employee performance (Y): Based on the result of path analysis (figure 1), the beta value is -0.657, sig < alpha value at 0.000 <0.005, and t-count value of -8.264. It indicates that the burnout variable (X2) has a negative significant influence on employee performance (Y). This research supports Asi [27] stating that burnout has a negative significant influence on performance.

Doctors and nurses working in Dr. Saiful Anwar General Hospital Malang experience burnout. The condition deters work initiative and idea generation to improve work achievement. In addition, burnout will decrease work performance. Oxford English Dictionary stated that burnout is a condition when an employee experience fatigue. Fatigue causes mental and physical exhaustion due to excessive work. It deters work initiative and idea generation to improve skills. Doctors and nurses possessing a good set of skills will exhibit good performance. In contrast, doctors and nurses without a good set of skills will exhibit bad performance.

5) The influence of job satisfaction (Z) on employee performance (Y): Based on the result of path analysis (figure 1), the beta coefficient value is 0.823, sig < alpha value at 0.000 < 0.005, and t-count of 13.762. This indicates that the employee job satisfaction variable (Z) has a positive significant influence on employee performance (Y). This research supports Sinambela [1] which stated that job satisfaction has a positive influence on employee performance.

In a descriptive manner, item 'doctors and nurses found no difficulty in collaborating with colleagues' shows a mean value of 3.8 as the highest mean value in the job satisfaction variable. Item 'doctors and nurses capable of solving the problem with a colleague and superior' shows a mean value of 3.9 as the highest mean value in the performance variable. The job satisfaction of doctors and nurses working in Dr. Saiful Anwar General Hospital Malang is shown through a friendly atmosphere, friendly colleague, and respect for differences in the work environment. A comfortable work environment increases the job satisfaction of doctors and nurses, consequently, increases work performance. Sinambela [1] stated that to increase job satisfaction, a company ought to create a good and healthy work environment. The job satisfaction is correlated to work performance. Job satisfaction will increase work performance. Doctors and nurses possessing high job satisfaction will be more productive.

Based on the discussion, doctors and nurses working in Dr. Saiful Anwar General Hospital Malang experience work stress and burnout. This condition is relevant to Hobfoll [13] Conservation of Resources Theory. The theory states that the loss of resources influences the stress level of an individual. Related to COR and burnout research, Neveu [28] studied how the utilization of resources may influence mood. Recent research found that emotional fatigue has the strongest relationship with symptoms of depression. In an empirical manner, the result of this research supports Sullivan et al. [6], Salami et al [7], Kazmi et al [8], Subha and Shakil [9], Hidayati et al [10], and Purdini [25]. In conclusion, excessive workload and work fatigue will increase exhaustion, frustration, weariness, helplessness, and discrepancy between hope and reality. For instance, the discrepancy between workload and reward. This condition will increase burnout and decreases the work performance of doctors and nurses.

V. CONCLUSION AND FUTURE SCOPE

From the study, it can be concluded as follows. First, there is a negative significant influence of work stress on employee job satisfaction. The beta coefficient value is -0.461 (sig 0.000). It indicates that a high level of work stress will decrease job satisfaction. Second, there is a negative significant influence of burnout on employee job satisfaction. The beta coefficient value is -0.340 (sig 0.000). This indicates that a high level of burnout will decrease job satisfaction.

Third, there is a negative significant influence of work stress on employee performance. The beta coefficient value is -0.192 (sig 0.000). It indicates that a high level of work stress will decrease performance. Fourth, there is a negative significant influence of burnout on employee performance. The beta coefficient value is -0.176 (sig 0.000). This indicates that a high level of burnout will decrease performance.

Lastly, there is a positive significant influence of employee job satisfaction on employee performance. The beta coefficient value of 0.585 (sig 0.000). This indicates that a high level of job satisfaction will increase performance.

The conclusions can be the foundation for several practical suggestions. Firstly, the majority of doctors and nurses experience work stress due to the deadline. Therefore, doctors and nurses should determine work priority. Prioritize tasks with the earliest deadline, followed by other less time demanding tasks. It will lessen the workload and induce less stress.

Secondly, doctors and nurses experience burnout due to the difficulty to increase work initiative. Therefore, the hospital superior should focus on creating a comfortable work environment and pay more attention to the employee.
Thirdly, the hospital superior should pay more attention to reward in the form of providing an incentive for doctors and nurses who are assigned extra workload.

Fourthly, the hospital superior should provide accurate and clear work division and direction to the doctors and nurses, consequently increasing their work performance.

Finally, future researchers may study IRNA II, III, or IV and increase the scope of the study to obtain a more comprehensive research result.

ACKNOWLEDGMENT

The researchers extend their gratitude to the Faculty of Administrative Science for providing the opportunity, facilities, and funds to conduct this research, and to the research team in finishing this article.

REFERENCES