The Effect of Workload on Turnover Intention among Health Workers, with Burnout as a Mediator and Work Stress as a Moderator

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Article Info

Keywords: Workload; Burnout syndrome; Turnover intention; Work stress

JEL Classification: M12, M19, M54

DOI: 10.33830/jom.v19i2.4264.2023

Abstract

Purpose - This study aimed to determine the effect of workload on turnover intention among health workers during the COVID-19 pandemic, with burnout serving as a mediator and work stress as a moderator.

Methodology - This qualitative study collected data from health workers in health facilities in the Klungkung Regency using questionnaires. The data obtained were then examined using SmartPLS 3.2.9.

Findings - The results showed that workload did not impact turnover intention, with burnout serving as a mediator. Meanwhile, work stress has not been proven to increase the connection between workload and turnover intent.

Originality - This study provided a different perspective based on organizational behavior theory, which described the turnover intention mechanism of health workers.

1. Introduction

Over the years, several studies have been conducted to determine the factors contributing to the desire of workers to leave the organization (Kim and Shim 2018; Labrague et al. 2020). Furthermore, Moynihan and Pandey (2011) identified three factors contributing to turnover intention, including environmental, individual, and organizational factors. Liu and Onwuegbuzie (2012) and Bhatnagar (2012) also reported the significance of worker intention as a strong predictor of organizational departure. The nature of the relationship influencing the decision to change workplace has been studied by Labrague et al. (2018). Organizational policies have been identified as one of the influential factors (Shore and Martin, 1989; Zeffane and Melhem, 2017; Labrague et al., 2018), but the effect on the decision to leave an organization is still unknown. To explain these phenomena accurately, a good methodology is needed to obtain the perceptions of workers. Recent studies on turnover intention indicate that external environmental factors, such as the pandemic COVID-19, play a significant role (De Simone et al., 2018; Li et al., 2019; Liu et al., 2019; Labrague et al., 2020). Although previous studies predominantly focused on internal organizational factors, such as development (Junaidi et al., 2020; Liu and Lo, 2018) and human
resource practice (Eriksson et al., 2014; Stamolampros et al., 2019), COVID-19 has led to substantial shifts and challenges in the healthcare sector (Singh et al., 2021). The rapid spread of the virus has raised concerns, particularly among health agencies and workers due to the associated risk (Sharma and Bhatta, 2020; Kang et al., 2021). However, these workers are still required to provide responsive health services (Creese et al. 2021).

The escalating incidence of COVID-19 exposure along with the challenging situations induces feelings of fear and anxiety, thereby affecting mental and psychological health. (Rodríguez-López et al., 2021). This burden is specifically pronounced among healthcare professionals who must return to the closest people (family) and environment after duties (Bruyneel et al., 2021). Health workers also face the negative consequences of the community stigma against the spread of the virus. To reduce the transmission rate, the government has intensified efforts in tracking and tracing, providing support to health agencies. However, the prevalence of low public awareness and compliance, particularly in developing countries, remains a key factor contributing to the surge in the number of cases (Ugwu and Onyishi 2020). Developed countries are known to exhibit a higher degree of public discipline and compliance, leading to more efficient preventive measures (Aristana, Arsawan, and Rustiarini 2022). This treatment of affected patients within hospitals and quarantine facilities has significantly increased the perceived workload of health workers.

Previous studies consistently underscored the significant correlation of workload with burnout (Yürür and Sarikaya, 2012; Xiaoming et al., 2014; Qureshi et al., 2013) as well as psychological well-being (Rodríguez-López et al., 2021). The psychological effect experienced by workers often leads to the inclination to change their workplace. Liu and Lo (2018) presented a divergent perspective, suggesting that workload had an effect on burnout, but did not affect turnover intention. This disparity in results underscores the ongoing relevance of investigating turnover intention, particularly in the context of the COVID-19 pandemic. This factor has also become an important subject of discussion over the final few decades (Chen et al., 2011; Bosak et al., 2021). This issue gains prominence due to the frequent discord between worker duties and the rights accorded to them, including aspects, such as environment, work pressure, exploitation, and worker status (outsourcing).

The effect of workload on burnout as well as turnover intent varies significantly when workers are exposed to work-related stress. Several studies showed that increased stress levels could contribute to burnout (Oruh et al., 2021) and turnover intention (Kokoroko and Sanda, 2019; Manoppo 2020), leading to psychological conditions, such as boredom and lethargy. A previous report stated that the prevalence of nurse turnover intention was in line with the level of burnout caused by workload (Dall’Ora et al. 2020; Vermeir et al. 2018). The increasing rate of COVID-19 transmission is predicted to increase work stress, further strengthening turnover intention (Junaidi et al., 2020; Liu & Lo, 2018; Qureshi et al., 2013).

