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# INDIVIDUAL CHARACTERISTICS, WORKLOAD, AND WORK STRESS ON NURSE PERFORMANCE

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ARTICLEINFO ABSTRACT

Keywords: Individual characteristics, workload, work stress, the performance of nurse

The purpose of this study was to determine the effect of individual characteristics, workload and work stress on performance of nurses. This study used quantitative research methods. Data collection techniques used in this study was a questionnaire measuring devices in the form of Agree-Disagree Scale, in which respondents are all nurses at Kasih Ibu Hospital Denpasar many as 143 people. In this study, data analysis was performed using SEM assisted by AMOS program 22. The results of this study indicate that individual characteristics and work stress have a significant effect on the performance of nurses in Kasih Ibu Hospital Denpasar. While the workload shows no significant effect on the performance of nurses in Kasih Ibu Hospital Denpasar. From the results of this study are expected to provide an overview to the management of Kasih Ibu Hospital Denpasar in improving the performance of nurses. Increasing the performance of nurses will have an impact on service delivery to the optimal and sustainable society

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# 1. INTRODUCTION

The hospital is a health effort facility that organizes health service activities and is a service provider institution. Complex services need to be managed professionally with respect to their human resources. One of the service providers in the hospital is a nurse. For nurses in hospitals to practice nursing in the form of nursing services known as nursing care. Nursing provides nursing services in hospitals 24 hours a day and has constant contact with patients (Nursalam, 2009). The quality of hospital services is influenced by several factors, among which the most dominant is human resources. All elements of human resources such as doctors, nurses, midwives, pharmacists, nutritionists and human resources outside the health sector strive to provide optimal health services to patients. According to a survey in Indonesia, the most hospital workers are nurses, amounting to about 60% of the health workers in hospitals and nurses are health workers in charge of providing nursing services.

In providing health services to patients in the form of fulfilling patient needs or implementing nursing care, sometimes nurses are faced with a condition that disrupts the performance of nurses, such as individual characteristics, workload, work stress, physical environmental conditions, organizational support and others. . Good nurse performance in



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addition to providing benefits to the hospital, the most important thing is to provide healing to patients. Patient recovery is the success of a hospital in dealing with the disease experienced by the patient.

#### 2. METHOD

#### 2.1 Data Source

The type of data that will be used in this research is quantitative data. While the data source to be used is primary data.

#### **Population and Sample**

In this study, the population was all nurses at Kasih Ibu General Hospital, Denpasar, amounting to 143 people. The researcher uses saturated sampling in which the technique of determining the sample is that all members of the population are used as samples (Ferdinand, 2014:176). So that the sample to be used in this study amounted to 143 people consisting of all nurses at Kasih Ibu Hospital, Denpasar.

# 2.2 Analysis Method

In this study, data analysis was carried out using SEM assisted by the AMOS 22 program. SEM is a tiered causal model that includes two main types of variables, namely latent variables and observation variables (Ferdinand, 2014:110).

#### 3. RELUST AND DISCUSSION

#### 3.1 Research result

#### **Validity and Reliability Test**

From the results of the validity test, it shows that the value of rcount (Corrected Item-Total Correlation) for all question items is 0.30. Therefore, the measurement instrument used in this study was declared valid. From the results of the reliability test shows that the value of Cronbach's Alpha for all variables 0.70. Therefore, the measurement instrument used in this study was declared reliable.

#### 3.2. Data Normality Evaluation

Based on the results of statistical analysis using the AMOS 22 computer program on the research data for each latent variable, it was found that there were no indicators of individual characteristics, workload, work stress, and performance variables that had cr skewness value and cr kurtosis value > 3.00. Thus it can be stated that the data for all indicators of Individual Characteristics, Workload, Job Stress, and Performance variables are normally distributed. That is, for further analysis, all latent variables are represented by these 22 indicators.

## 3.3. Confirmatory Factor Analysis (CFA)

Based on the results of confirmatory factor analysis on the variables of recruitment, selection, placement and employee performance both in the form of pictures and in tabular form, it is known that the Regression Weight for 23 indicators is > 0.50 and the Critical Ratio (CR) value is > 2.00. Thus, it can be said that the 17 indicators are significant to confirm the latent variables of Individual Characteristics, Workload, Work Stress, and Performance so that they can be included in further analysis.

