



Conference Paper

The Effect of Locus of Control, Emotional Intelligence, and Organizational Climate on Nurse Work Stress in Outpatient Clinics of Prof. Dr. R.D. Kandou Hospital

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Abstract

The aim of this research is to study the direct effect of locus of control (LoC), emotional intelligence (EI) and organizational climate (OC) on nurse work stress (WS) and the indirect effect of LoC and El effect on WS through OC in Outpatient Clinics of Prof. Dr. R.D. Kandou Hospital. There are 5 research hypothesis have been stated, they are 1) LoC (X1) effects WS (Y); 2) El (X2) effects WS (Y); 3) OC (X3) effects WS (Y); 4) LoC (X1) effects OC (X3); and 5) El (X2) effects OC (X3). A survey method was used with causal techniques, and the influence between different variables was evaluated using path analysis. The objects of this research are 62 nurses. All data was obtained by distributing questionnaires. The results found that the LoC had a direct effect on WS and had an indirect effect on WS through OC. The El had a direct effect on WS but had not an indirect effect on WS through OC. Based on these findings above, it can be concluded that 4 of the 5 research hypotheses have been significantly proven, they are the effects of LoC (X1), El (X2), and OC (X3) on WS (Y), and the effect of LoC on OC. One of the 5 research hypothesis, that is the effect of El (X2) on OC (X3) has not been proven.

Keywords: nurse work stress, locus of control, emotional intelligence, and organizational climate

1. Introduction

Every employee has the potential to stress because it is a process of individual perception [1]. Some things that cause stress on individuals are lack of physical activity, work demands, emotional and unhealthy living habits [2]. Nurses are individuals who have the potential to experience stress. Their responsibility on maintaining patient's homeostasis leading to increased workloads on nurses and resulting in increased job stress in nurses [3, 4]. The work environment influences the physiological and psychological conditions

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of the individual. Work environment that is full of pressure and tension makes one turn around doubting his own skills [5]. As a result of various pressures and tensions individuals can experience work stress [6].

Locus of control is a concept that is widely studied in psychology that explains the causal relationship between his own behavior with the rewards he gets [7, 8]. In this research, locus of control is focused specifically on the field of work. Locus of control is control of life events both internally in the form of positive and external events that are negative or have positive and negative relationships at the same time [9, 10]. In addition, locus of control has a number of strong relationships with other variables, although not always positive, including emotional conditions such as depression and stress [11].

When doing work, nurses also need emotional intelligence so that they can work more pleasant. Each individual has different emotional intelligence and complement each other with pure academic abilities as measured by Intelligence Quotient (IQ) [12]. Emotional intelligence refers to the ability to recognize our own feelings, other people, the ability to motivate ourselves, relationships with others, the ability to understand and manage other emotions and special abilities called "common sense" [13-15]. For this reason, it is necessary to think about anything that can help people develop their emotional intelligence [14].

As humans, nurses also require satisfactory organizations working climate in order to have the pride to work and can work equally well with his colleagues. Organizational climate is the employee's perception of the willingness of various stakeholders to engage, collaborate and contribute to each activity to achieve their individual and organizational goals [15]. A good organizational climate, leads workers to innovation and inspiration in the organization and has a positive role in achieving the organization's goals in the hospital [16].

Based on the explanation above, the researcher believes that the three variables have a direct effect on nurse work stress, and the locus of control and emotional intelligence have an indirect effect on nurse work stress through the organizational climate variable.

2. Methods

The research method used was the survey method with causal techniques, whereas to analyze existing or whether the influence between one variable with another variable using path analysis.



2.1. Population and Sample

The objects of this research are all of nurses, as much as 62 nurses, in Outpatient Clinics of Prof. Dr. R.D. Kandou Hospital.

2.2. Data collection technique

Data collection techniques used in this study were obtained by distributing the questionnaires. These questionnaires were then filled out by the 62 respondents. Respondents' responses to statements regarding the four variables, namely the locus of control (X_1), emotional intelligence (X_2), organizational climate (X_3), and work stress (Y), measured by a Likert pattern rating scale.