This study aims to analyze the relationship between workload, burnout, as well as turnover intention among health workers during COVID-19 and examine the moderating effect of work stress. The results also integrate study models that have been carried out previously. Liu & Lo (2018) and Qureshi et al. (2013) measured the effect of workload, work stress, as well as burnout, while Sveinsdóttir et al. (2021) found that burnout was a driver of turnover. This current study also fills the existing theoretical gaps due to the inconsistencies in the results of previous reports. The results can be a consideration for stakeholders, both health agencies and the government, in determining regulations and management of health workers, in the treatment of employment status, and the balance between duties and compensation.
This research reveals the determinants of turnover intention and tests the function of burnout syndrome as a mediator and work stress as a moderator. Theoretically, the findings of this research can contribute to expanding the literature explaining personal behavior in organizations as well as contributing to the best approaches. Apart from that, the workload received by employees can be accommodated proportionally so as to overcome existing gaps, especially in the management of health facilities. Practically, the results of this research can contribute to the management of burnout syndrome, work stress, and turnover intention in health facilities. Therefore, managerial parties need to design the workload in managing the organization because it can increase the level of fatigue, which is interfered with by the level of stress and ultimately stimulates the employee’s desire to quit.

The grand hypothesis that underscored this study was the organizational conduct concept, which explains human behavior beginning from personal and group behavior influencing organization (Manoppo, 2020; Yammarino and Dansereau, 2009). According to its development, this theory provided an overview of organizational systems (Pinder and Moore, 1979; Ehrenberg and Stupak, 1994). Lord and Smith (1983) and Malott (2008) explained how organizational attributions were associated with changes in the attitude of followers. Furthermore, Barnard (1938) stated that four issues revolved around the topic of human behavior, including free will, internal and external causes of behavior, reverse causality, as well as tension reduction (Mitchell and Scott, 1985). This theory could also explain the study variables, namely workload, work stress, burnout, and turnover intention.

1.1 Workload

Workload was an interesting concept, as it played an essential role in determining the level of productivity and turnover (Inegbedion et al. 2020). A previous study stated that if the workload given was low, it could cause worker laziness. Meanwhile, higher levels often led to overwhelmedness, thereby reducing the effectiveness of resources (Ugwu and Onyishi, 2020; Larsson et al., 2022). This indicated that it was important to design workloads based on the ability of workers (Jeffri and Rambli, 2021). At present, the technique of determining this variable is still subjective, indicating the need to carry out its assessment based on performance and physiology (Matthews et al., 2020; Braarud, 2021). The use of resources and the distribution of a balanced workload have been proven to provide satisfaction and awareness (Matl et al., 2019; Mancini et al., 2021).

1.2 Work Stress

Work stress refers to the response shown by individuals toward certain work characteristics (Riezebos and Huisman 2021). The work demand-control model conceptualized work stress as the result of a simultaneous situation of high task demands and low work control (e.g., decreased control over work, skills, as well as various tasks). Meanwhile, the effort-reward imbalance model stated that it could be referred to as difficult working conditions with appropriate rewards, such as adequate salary, promotion opportunities, work security, and recognition (Steinisch et al., 2014; McKnight et al., 2020; Riezebos and Huisman, 2021). According to Seaward (2019), it was a chronic and complex emotional condition caused by a psychological reaction to the pressure of the work environment (Kaewanuchit and Sawangdee, 2018). The phenomenon of stress was explained as a psychological discomfort that interfered with individual feelings and affected the ability to work (Oruh et al., 2021; Ellison and Caudill, 2020).
1.3 Burnout Syndrome

Grossi et al., (2015) burnout is a significant fatigue that disrupts performance among individuals. According to Maslach (1976); and Maslach and Jackson (1981), it was a mental and physical exhaustion caused by contact with other people. Sterkens et al. (2021) perceived burnout as an inability to cope with pressure and demands from superiors. Furthermore Shiu et al. (2021) and Jiménez-Labaig et al. (2021) it was a prolonged work stress situation, which often occurred in the shape of emotional exhaustion, depersonalization, and reduced individual achievement. Fatigue has been reported to have a negative correlation with functioning at work (Makara-Studzińska et al., 2021; Sullivan et al., 2021). Furthermore, burnout at work could be described as a condition of mental and physical fatigue during work actions (Mahmood et al. 2021).

1.4 Turnover Intention

The turnover intention was a paradigm faced by workers when deciding to leave the organization (Saeed 2020). The desire of workers to quit was caused by various factors, such as the environment and stress at the workplace. Several studies showed that improving relationships and interactions could minimize the intention to switch workers (Abid, Zahra, and Ahmed 2016). The desire to improve their career accompanied by proactive behavior was another trigger for turnover intention (Zhang et al., 2020; Lee et al., 2021). However, Bajrami et al. (2021) stated that the intention to move was strongly affected by marital status, whereas those with marital status had a lower intention. This indicated that it was very important to understand the level of effect work support had on switching intentions by taking into account career growth in an organization (Yang et al. 2015). Chen and Wang (2019) stated that this concept referred to the intensity of turnover intention driven by subjective feelings about the turnover of members of the organization.

