

Conference Paper

Prediction Model of Desire to Retreat on Nursing in Hospitals Based on Work Environment, Organizational Commitment, Work Satisfaction and Work Stress in Indonesia

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Abstract

Ahead of the opening of the Asean Economic Community (AEC) in the field of health services, the growth of hospitals in Indonesia, especially private hospitals, has increased by 5% every year. It allows the transfer of nurses to other hospitals, both domestic and abroad, and also lack of nurses at the hospital. The purpose of this study was to develop a prediction model in measuring turnover intention (desire to withdraw) among nurses in Indonesia based on predictors of work environment predictors, organizational commitment, job satisfaction, and job stress. This study used a cross-sectional design involving 88 samples of nurses in type C private hospitals in Depok, Indonesia. The data that has been obtained is then analyzed by Structural Equation Model (SEM) using Smart-PLS software. The analysis shows that job satisfaction and work environment have a significant relationship to organizational commitment, the work environment has a significant relationship on job satisfaction, and organizational commitment and work environment have a significant relationship to turnover intentions. Furthermore, this study also shows that it is important for hospitals to build high organizational commitment to nurses that will have an impact on their attitude that can prevent the desire to retreat, in addition to organizational commitment must also create a comfortable physical and non-physical work environment when working and cause job satisfaction for nurses. In conclusion, this study proposes that hospital policymakers must define the hospital' strengths within the internal and external environment to create high commitment and job satisfaction and a conducive work environment to reduce the incidence of desire to withdraw to the nurse.

Keywords: retreat, nurse, environment, organizational commitment, satisfaction.

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1. Introduction

Ahead of the opening of a free market of health workers in the era of the ASEAN Economic Community (AEC), hospitals are currently faced with the challenges of globalization that are quite heavy, including the percentage of change and the increase in the number of hospitals, especially private hospitals which reach 45% annually [1]. Increasing the number of private hospitals also demands that these hospitals have certain advantages so that they can competitively compete with other hospitals to become a community of choice hospitals. One of the advantages that can be created as a hospital specialty is the quality of its human resources as service providers who are dealing with the community as clients, both directly and indirectly. The ASEAN Free Trade Area (AFTA) and the globalization of the economy in the world require each organization, both profit organizations and non-profit organizations to compete for the best resources and markets. This situation also applies to the hospital industry. Changes are so fast, requiring hospitals to remain able to survive among competitors who can appear at any time. Therefore, hospital human resources must be of good quality in order to respond to any changes that may occur.

Previous studies have shown that employee turnover is a growing issue in health-care organizations in the world [2], [3]. This is reinforced by research conducted by L. O'Brien-Pallas, et al (2010) [4], where it was found that turnover was also a major problem for hospitals in Canada with an average turnover rate of 19.9%. In other cases, it is estimated that there will be a shortage of nearly 1 million nurses in the United States in 2020. This is because the growth of the health industry continuously exceeds the number of available nurses which is decreasing due to an increase in turnover in the future [5], [6].

The shortage of nurses and the high rate of nurse turnover is a symptom for the emergence of greater health care problems for hospitals around the world [7]. This is supported by the 2012 results of a survey conducted by the American Health Care Association (AHCA) in nursing facilities, where the average turnover rate for workers in the nursing field was 43.9%. As for globally, turnover rates among nurses range from 10-21% per year [8], where the figure has exceeded the optimum standard of 10% [9].

Various results of previous studies indicate that the problem of turnover intention is triggered by the emergence of individual behavior such as job characteristics, work stress, and transformational leadership patterns of a leader which in turn determines the level of job satisfaction and organizational commitment [10], [11]. Basically,

turnover intention can be owned by employees in various professions [12], [13]. As for the hospital, many determinants of nursing turnover are caused by job dissatisfaction, work stress and intention to leave, decisions and organizational commitment [14] - [16].

The results of previous studies indicate that the percentage of turnover events in hospital nurses in Indonesia has reached 10% per year (above the normal limit). That means management of human resources in hospitals, especially in the field of nursing has not been effective. In fact, the proportion of nursing staff is the largest in hospitals, which is 40–60% of the total number of other health workers. The nursing staff provides services for patients 24 hours continuously [17] and absorbs hospital budget more than 50% [18]. Based on this background, this study was conducted with the aim of developing a prediction model in measuring turnover intention (desire to withdraw) hospital nurses in Indonesia based on predictors of a work environment, organizational commitment, job satisfaction, and also job stress.

2. Methods

This study uses a cross-sectional design. Data collection was carried out in March to August 2016 in private hospitals in class C. The population and sample in the study were 88 nurses who served in the outpatient unit, inpatient, emergency room, Intensive Care Unit (ICU) and operating room units. The measuring instrument used is a questionnaire containing 98 questions. To analyze the data, this study uses Structural Equation Model (SEM) analysis followed by Partial Least Square (PLS) analysis to examine the relationships between variables, as suggested by R. Hoyle (1995) [19] and JF Hair, et al (2016) [20].