All instruments that have been compiled are tested first. This trial was conducted to see the extent of validity and reliability. However, if invalid items are found, these items will be discarded or not used as data in this study.

2.3. Data Analysis

Data processing was performed by descriptive statistical analysis to present data from each variable which included percentages and frequency distributions, average values, medians, modes, standard deviations, and histograms. Inferential statistics are used to test the research hypothesis. In this case using statistical techniques *path analysis*. According to Sudjana, path analysis is one of the approach models in order to study the attachment of several variables which are also guided by the assumption not to find causes, but it is a method used in the causal model that has been formulated by researchers based on theoretical considerations and knowledge of the dependent variable [17].

Thus, path analysis is useful for checking or testing the theorized causal relationships and not for deriving the causal theory. Therefore, the consequence is a way of thinking causally coupled with the theory and knowledge of the material being discussed have a very big role in the use of this pathway analysis.

This study offers a model of the relationship between variables in the form of a recursive model, the path goes in one direction with variables that can be observed and measured directly (manifest variables). Thus, there are two kinds of variables, namely variables called exogenous and endogenous



3. Results

3.1. First Structural Equation

Table 1. Shows the results of the regression calculations for the first equation, namely the influence of locus of control (X1), emotional intelligence (X2) and organizational climate (X3) on work stress (Y).

The first equation is as follow:

$$Y = 56.143 + 0.302X_1 - 0,125X_2 - 0.551X_3$$
(1)

$$\beta_{v1} = 0.538, t_{\text{calculated}} = 3.291$$
 (2)

$$\beta_{y2} = -0.229, t_{\text{calculated}} = -2.298$$
 (3)

$$\beta_{y3} = -1.192, t_{\text{calculated}} = -7.629$$
 (4)

TABLE 1: Path of coefficient effect of locus of control, emotional intelligence, and organizational climate on work stress

Coefficients ^a										
	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.				
		В	Std. Error	Beta						
1	(Constant)	56,143	2,434		23,065	,000				
	x1	,302	,092	,538	3,291	,002				
	x2	-,125	,054	-,229	-2,298	,025				
	x3	-,551	,072	-1,192	-7,629	,000				

a. Dependent Variable: y

3.1.1. The direct test influence between locus of control toward work stress.

Based on the SPSS calculation, the results of discussion $\beta_{y.1} = 0.538$, t_{calculated} = 3.291, t-table ($\alpha = 0.05$, dk-n-1) = 1.983 (2-tailed). Because the value of t_{calculated} > t_{table} and sig <0.05 then reject H₀, meaning there is a significant influence between locus of control on organizational climate.



3.1.2. The direct test effect between emotional intelligence toward work stress.

Based on the SPSS calculation, the results of the discussion $\beta_{y.2} = -0.229$, t_{calculated} = -2.298, t-table (α = 0.05, dk-n-1) = 1.983 (2-tailed). Because the value of t_{count} > t_{table} and sig < 0.05 then reject H₀, means there is significant influence between the emotional intelligence of the work stress. This shows that the emotional intelligence has an influence on the work stress. The results of Karimi study reinforce this research by modeling structural equations finding that emotional intelligence has a direct and moderate effect on nurses' work stress significantly [18].

3.1.3. The direct test effect of organizational climate toward work stress

Based on the SPSS calculation, the result of the discussion $\beta_{y,3} = -1.192$, t_{count} = -7.629, t-table ($\alpha = 0.05$, df-n-1) = 1,983 (2-tailed). Because the value of t_{calculated} > t_{table} and sig <0.05 then reject H₀, meaning there is a significant influence between work stress on organizational climate. These results indicate that the work climate is very influential on work stress experienced by individuals. This was confirmed by Kath [19] who mentioned that a good climate can reduce work stress levels.