1.5 The Effect of Workload on Work Stress, Burnout, and Turnover Intention

The turnover intention was explained as an awareness and judgment to leave the institution (Tett and Meyer 1993). Furthermore, several predictors of this concept have been identified in various studies. Holland et al. (2019) and Watson et al. (2019) stated that workload could increase turnover intention. Cullen et al. (2008) showed the importance of institutions taking into account workload as a form of reducing the intensity of turnover intention. Based on the results, the workload had a significant connection with turnover intention (Xiaoming et al., 2014; Altahtooh, 2018; Liu and Lo, 2018). This variable has also been reported to have an effect on the workplace, specifically in conditions beyond control, thereby affecting the level of fatigue (Rodríguez-López et al., 2021) and reducing the quality of work (Xiaoming et al., 2014; Van Bogaert et al., 2013). Rodríguez-López et al. (2021) reported that the workload of each worker was differentiated based on the position, but still had an effect on the level of exhaustion. A reduction in its levels was always associated with a decrease in fatigue levels (Cullen et al., 2008; Phillips, 2020; Liu and Lo, 2018). In previous results, the level of physical and emotional exhaustion was predicted to be due to workload (Shirom et al., 2010; Greenglass et al., 2001; Yürür and Sarikaya, 2012), and the first and second hypotheses as follows:

H1: Workload has a significant effect on turnover intention
H2: Workload has a significant effect on burnout

1.6 The Effect of Burnout on Turnover Intention

The connection between burnout as well as turnover intention had been measured by several analyses, but this was still interesting to measure when it was associated with the COVID-19
pandemic. In line with Califf and Brooks (2020); and Chen et al. (2019), burnout had a positive as well as powerful effect on turnover intention. Further studies showed that its presence among workers could further increase the desire to switch (Wang et al. 2021). Founded on the theory of the conservation of resources (Hobfoll 1989), the ability of workers to control their emotions requires a high level of psychological action as well as could lead to a depletion of passionate resources (Mahoney et al., 2011; Lee, 2019). This indicated that burnout (despair and exhaustion) and turnover intention had a strong relationship (Scanlan et al. 2020). These results were in line with Wang et al. (2021), where burnout was recognized as a major predictor of turnover intention. Based on the findings in previous research, the third hypothesis was developed as follows:

H3: Burnout has a powerful effect on turnover intention

1.7 The Effect of Work Stress on Burnout and Turnover Intention

Personal stress is a common phenomenon often faced by every individual in the demands of the work being done (Peasley et al. 2020). The management of pressure in the workplace could help in reducing the increased risk of turnover (Kelty et al. 2021). The negative effects of work stress included fatigue, which eventually led to the intention to move (Tziner et al. 2015). The level of fatigue experienced by each worker was caused by various factors, including work stress. Tuna & Baykal (2014) found that the two variables had a meaningful relationship. The level of stress and fatigue required handling by paying attention to psychological factors due to the effect on organization (Fares et al., 2016; De Francisco et al., 2016; Tziner et al., 2015). The negative effect of work stress could be addressed using psychological comfort, leading to a reduction in fatigue syndrome (Makara-Studzińska et al. 2021). Based on previous studies, work stress caused increased fatigue levels and turnover intention. Therefore, the fourth and fifth hypotheses were proposed as follows:

H4: Work stress has a significant effect on turnover intention
H5: Work stress has a significant effect on burnout

1.8 Burnout Mediating Effect

Various studies conducted proved that the level of boredom could affect turnover intention (Califf and Brooks 2020). Shemueli et al. (2016) and Xiaoming et al. (2014) stated that burnout mediated the interaction of workload and turnover intention. Excess workload contributed to reducing fatigue levels, indicating that it also increased turnover intention. Based on the outcomes, burnout showed an intervention in the connection between workload as well as turnover (Cullen et al. 2008; Tziner et al. 2015). Furthermore, it was determined from the lives of monkeys, that the most crucial regions were related to value matches and incompatible prizes (Leiter and Maslach 2009). This situation was experienced by individuals to make the workload received increasingly difficult (Amponsah-Tawiah, Annor, and Arthur 2016). Burnout implicitly affected individuals in making decisions about work, including turnover intention. Workload received by individuals showed a causal relationship with turnover and this relationship was intervened by the variable (Back et al. 2020). This indicated that the resistance shown by turnover intention due to workload received by the individual was stronger in the presence of burnout ((Liu and Lo 2018; Srivastava and Agrawal 2020). The results were strengthened by Han, Bonn, and Cho (2016), and Laeeque et al. (2018), where burnout was believed to support turnover intention. Based on empirical, the sixth hypothesis was offered as follows:

H6: Burnout syndrome as a mediator between workload as well as turnover intention
1.9 The Moderating Effect of Work Stress

Several studies showed that work stress had an important role in influencing worker behavior (Gatling et al. 2017). This variable also had an effect on turnover intention in health facilities both directly and indirectly (Xiaoming et al. 2014). Liu & Onwuegbuzie (2012) explained that the level of stress experienced by workers was the major cause of turnover intention. The triggers for this condition included managerial, productivity levels, and work team support (Chen et al. 2011; Oruh et al. 2021). Furthermore, the stress level was reported to have a directly proportional relationship with turnover intensity (Lee, Lee, and Lee 2020). The results were in line with previous studies, which also obtained similar findings (Chen et al. 2011; Kokoroko and Sanda 2019; Salama et al. 2022). Chung et al. (2017) and Soelton et al. (2020) found work stress as a moderator of self-determination on turnover intention. Recent studies also indicated that it did not moderate workload (Zhao et al. 2022). The results were consistent with Qureshi (2015) which found that work stress did not increase the relationship between routine activities and turnover intention. Although there were differences in the results of existing empirical results, the seventh hypothesis was formulated as follows:

**H7:** Work stress moderates the relationship between workload and turnover intention

2. Research Methods

The sample population of this study comprised all health facilities in Klungkung Bali, totaling 25 units. The health facilities consisted of 5 public hospitals, 9 health centers, and 11 clinics. Determination of the sample was carried out using a saturated sample method, where the entire population was used (Sugiyono 2017). Furthermore, respondents comprised 5 health workers from each facility, totaling 125 individuals. The selection of respondents was based on the assumption that health workers during COVID-19 had high interactions with patients. This condition was experienced as a burden that could lead to increased levels of fatigue and stress, thereby triggering turnover intention.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover Intention (Y2)</td>
<td>I plan to quit my organization</td>
<td>(Liu &amp; Lo, 2018)</td>
</tr>
<tr>
<td></td>
<td>I often think about leaving my work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>As soon as I can find a better work, I will quit my work</td>
<td></td>
</tr>
<tr>
<td>Burnout Syndrome (Y1)</td>
<td>I find this work exhausting physically and emotionally</td>
<td>(Phillips 2020)</td>
</tr>
<tr>
<td></td>
<td>I become insensitive to others when I work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I feel unmotivated to do work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I always feel exhausted every time it is time to work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I feel pressured to do work</td>
<td></td>
</tr>
<tr>
<td>Workload (X)</td>
<td>I do a lot of work every day that needs to be done immediately</td>
<td>(Van Bogaert et al., 2013)</td>
</tr>
<tr>
<td></td>
<td>The target I have to achieve in work is too high</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I get and complete work with a high degree of difficulty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tasks that are still given are sometimes sudden in nature with a short time</td>
<td></td>
</tr>
<tr>
<td>Work Stress (M)</td>
<td>I feel tense when I start doing work or at work</td>
<td>(Ellison and Caudill 2020)</td>
</tr>
<tr>
<td></td>
<td>I always think about things outside of my work at work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I often have sleep disturbances</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Often does things or makes excuses to avoid work</td>
<td></td>
</tr>
</tbody>
</table>

Source: processed data
The distribution of study questionnaires was carried out online using e-mail and other, as well as offline by filling out manual questionnaires during visits to existing health facilities. The instrument was distributed in two stages, where it was first shared among 30 respondents to determine the validity and reliability using IBM SPSS 21. The device was considered valid when the relation coefficient product-moment value (r) was more significant than 0.3 (r>0.3), and reliable when the Cronbach Alpha value was greater than 0.6 (CA>0.6) (Hair et al. 2010). After the confirmation of validity and reliability, the distribution of the questionnaire was continued using the number of respondents targeted. The measurement of each variable was adopted from various studies, which were summarized in Table 1 above.

In this study, the measurement was carried out using workload, turnover intention, burnout syndrome, and work stress as the independent, dependent, mediating, and moderating variables, respectively. The measurement range used seven answer choices (Likert scale: 1 strongly disagree – 7 strongly agree) to obtain the perception of respondents that were closer to the predetermined phenomena.

3. Results and Discussions

Based on the data collected, the demographic information of the respondents is presented in Table 2.