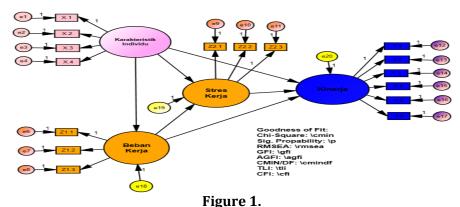
#### 3.4. Influence Analysis With SEM

This technique is a set of statistical techniques that allow the simultaneous testing of a series of relatively complex relationships.



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Full Model of Individual Characteristics, Workload, Job Stress, and Performance

Referring to the picture above, it can be seen that the number of latent variable indicators of Individual Characteristics is 4 indicators, Workload 3 indicators, Job Stress 3 indicators, and Performance 6 indicators. Respondents' answer scores for each indicator are presented in appendix 8. The respondent's answer scores in appendix 8 have been processed with Confimatory Factor Analysis (CFA) and then processed with Full Model Structural Equation Modeling (SEM) statistics using AMOS software for Windows version 22 to obtain results such as in appendix 13. From the results of data processing in appendix 13, a Full Model Structural Equation Modeling (SEM) analysis is carried out. For the purposes of analysis, first of all, an image of the results of the Structural Equation Modeling (SEM) processing is displayed as shown below.

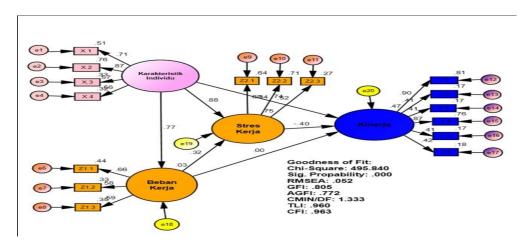


Figure 2.
Full Model of Individual Characteristics, Workload, Job Stress, and Performance

Based on the picture above, it is possible to analyze the measurement model with the lamda parameter ( $\lambda$ ) for the effect of recruitment, selection, placement, and employee performance, goodness of fit analysis, determination analysis and structural model analysis.

# 3.5. Analysis of Measurement Model Testing with Lambda Parameters (\(\lambda\))

Parameter testing carried out is testing the lamda parameter ( $\lambda i$ ). This test is intended to determine the validity of the data for each research indicator. For testing the lamda parameter ( $\lambda i$ ) the standardized estimate value (regression weights) in the form of loading factor is used. If the parameter value lamda ( $\lambda i$ ) > 0,50, CR > 2,000 and probability < 0,05, then loading factor Individual characteristics, workload, and work stress On nurse performance-Luh Gde Nita Sri

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parameter lambda ( $\lambda$ i) the indicator is declared significant (Ferdinand, 2014: 97). This means that the indicator data is valid with the corresponding latent variables.

#### 3.6. Goodness-of-fit Criteria Evaluation

Testing this model uses several fit indices to measure how well the research model is being developed

Goodness of Fit Index	Cut-off Value	Analysis Results	Model Evaluation
Chi-Square (χ²)	Expected small	495,840	Not good
Probability	0.05	0.000	Not good
RMSEA	0.08	0.052	Well
GFI	0.90	0.805	Marginal
AGFI	0.90	0.772	Marginal
CMIN/DF	2.00	1.333	Well
TLI	0.95	0.960	Well
CFI	0.95	0.963	Well

Taking into account the cut-of-value and goodness of fit values from the model in table 5.18 above, out of the eight criteria used, 4 (four criteria) have met the goodness of fit requirements, namely RMSEA, CMIN/DF, TLI and CFI, 2 (two) the marginal criteria are GFI and AGFI and only two criteria are not good.

#### (1) Structural Equation Model Analysis

Structural equations of individual characteristics, workload, job stress, and performance are as follows:

 $Z2 = \gamma_{Z2.X}X + \xi_1$  direct effect of individual characteristics (X) on work stress (Z2).

 $Z2 = \gamma_{Z2X}X + \xi_1$  direct effect (direct effect) workload (Z1) on work stress (Z2).

 $Z1 = \gamma_{Z1,X}X + \xi_2$  direct effect of Individual Characteristics (X) on Workload (Z1).

 $Y = \gamma_{Y,Z_2}Z_2 + \xi_3$  direct effect of work stress (Z2) on performance (Y).

 $Y = \gamma_{YX}X + \xi_3$  direct effect (direct effect) Individual Characteristics (X) on Performance (Y).