3.2. Second Structural Equation

Table 2 shows the second structural equation, namely the influence of locus of control (X1) and emotional intelligence (X2) on organizational climate (X3). The second equation is as follow:

$$X_3 = 4,565 + 1,016X_1 + 0,128X_2$$
⁽⁵⁾

$$\beta_{3.1} = 0.838, t_{\text{calculated}} = 10.265$$
 (6)

$$\beta_{3.2} = 0.109, t_{\text{calculated}} = 1.329 \tag{7}$$

3.2.1. The direct test effect between locus of control toward organizational climate.

Based on the SPSS calculation, the results of the discussion $\beta_{3.1}$ = 0.838, t _{calculated} = 10.265, t-table (α = 0.05, df-n-1) = 1.983 (2-tailed). Because the value of t _{calculated} > t



Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.				
		В	Std. Error	Beta						
1	(Constant)	4,565	4,345		1,051	,298				
	x1	1,016	,099	,838	10,265	,000				
	x2	,128	,096	,109	1,329	,189				

TABLE 2: Path of coefficient effect of locus of control and emotional intelligence on organizational Climate

a. Dependent Variable: x3

table and sig <0.05 then reject H_0 , meaning there is a significant influence between the locus of control on organizational climate. Locus of control is an explanation of individual beliefs about one's own ability to control the environment and the results of a behavior [20]. Emotional intelligence here plays a role in controlling oneself to overcome various pressures from within (internal) or from outside (external). It has three psychological dimensions, namely emotional competence, emotional maturity, and emotional sensitivity, which motivate a person to know correctly, interpret honestly, and act appropriately in the face of dynamic human behavior [21].

3.2.2. The direct test effect of emotional intelligence toward organizational climate

Based on the SPSS calculation, the results of discussion $\beta_{3.2} = 0.109$, t _{calculated} = 1.329, t-table ($\alpha = 0.05$, df-n-1) = 1.983 (2-tailed). Because the value of t _{calculated} < t _{table} and sig >0.05 then accept H₀, meaning there is no influence significantly between emotional intelligence toward organizational climate. These results indicate that work stress is only influenced by the emotional intelligence of each nurse directly. Emotional intelligence is a complex interaction between the expression, judgment, and utilization of emotions that modulate the effects of environmental stress on individuals. This concept has been widely associated with improved performance outcomes [22] reducing stress levels [18] as well as fatigue in working for nurses [23].

4. Discussion

The results of this study show that locus of control has a direct significant effect on work stress. Humans will tend to experience stress if humans are unable to adapt their desires to the realities, both outside and inside facts. Stress is a subjective state, where everyone experiences stress to different degrees. Environments such as workplace organizations



can also cause stress to individuals. The problem of stress is closely related to work problems, often felt when individuals feel unable to handle the workload.

Locus of control as a personality trait that influences individual stress levels, determines how individuals react to stressful or stressful situations. Locus of control refers to a measure that shows how individuals perceive the possibility of a relationship between the actions carried out with the results or results obtained. Individuals who believe that reinforcement occurs because of their behavior and capacity and attributes, are said to have an internal locus of control, whereas individuals who believe that the reinforcement achieved is under the control of outside factors such as fate, luck, or power that cannot be predicted, is said to be an individual who has an external locus of control.

These results reinforce the results of the study of Demir et al [24] who used a mentoring program to improve locus of control and it was found that increasing internal locus of control can deal with stress actively. In line with the description above, Kokoroko and Sanda [4] who suggested that constraints due to stress can be minimized by overcoming emotional problems in the form of emotional intelligence.

The above facts at the same time confirm the statement that says that locus of control has a number of relationships that are quite strong, although not always positive with other variables, including emotional conditions such as depression and stress [11], self-esteem and self-management and perceptions of management in general [8], selfconfidence perfectionist, perceptions of organizations such as organizational climate [25, 26].