Table 2. Respondent Demographic Information

<table>
<thead>
<tr>
<th>Demographic Background</th>
<th>Category</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>Age</td>
<td>21 – 30 Years</td>
<td>64</td>
<td>51.2</td>
</tr>
<tr>
<td></td>
<td>31 – 40 Years</td>
<td>34</td>
<td>27.2</td>
</tr>
<tr>
<td></td>
<td>41 – 50 Years</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>&gt; 50 Years</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>87</td>
<td>69.6</td>
</tr>
<tr>
<td>Graduation</td>
<td>Bachelor</td>
<td>34</td>
<td>27.2</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>1 – 10 Years</td>
<td>86</td>
<td>68.6</td>
</tr>
<tr>
<td></td>
<td>11 – 20 Years</td>
<td>19</td>
<td>15.2</td>
</tr>
<tr>
<td></td>
<td>21 – 30 Years</td>
<td>11</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>31 – 40 Years</td>
<td>9</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>Midwife</td>
<td>58</td>
<td>46.4</td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>13</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>Environmental Health</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>Nurse</td>
<td>37</td>
<td>29.6</td>
</tr>
<tr>
<td></td>
<td>Tracer</td>
<td>14</td>
<td>11.2</td>
</tr>
</tbody>
</table>

Source: processed data

Based on the analysis carried out, information was obtained regarding the demographic of respondents. The results indicated that the majority of respondents were women (80%) aged 21-30 years (51.2%), with a Diploma education level (69.6%), work period of 1-10 years (68.8%), and Midwives profession (46.4%). This showed that health workers who participated were dominated by women from the press graduate category to young mothers. Furthermore, these categories of people were prone to having a higher turnover intention.
3.1 Measurement Outer Model

The measurement of the reflective model began with the measurement of the reliability of all items used to meet the criteria at the specified cut-off point (Hair, Ringle, and Sarstedt 2013). The validity value was seen from concurrent validity by peaking at the outer loading (OL) value, which was declared valid when it had an OL value > 0.6, with discriminant validity having an AVE value > 0.5. Meanwhile, for construct consistency, it was declared satisfactory when the CR and CA values were greater than 0.7 (Hair et al. 2013).

Figure 1. Full Model Analysis

The test results of the measurement standard quality are presented in Table 3 and Figure 1.

Table 3. Criteria for the Measurement Model Quality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>CA</th>
<th>rho_A</th>
<th>CR</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover Intention (TI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TI1</td>
<td>0.798</td>
<td>0.890</td>
<td>0.869</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>TI2</td>
<td>0.838</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>TI3</td>
<td>0.806</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Burnout Syndrome (BS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BS1</td>
<td>0.799</td>
<td>0.808</td>
<td>0.862</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>BS2</td>
<td>0.657</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BS3</td>
<td>0.796</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BS4</td>
<td>0.807</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BS5</td>
<td>0.705</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Workload (WL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WL1</td>
<td>0.719</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>WL2</td>
<td>0.905</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>WL3</td>
<td>0.718</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>WL4</td>
<td>0.806</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td>Work Stress (WS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WS1</td>
<td>0.813</td>
<td>0.943</td>
<td>0.869</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>WS2</td>
<td>0.837</td>
<td>0.862</td>
<td>0.889</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>WS3</td>
<td>0.845</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>WS4</td>
<td>0.884</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>WS5</td>
<td>0.736</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>WS6</td>
<td>0.798</td>
<td></td>
<td></td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: processed data
Based on Table 3, OL had a value above 0.6, while CR and CA had a value above 0.7.

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>BS</th>
<th>TI</th>
<th>WL</th>
<th>WS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout Syndrome (BS)</td>
<td>0.557</td>
<td>0.746</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnover Intention (TI)</td>
<td>0.689</td>
<td>0.649</td>
<td>0.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workload (WL)</td>
<td>0.625</td>
<td>0.474</td>
<td>0.278</td>
<td>0.791</td>
<td></td>
</tr>
<tr>
<td>Work Stress (WS)</td>
<td>0.668</td>
<td>0.766</td>
<td>0.709</td>
<td>0.428</td>
<td>0.817</td>
</tr>
</tbody>
</table>

Source: processed data

The discriminant validity test was presented in Table 4, where the AVE value and AVE root had values above 0.5. Therefore, all items and constructs used met the measurement model criteria and could be continued in further analysis.

### 3.2 Measurement of Inner Model

Behind the entire outer model measurement series was carried out and all measures were met, the next step was to measure the inner standard. The first test was performed to examine the value of R square ($R^2$) and determine the feasibility of the research model, as well as to investigate the relationship shown by the independent and dependent variables. Rules of thumb for acceptable $R^2$ varied, but according to Cohen, (1992) and Gignac & Szodorai, (2016), an $R^2$ value above 0.26 was assumed to be substantial. Meanwhile, Chin (1998) suggested that the $R^2$ value was 0.67 (substantial), 0.32 (moderate), and 0.19 (weak).