 $Y = \gamma_{Y.Z1}Z1 + \xi_3$  direct effect (direct effect) workload (Z1) on performance (Y).

Model testing was conducted using regression weights for the variables of Individual Characteristics (X), Workload (Z1), Job Stress (Z2), and Performance (Y). Based on the data in Appendix 12, an output table can be made as follows.

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# Table 1. Regression Weights

			Unstandar dized Estimate	Standar dized Estimat e	SE	CR	Р	Label
Z1	<	X	.662	.767	.117	3.388	***	Significant
Z2	<	X	747	877	.148	-5,060	***	Significant
Z2	<	Z1	.302	.317	.079	2.297	.011	Significant
Y	<	Z1	002	001	.156	011	.991	Not significant
Y	<	Z2	547	402	.542	-3.222	.001	Significant
Y	<	X	.917	.741	.448	2,047	.041	Significant

Individual Characteristics, Workload, Job Stress and Performance

#### 3.7. Discussion

#### 3.7.1. The Influence of Individual Characteristics on Job Stress

The results of the study stated that the first hypothesis was rejected, which stated that the better the individual characteristics, the lower the work stress.

#### 3.7.2. The Effect of Workload on Work Stress

From the results of the analysis above, it can be shown that the acceptance of the second hypothesis which statessThe higher the workload, the higher the work stress. The results of this analysis are in line with research conducted by Sunyoto (2012:217) "too much workload can cause tension in a person, causing stress. This is caused by the level of expertise demanded is too high, the work speed is too high, the work volume is too much, and so on".

#### 3.7.3. Influence of Individual Characteristics on Workload

From the analysis above, it shows that the acceptance of the third hypothesis which states that the better the individual characteristics the higher the workload. The results of this study are in line with Manuaba (2000), which states that the factors that affect the workload are internal and external factors. Internal factors include: abilities, attitudes, interests, and personal needs.

#### 3.7.4. The Effect of Job Stress on Nurse Performance

From the above analysis shows that the acceptance of the fourth hypothesis which states that the higher the work stress, the lower the nurse's performance. The results of this study are in line with research conducted by Anton, Penjaitan (2014:1-18) which states that stress has a significant effect on performance. The results of this study are also supported by Agus, et al (2007:77) which shows that the job stress variable affects employee performance with a probability value of 0.000.

# 3.7.5. The Influence of Individual Characteristics on Nurse Performance

From the results of the analysis above, it can be concluded that the acceptance of the fifth hypothesis which states the better the individual characteristics, the higher the nurse's performance. The results of this study are in line with research conducted by Fisella, et al (2012) which showed that there was a significant relationship between individual characteristics and nurse performance, with a P value of 0.000. The results of a similar study were also conducted by Kanestren (2009) which stated that individual characteristic variables had a significant relationship with nurse performance.

# 3.7.6. The Effect of Workload on Nurse Performance

From the results of the analysis above, the sixth hypothesis proposed in this study is that the higher the workload, the lower the nurse's performance is not verified. The results of this



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study are in line with research conducted by Satria, et al (2013) which states that there is no relationship between workload and nurse performance, this is due to external factors (environmental) and internal (personal) factors of nurses themselves with a P value of 0.078 analysis. morning shift analysis, 0.378 analysis of afternoon work shift and 0.162 analysis of night work shift.

#### 4. **CONLUSION**

In this study it can be concluded that 1. The better the individual characteristics, the lower the work stress is not verified. 2. The higher the workload, the higher the work stress is verified. 3. The better the individual characteristics, the higher the workload is verified. 4. The higher the work stress, the lower the nurse's performance is verified. 5. The better the individual characteristics, the higher the nurse's performance is verified. 6. The higher the workload, the lower the nurse's performance is not verified. In connection with the results obtained from this study, several suggestions can be submitted for consideration to the Kasih Ibu Hospital in Denpasar, namely:: Job stress has a negative effect on nurse performanceKasih Ibu General Hospital Denpasar, then Kasih Ibu Hospital Denpasar as far as possible take an approach to find out the causes of stress experienced by nurses so that it does not affect the performance of nurses, especially in providing nursing care services to patients. The results of this study should be used as material for further research by considering the limitations of this study.