Work environment variables are measured based on indicators of physical environment and non-physical environment. The physical environment is measured by the comfort of space and health of occupational safety [21] and based on the KMK RI No. 1087 / MENKES / SK / VIII / 2010. The non-physical work environment is measured according to The Practice of the Environmental Scale of the Nursing Work Index (PES-NW) [22] - [24] with 21 questions.

Organizational commitment variables are measured based on indicators of affective commitment, continuous commitment, and normative commitment based on Allen and Meyer's theory, with 24 item of questions adapted from previous research [25, 26]. Next, the variable job satisfaction was measured based on intrinsic and extrinsic

satisfaction that adopted from Minnesota Job Satisfaction (MSQ) which was built by D. J. Weiss, et al [27] and adopted in several studies [28] - [31] with 20 questions.

Other variables, namely job stress measured by questionnaires adopted from [32] and [33], [34], where the parameters are physiological symptoms, psychological symptoms and behavioral symptoms, with 24 questions. Finally, the variable desire or intention to retreat among nurses is measured using instruments that have been developed previously [35] - [37] and then modified by researchers using three parameters, namely (1) how often nurses think to leave the organization, (2) how much the nurses want to find other job vacancies, and (3) how much they want to leave the company in the near future 1-3 years.

3. Results

3.1. Measurement model results

The results for the measurement model were evaluated by assessing convergent validity measured by loading, Average Variance Extracted (AVE), and the results of composite reliability (CR). Determination or classification of included or excluded a variable or indicator in the measurement model is the variable threshold value or the indicator itself. The threshold value of the variable acceptance threshold or indicator to be included in the measurement model is 0.5. This figure corresponds to the threshold used in the previous study by J. F. Hair, G. T. Hult, C. M. Ringle (2016) [20]. If the variable threshold value or recommended indicator is lower than 0.5, the variable or indicator is excluded from the model.

Furthermore, another way to test the outer model is to look at the square root value of AVE (AVE) of a construct compared to the correlation value between other constructs. If the value is higher than the correlation between other constructs, then it can be concluded that the construct has a good level of reliability. The correlations between constructs and AVE root values are presented in Table 2.

Back in Table 1, R^2 on the intention to withdraw is equal to 0.485371. This shows that the predictors (work environment, organizational commitment, job satisfaction, and work stress) have an effect of 48.53% on the desire to withdraw variables among nurses.

The results of statistical tests on all variables relatedness hypotheses indicate that the factors that directly and significantly influence the desires and occurrence of resignation among nurses include organizational commitment. The working environment

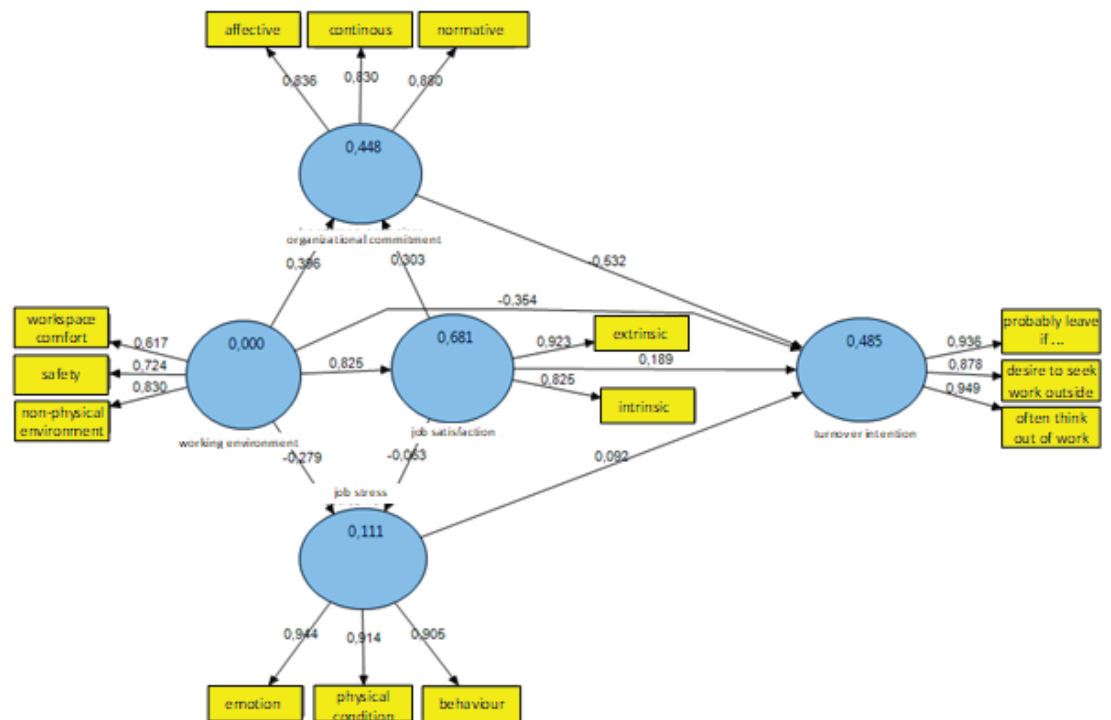


Figure 1: Structural Path Model.

conditions have a significant influence both directly and indirectly on the desires and events of resigning among nurses. Furthermore, factors that indirectly but significantly cause the desires and incidents of resigning among nurses are job satisfaction that affects organizational commitment which in turn determines the size of the desire to resign among nurses [Table 3].