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$R^2$ Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout Syndrome (BS)</td>
<td>0.613</td>
<td>0.606</td>
</tr>
<tr>
<td>Turnover Intention (TI)</td>
<td>0.548</td>
<td>0.533</td>
</tr>
<tr>
<td>Average</td>
<td>0.581</td>
<td>0.570</td>
</tr>
</tbody>
</table>

Source: processed data

Based on the analysis results, each model had an $R^2$ value above 0.32 in the moderate category, as shown in Table 5. The average value was 0.581, which indicated that the construct had a relationship of 58.1%, while the remaining 41.9% was affected by further variables outside this research. Therefore, the estimated model had a match with the data used (Chin, 1998).

The next stage of testing was to measure the predictive capability of the study concept framework using quadratic predictive relevance ($Q^2$). The model prediction was stated to be good when the $Q^2$ value was close to 1 (Stone 1974), and the calculation results showed a $Q^2$ value of 0.825 (good). Based on the results, it could be inferred that the proposed framework was good, indicating an 82.50% relationship between the construct and others, and the remaining 17.5% was caused by an error factor. The calculation of Goodness of Fit (GoF) results showed a value of 0.59, which was perceived by the model as a whole to have very good accuracy (Chin 1998). This study model was included in the GoF Large because its value was greater than 0.36.
Table 6. Effect Size

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>Mean</th>
<th>STDEV</th>
<th>T Statistics</th>
<th>P values</th>
</tr>
</thead>
<tbody>
<tr>
<td>WL dan TI</td>
<td>0.025</td>
<td>0.023</td>
<td>0.078</td>
<td>0.326</td>
<td>0.745</td>
</tr>
<tr>
<td>WL dan BS</td>
<td>0.179</td>
<td>0.187</td>
<td>0.090</td>
<td>2.001</td>
<td>0.046</td>
</tr>
<tr>
<td>BS dan TI</td>
<td>0.267</td>
<td>0.273</td>
<td>0.088</td>
<td>3.053</td>
<td>0.002</td>
</tr>
<tr>
<td>WS dan TI</td>
<td>0.686</td>
<td>0.695</td>
<td>0.043</td>
<td>16.077</td>
<td>0.000</td>
</tr>
<tr>
<td>WS dan BS</td>
<td>0.689</td>
<td>0.688</td>
<td>0.057</td>
<td>12.068</td>
<td>0.000</td>
</tr>
<tr>
<td>Average</td>
<td>0.369</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Workload (WL), Work Stress (WS), Burnout Syndrome (BS), and Turnover Intention (TI)

Source: processed data

To predict the association between the independent as well as dependent variables (Cohen et al., 1998), the measurement was performed by assessing the effect size ($f^2$). According to Chin (1998), the measurement $f^2$ had three size categories namely 0.02-0.15 (weak), 0.15-0.35 (medium), and > 0.35 (strong). Based on Table 6, the sample average value was 0.369, indicating a pattern of strong mediating relationships.

3.3 Hypothesis Testing

After the inner model criteria were met, direct and indirect effect measurements were taken out. The hypothesis results are illustrated in Table 7. Furthermore, hypothesis testing was carried out by confirming the path coefficient and p-value of the PLS-SEM bootstrap output. The results indicated that workload did not affect turnover intention ($\beta$= -0.088, $t$= 0.289, p>0.773) and had a significant effect on burnout ($\beta$= 0.1179, $t$= 2.001, p<0.046). This indicated that $H_1$ was not supported, while $H_2$ was supported. Burnout showed a substantial positive effect on turnover intention ($\beta$= 0.267, $t$=3.053, p<0.002), hence, $H_3$ was funded. Based on the results, work stress had a significant effect on turnover intention ($\beta$= 0.502, $t$=6.043, p<0.000) burnout ($\beta$= 0.689, $t$=12.068, p<0.000), indicating the acceptance of $H_4$ and $H_5$.

Table 7. Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>β</th>
<th>Mean</th>
<th>STDEV</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$</td>
<td>WL -&gt; TI</td>
<td>-0.022</td>
<td>-0.029</td>
<td>0.078</td>
<td>0.289</td>
<td>0.773</td>
<td>No</td>
</tr>
<tr>
<td>$H_2$</td>
<td>WL -&gt; BS</td>
<td>0.179</td>
<td>0.187</td>
<td>0.090</td>
<td>2.001</td>
<td>0.046</td>
<td>Yes</td>
</tr>
<tr>
<td>$H_3$</td>
<td>BS -&gt; TI</td>
<td>0.267</td>
<td>0.273</td>
<td>0.088</td>
<td>3.053</td>
<td>0.002</td>
<td>Yes</td>
</tr>
<tr>
<td>$H_4$</td>
<td>WS -&gt; TI</td>
<td>0.502</td>
<td>0.507</td>
<td>0.083</td>
<td>6.043</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>$H_5$</td>
<td>WS -&gt; BS</td>
<td>0.689</td>
<td>0.688</td>
<td>0.057</td>
<td>12.068</td>
<td>0.000</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>β</th>
<th>Mean</th>
<th>STDEV</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_6$</td>
<td>WS -&gt; BS -&gt; TI</td>
<td>0.184</td>
<td>0.188</td>
<td>0.062</td>
<td>2.947</td>
<td>0.003</td>
<td>Yes</td>
</tr>
<tr>
<td>$H_7$</td>
<td>WL*WS -&gt; TI</td>
<td>0.138</td>
<td>0.135</td>
<td>0.071</td>
<td>1.950</td>
<td>0.052</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: Workload (WL), Work Stress (WS), Burnout Syndrome (BS), and Turnover Intention (TI)