#### REFERENCES

- [1]. Abdurrahman, Muhammad. (2013). Relationship between Individual Characteristics and Work Shift with Job Stress. The Indonesian Journal of Occupational Safety and Health. Vol.2, ISSN 2301-8046.
- [2]. Ahmed, et al. (2013). Effect of Job Stress on Employees Job Performance A Study on Banking Sector of Pakistan. Journal of Business and Management (IOSR-JBM) 11(6):61-68.
- [3]. Agus, et al. (2007). Analysis of Factors Affecting Job Stress and Its Effect on Job Satisfaction and Salesman Performance. Journal of Management & Organizational Studies, vol.2, No. 2: p. 70.
- [4]. Ambarwati, Diah. (2014). The Effect of Workload on Stress Emergency Nurse with Social Support as Moderating Variable (Study at Dr. Kariadi Hospital Semarang). Diponegoro University, Semarang.
- [5]. Anggit, A. (2014). Effect of Work Stress and Workload on Employee Performance PDAM Surabaya. Journal of Management Science & Research, Volume 3 No 7.
- [6]. Anton, Penjaitan. (2014). The Effect of Motivation, Stress and Coworkers on Auditor Performance. Journal of Business & Economics, vol. 5 No. 1, 1-18.
- [7]. Aster, et al. (2014). The Effect of Workload on Work Stress and Its Impact on Employee Performance. Journal of Management Science, Volume 2.
- [8]. Carudin. (2011). Principal Leadership and School Work Climate on Teacher Performance. Indonesian Journal of Economics and Business, ISSN 1412-565X. Special Edition No. 2.
- [9]. Fahmi, I. (2014). Organizational Behavior: Theory, Applications, and Cases. Alphabeta Publishers, Bandung.
- [10]. Ferdinand, Augusty. (2014). Management Research Methods. Publisher: Bada Publishing Diponegoro University.
- [11]. Fisella, et al. (2012). The Relationship between Individual Characteristics and Nurse Performance in the Internal Medicine Inpatient Room at Datoe Binangkag Hospital, Bolaang Mongondow Regency. Journal of the Faculty of Medicine, Sam Ratulangi University.
- [12]. Fitri, Musliha. (2013). Analysis of Factors Associated with the Incidence of Work Stress in Bank Employees (Study on BMT Bank). Journal of Public Health 2(1):1-10.



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- [13]. Hanan, AA. (2009). Factor Affecting Performance of Hospital Nurse in Riyadh Region, Saudi Arabia. International Journal of Health Care Quality.
- [14]. Handoyo, S. (2001). Stress in Surabaya Society. Journal of Media People. UNAIR Faculty Publisher, Surabaya, Jakarta.
- [15]. Hardiwinoto.(2012). Definition of Age. http://science-health society.blogspot.co.id.
- [16]. Harlen, Saragih. (2008). The effect of organizational and individual characteristics on the work stress of nurses in the inpatient room of the Porsea Regional General Hospital. Thesis, University of North Sumatra, Medan.
- [17]. Hungry. (2007). Gender. <a href="http://www.kasihibuhospital.com/index.php/about-us">http://www.kasihibuhospital.com/index.php/about-us</a>.
- [18]. Indrawan, R. & Yaniawati, P. (2014). Research Methodology: Quantitative, Qualitative and Mixed for Management, Development, and Education. PT. Refika Aditama, Bandung.
- [19]. Kanestren, DR. (2009). Analysis of the Relationship between Individual Characteristics and Work Environment with Nurse Performance in the Inpatient Unit of Pertamina Jaya Hospital. Thesis of the Faculty of Public Health, University of Indonesia.
- [20]. Kreitner & Kinicki. (2005). Organizational behavior. Salemba Empat Publisher, Jakarta.
- [21]. Kumalasari, Gusti Ayu Ratih. (2014). The Role of Workload, Hardiness, and Sincerity on Burnout. Thesis.
- [22]. Manuaba. (2000). Workload. <a href="http://www.psychologymania.com">http://www.psychologymania.com</a>. Retrieved April 25, 2016.
- [23]. Marwansyah. (2014). Human Resource Management (Second Edition). Alphabeta Publishers, Bandung.
- [24]. Muhammad Shafi. 2009. Seeing Children's Behavior: An Approach in Education. Semarang: PT. Prosperous Jaya.
- [25]. Start, M. (2006). Development of Performance Management (PMK), Concepts, Strategies and Applications. Journal of Nursing Pajajaran University Bandung.
- [26]. Munandar, Ashar Sunyoto. (2001). Industrial and Organizational Psychology. Publisher University of Indonesia, Jakarta.
- [27]. Nawawi, H. (2006). Leadership Makes Organizations Effective. Publisher Gadjah Mada University Press, Semarang.
- [28]. Notoatmodjo. (2003). Education Level.wordpress.com.
- [29]. Noviansyah. (2011). The Influence of Work Stress and Work Motivation on the Performance of PT. Minango Ogan Baturaja Plantation. Sriwijaya Journal of Management and Business Vol. 9, No. 18).
- [30]. Nurmalasari, Wanti. (2013). The Effect of Work Environment and Workload on Work Stress of Nurses at Arifin Ahmad Regional General Hospital Pekanbaru. Journal of Management: 1-10
- [31]. Nursalam. (2009). Nursing Management: Application in Professional Nursing practice (Second Edition). Salemba Medika Publisher.
- [32]. Perry, et al. (2006). Effect of Physical Workload on Cognitive Task Performance and Situation Awareness. Journal of Ergonomic Science: 1-19
- [33]. Potter, Ferry. (2012). Nursing Care and Nurse Stress Management. Jakarta: EGC
- [34]. Priansa, DJ (2014). Human Resource Planning and Development. Alphabeta Publishers, Bandung.
- [35]. Robbins, SP (2006). Organizational Behavior. Publisher PT. Gramedia, Jakarta.
- [36]. Ronald, E. (2000). Introduction to Industrial/Organizational Psychology. Forestman and Company.
- [37]. Ryo, Gobel. (2012). Factors Associated with Work Stress on Nurses in the ICU and ER. Journal of the Faculty of Public Health. Sam Ratulangi Mando University.
- [38]. Satria, et al. (2014). Relationship between workload and nurse performance in implementing patient safety at Hasanuddin University Hospital. Journal of the Faculty of Public Health, UNHAS, Makassar.