4. Discussion

Job satisfaction and work environment have a significant relationship to organizational commitment, the work environment has a significant relationship on job satisfaction, and organizational commitment and work environment have a significant relationship to turnover intentions. Based on the results of a PLS2 analysis, it can be concluded that high commitment will affect the low desire to retreat among hospital nurses. Great satisfaction will also increase the organizational commitment of nurses in hospitals. Furthermore, a good work environment will affect the low desire to retreat among nurses, increase the commitment of nurses and increase job satisfaction of nurses in hospitals.

TABLE 1: Loading, AVE, CR, Cronbach's Alpha, and R-Square Summary.

| Variable | Indicator | Loading | AVE | CR | Cronbach Alpha | R ² |
|---------------------------|---|----------|----------|----------|----------------|-----------------|
| Work Environment | Physical environment (workspace comfort) | 0,616728 | 0,531521 | 0,770380 | 0,557825 | |
| | Physical environment (safety) | 0,724436 | | | | |
| | Non-physical environment | 0,830302 | | | | |
| Organizational Commitment | Affective | 0,835554 | 0,720790 | 0,885572 | 0,806752 | 0,447547 |
| | Sustainability | 0,830146 | | | | |
| | Normative | 0,880384 | | | | |
| Job Satisfaction | Intrinsic | 0,825382 | 0,766499 | 0,867460 | 0,704964 | 0,681077 |
| | Extrinsic | 0,922898 | | | | |
| Stress on Job | Emotion | 0,943680 | 0,848198 | 0,943685 | 0,911371 | 0,11093 |
| | Physical | 0,913776 | | | | |
| | Behavior | 0,905027 | | | | |
| Intention to Resign | The possibility of leaving the hospital | 0,936453 | 0,849784 | 0,944296 | 0,911021 | 0,485371 |
| | Planning to find another job | 0,878106 | | | | |
| | Often think of stopping working at the hospital | 0,949389 | | | | |

TABLE 2: Correlation of Latent Variables and AVE Roots.

| Hypothesis | Desire to Resign | Job Satisfaction | Organizational Commitment | Work Environment | Stress on Job |
|----------------------------------|------------------|------------------|---------------------------|------------------|-----------------|
| Desire to Resign | 0,696686 | | | | |
| Job Satisfaction | -0,466243 | 0,825274 | | | |
| Organizational Commitment | -0,655656 | 0,630437 | 0,66899 | | |
| Work Environment | -0,573243 | 0,825274 | 0,646683 | | |
| Stress on Job | 0,230382 | -0,293502 | -0,143008 | -0,331145 | 0,333074 |

5. Conclusion

As a follow-up to the results of the study, researchers suggested that hospitals build high organizational commitment among nurses to build attitudes and prevent the nurses' desire to resign. In addition, organizational commitment must also create a comfortable physical and non-physical work environment when working to create job satisfaction for nurses. For this reason, previously, the hospital policymakers must be able to determine the strengths that exist within the internal and external environment of the hospital to reduce the desire to resign among nurses.

TABLE 3: Summary of Results.

| Hypothesis | Original Sample (O) | Path Coefficient | T-Statistic | Information |
|---|---------------------|------------------|-------------|--------------------|
| Organizational Commitment → Desire to Resign (H1) | -0,532466 | -0,532466 | 5,424404 | Significant |
| Job Satisfaction → Desire to Resign (H2) | 0,188827 | 0,188827 | 1,195574 | Not significant |
| Job Satisfaction → Organizational Commitment (H3) | 0,303353 | 0,303353 | 2,758639 | Significant |
| Kepuasan Kerja → Stres Kerja (H4) | -0,063391 | -0,063391 | 0,352435 | Not significant |
| Stress on Job → Desire to Resign (H5) | 0,092382 | 0,092382 | 1,302715 | Not significant |
| Work Environment → Desire to Resign (H6) | -0,354148 | -0,354148 | 2,542557 | Significant |
| Work Environment → Organizational Commitment (H7) | 0,396334 | 0,396334 | 3,941176 | Significant |
| Work Environment → Stress on Job (H8) | 0,825274 | 0,825274 | 24,156676 | Significant |
| Work Environment → Stress on Job (H9) | -0,278830 | -0,278830 | 1,848041 | Not significant |

Note: T > 1.96 at P < 0.05 level

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