Source: processed data

After direct testing, the process was continued with the assessment of the indirect effect using burnout as a mediator and work stress as a moderator. The analysis showed that burnout is
a mediator between workload and turnover intention with a path coefficient, t-statistics, and p-value of 0.184, 2.947, and 0.003, respectively, indicating the acceptance of $H_6$. According to Hair et al. (2010) regarding the classification of mediation, burnout served as complete mediation. The analysis also showed that work stress was not proven to be a moderator of the relationship between workload as well as turnover intention with a path coefficient, t-statistic, and p-value of 0.183, 1.950, and 0.052, respectively, indicating the rejection of $H_7$.

3.4 Discussion

Based on the analysis, the workload had no important effect on turnover intention, indicating the rejection of $H_1$. The result was in line with Liu & Lo, (2018), where it did not affect turnover intention. The effects explained that the high workload of health workers during COVID-19 did not increase their intent to quit. Furthermore, health workers had a high sense of responsibility in their profession. The majority of those who selected the profession perceived their duties as a form of calling to serve. The pandemic was a challenge for health workers in contributing to global health. Although the turnover intention was always identical, it led to psychological conditions, causing the intention to quit among workers (Chen et al., 2018). These results provided a view that the COVID-19 pandemic did not influence the beliefs held. The results obtained confirmed the theory of organizational behavior because individual behavior affects organizations (Yammarino and Dansereau 2009). Several studies showed that emotional conditions often cause individual judgment (Al-Sada et al., 2017; Chang et al., 2010). This situation affected the decision to change work (Liu et al., 2020) or reduce turnover intention (Tuten and Neidermeyer 2004). The results were not in line with previous research (Altahtooh, 2018; Cullen et al., 2008; Holland et al., 2019; Jiayan Liu et al., 2010; Watson et al., 2019; Xiaoming et al., 2014) regarding the effect of workload on turnover intention.

The analysis also showed that workload significantly affected burnout, indicating the acceptance of $H_2$. Burnout was described as a significant condition, which had an effect on performance disturbance (Grossi et al. 2015). This form of fatigue was seen from the inability to cope with the existing pressure (Sterkens et al. 2021). Furthermore, it referred to emotional reduction and loss of motivation due to extended stressful conditions (Leiter, Maslach, and Frame 2015). This fatigue level was often associated with workload (Yürür and Sarikaya 2012), thereby posing a positive correlation (Cullen et al. 2008). In the world of health, it typically occurs during a pandemic as the reluctance to carry out tasks, decreased enthusiasm, and increased pessimism about the COVID-19 situation. This condition was caused by the attitude of the people who had not been disciplined towards the health protocols suggested by the government. Previous reports stated that there was still a lot of community stigma with negative perceptions related to the presence of health workers in carrying out their duties. The workload received was associated with an increase in exposed patients, leading to increased work risks, work rules, and changes in regulations, which could elevate psychological fatigue. The results were consistent with Phillips (2020), Rodríguez-López et al. (2021), and Shirom et al. (2010).

The $H_3$ testing revealed that burnout had a powerful positive effect on the turnover intention of health workers during the pandemic. The results explained that the increase in the level of fatigue experienced increased turnover intention. Burnout often occurs when workers experience sustained levels of stress and mental fatigue (van den Berg and Beute 2021). The COVID-19 pandemic has changed the work structure of health workers, such as the use of personal protective equipment as well as changes in task rules, triggering fatigue levels. This condition had a direct effect on mental, physical, and behavioral health (De Diego-Cordero et al. 2022). The effect of burnout that was experienced by workers led to turnover intention (Choi et al., 2011). This study
provided support for previous studies, which obtained similar results (Tziner et al., 2015; Lee, 2019; Liu & Lo, 2018).

The results of the H₄ testing established that work stress significantly increased burnout. Furthermore, continuous burnout arising from stress faced at work often leads to feelings of fatigue, mental decline, and professionalism (Arora and Knight 2021). Makara-Studzińska et al. (2021) reported the role of cognitive resources in the relationship between stress and fatigue, including self-efficacy, perceived stress, and psychological well-being. Knowledge of psychological comfort levels provided an overview related to the treatment of the effect of chronic stress on mind function and fatigue. Management of stress levels faced by workers could be achieved by applying transformational leadership as an effective strategy (Bosak et al. 2021). Pandemic situations, such as Covid-19 triggered substantial fatigue, which started with the level of stress faced by health workers due to reduced well-being and the moral stake (Shiu et al. 2021). The results provided previous empirical support that work stress affected burnout, as reported in previous studies (van den Berg & Beute, 2021; Mosolova et al., 2021; Tziner et al., 2015).