Jurnal Ekonomi, Volume 11, No 01 June 2022 ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)



- [39]. Schultz, D., Schultz, SE (2006). Phschology Work Today (9 Edition). New Jersey:Pearson Education, Inc.
- [40]. Shah, Syed. (2011). Workload and performance of Employees. Journal of Contemporary Research in Business 3 (5):256-267.
- [41]. Siagian, SP (2009). Human Resource Management. Earth Literacy Publisher, Jakarta.
- [42]. Sujak, Abi. (2005). Managerial Leadership: Its Existence in Organizational Behavior. Jakarta: Rajawali Press.
- [43]. Sumarni, Tri. (2009). Relationship between Working Conditions and Individual Characteristics with Job Stress. Journal of Occupational Health and Safety.
- [44]. Sumokno, Tri. (2012). Relationship Between Individual Characteristics with Nurse Work Stress. Thesis of the Faculty of Nursing and Health Sciences. Muhammadiyah University of Semarang.
- [45]. Sunarto, Hartono . 2008 . Student Development . Jakarta : PT. RinekaCipta .
- [46]. Sugiyono. (2015). Statistics for Research. Alphabeta Publishers, Bandung.
- [47]. Sutrisno, E. (2015). Human Resource Management. Kencana Prenadamedia Group, Jakarta.
- [48]. Sunyoto. (2012). Human Resource Management, edition 2. CAPS, Yogyakarta.
- [49]. Shah, N. (2004). Analysis of Factors Affecting the Performance of Inpatient Nurses at Pekanbaru Mental Hospital. Journal of Public Health Research, Vol. 4, No. 1, Diponogoro University, Semarang.
- [50]. Tampubolon, Manahan P. (2004). Organizational behavior. Ghalia Publisher, Jakarta.
- [51]. Tarwaka. (2011). Industrial Ergonomics. Harapan Press Publisher, Solo.
- [52]. Thoha. (2003). Organizational Behavior (Basic Concepts and Applications). Publisher PT Grafindo Persada, Jakarta.
- [53]. Tyas, Nugraheni. (2013). The Influence of Individual Characteristics and Employee Welfare on the Performance of Polyclinic Officers at PKU Muhammadiyah Hospital Surakarta. Publication manuscript. Faculty of Health Sciences, University of Muhammadiyah, Surakarta.
- [54]. Widodo, SE (2015). Human Resource Development Management. Student Library, Yogyakarta.