The analysis of the H₅ testing revealed that work stress significantly increased the turnover intention of health workers during the pandemic. This explains that sustained levels of stress lead to turnover intention. Turnover intention was explained as a desire to leave a work driven by subjective feelings (Chen & Wang, 2019). Although this condition often develops in the minds of workers, it is still important to pay attention before the desire occurs (Choi & Kim, 2020). The health sector was an important sector during the COVID-19 pandemic, indicating the need to monitor stress levels among workers (Chen et al., 2011). The results supported previous studies stating that stress was related to the level of turnover intention (Tziner et al., 2015; Jinlin Liu et al., 2019; Labrague et al., 2020).

The analysis showed that burnout played a fully mediated role (fully mediating), indicating the acceptance of H₆. The results indicated that it had an intervention on the connection between workload as well as turnover intention. The discomfort experienced simultaneously with a high workload could trigger mental fatigue (Cullen et al., 2008; Tziner et al., 2015). According to Steinisch et al. (2014), working conditions caused burnout as a psychological implication. Although the workload received by workers did not affect turnover intention during the pandemic, this desire could appear due to co-existence with fatigue (Greenglass et al., 2001; Oruh et al., 2021). The results of this study supported the results of previous research conducted by Califf and Brooks (2020). Shemueli et al. (2016) and Xiaoming et al. (2014) stated that burnout mediated the interaction of workload and switching intentions. Reducing work overload contributed to reducing fatigue levels, thereby decreasing turnover intention. This showed that burnout was an intervention in the association between workload and turnover intention (Cullen et al., 2008; Tziner et al., 2015).

Measurement of the indirect effect comprised work stress as a moderator, and the results illustrated that it was not proven to be a moderator of the relationship between workload as well as turnover intention. Work routines that were considered a workload did not trigger the turnover intention of health workers during the COVID-19 pandemic, although it had been proven to affect turnover intention (Chen & Wang, 2019; Choi & Kim, 2020). Several studies showed that work stress did not increase turnover intention. The result provided a new perception in which the work stress encountered by health workers during the pandemic did not confront turnover intention due to workload. The results were inconsistent with previous studies led by Chen et al., (2011), Kokoroko & Sanda, (2019), Salama et al., (2022), and Lee et al., (2020). According to Chung et al. (2017), work stress could trigger turnover intention due to workload.
4. Conclusions

In conclusion, health workers were an important aspect in tackling COVID-19, which posed several challenges. The increase in the number of cases led to an increment in workload during the COVID-19 pandemic. The results implied that workload did not increase turnover intention. However, workload was proven to increase the level of fatigue or burnout, and this increased turnover intention. The results indicated that work stress could directly increase burnout and turnover intention. Burnout was reported to have an intervening relationship between workload and turnover intention, while stress had no effect.

This study made theoretical contributions, including enriching the literature related to behavior, specifically reports on turnover intention. The results could also be an opening for further studies to carry out investigations related to the significant results of workload on turnover intention. Through re-enrichment of the measurements used, analysis, and expanding the generalization area to get closer to the phenomenon. The results provided insights into the causes of turnover intention and supported studies reporting the effect of workload. In addition, the results obtained could strengthen or support previous results. Based on the results, it was important to attention to the level of fatigue experienced, specifically in health facilities under certain conditions or unpredictable situations, such as the COVID-19 pandemic.

The results provided suggestions that could be realized practically for health workers and managers of health facilities as additional knowledge. The results were also focused on the causes of turnover intention during the pandemic associated with workload. Health facilities were businesses that absorbed services, indicating the need to pay attention to the quality of human resources. Several studies reported that the occurrence of turnover intention often caused a decrease in service quality. Although the results proved that workload did not affect turnover intention, it had a significant effect on burnout. Furthermore, burnout played an important role in intervening in the relationship between workload and turnover intention. This indicated that it was very important to pay attention to the level of fatigue caused by workload. Work stress had a direct effect on promoting turnover intention and burnout, but it was not proven to be a moderator of the relationship between workload and turnover intention.

This study had several limitations, including the small sample size. Further studies were advised to use a larger population size to obtain optimal results. Furthermore, efforts to reduce turnover intention were only focused on workload and burnout. The data also used self-assessment, adjusting to the causality approach, thereby increasing the possibility for bias. Therefore, longitudinal studies were advised to find out the problem more comprehensively.

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