Locus of control also has a significant direct effect on organizational climate. Humans will tend to experience stress if humans are not able to adapt their desires with the facts that exist, both the reality that is outside and inside. Environments such as workplace organizations can also cause stress to individuals. The problem of stress is closely related to work problems, often felt when individuals feel unable to handle the workload.

As a result, or other result of the work process, workers can experience stress, which can develop making the workforce sick, both physically and mentally, so that they cannot work optimally anymore. Most people consider stress to be a negative condition, a condition that leads to physical or mental illness, or lead to inappropriate behavior. Even so, it cannot be denied that the right amount of stress is needed to increase productivity and efficiency at work.

Stress is the result of no or lack of compatibility between the individual and his environment, which results in his inability to deal with various demands on him effectively. Stress arises can be caused by various sources of stress, one of which is personality. A person with an internal locus of control believes that mistakes in an assignment that can



cause accidents are more due to the actions of the guide itself, as well as a result of his ability and experience that is lacking. Whereas a guide with an external locus of control, believes that mistakes in duty that can cause accidents are caused by external factors, such as pilots, equipment that is not working properly, and other external factors and environmental forces that cannot be predicted.

These results reinforce the view of Asante [10] who said that locus of control is an individual's ability to influence events related to his life. Fan et.al [26] supports this opinion by saying that locus of control is a person's perspective on an event, whether he can or does not control the event that happened to him.

According to Kiral [25] in the individual, there is a great potential for self-determination, regardless of whether the environment will support or not support. Individuals like this have a high work ethic in dealing with all kinds of difficulties both in their lives and in their work with this, a good organizational climate is realized. Although there are concerns in him, but these feelings are relatively small compared to the passion for himself so that it can inspire the perceptions of people in an organization.

Job professions engaged in social services are often confronted with emotional tensions associated with the nature of the work being carried out, which is very likely to cause work stress. Stress reactions that occur in nurses can affect the behavior, attitudes, and emotions of nurses towards patients treated. In positions associated with many people, a person's ability to manage emotions is very important because they will be more empathetic, communicative, and more sensitive to the needs of others. In this case, it is emotions that take the most roles.

Karimi [18] corroborates by modeling structural equation finding that emotional intelligence has a direct and moderate effect on nurses' work stress significantly. Samples taken amounted to 312 nurses in Australia. The same fact was revealed in Lu and Kuo's research [27] in which of 430 respondents in Taiwan stated that emotional intelligence played a moderate role in its relationship with work stress and safety compliance. That is, the better a person's emotional intelligence, the lower his work stress. In line with the previous facts, Choi, Mohammad and Kim [28] revealed that between emotional intelligence and burnout there is an important mediator variable, namely work stress. Emotional intelligence plays an important role in moderating *Burnout* by reducing work stress levels. This research was conducted in South Korea with a total sample of 344 employees.

Stress can occur, among others, due to the work environment that is not in accordance with the wishes of employees even to the level of burnout. According to Lee et.al [29]



out of 179 respondents it was found that a positive organizational climate can predict lower burnout rates, as well as predict the effects of employee empowerment.

The building where employees do activities in this case is also a variable that has an influence on employee performance. Business premises can be categorized as the physical work environment of employees, bearing in mind that each working day of the employee concerned is within the scope of the workplace building.

Likewise, with health, to be able to provide the elements of health in an environment in question must pay attention to several elements that are able to reflect health itself. Security also has a close relationship with a healthy environment with the understanding that a safe environment will be able to create a calm condition [30]. The most stressful thing as a nurse is when a nurse is faced with a great responsibility and risk in the process of saving a patient's life. Other sources that may trigger stress on nurses are demands for technical expertise in caring for patients, knowledge, and high concentration in performing their duties, procurement of shifting and uneven rolling systems, excessive task demands, inadequate reward systems, and demands for professional idealism, problems with patients, coworkers and midwives' personal problems. It all can cause pressure on nurses so that it appears as a trigger for the onset of work stress. Stress reactions that occur in nurses can affect the behavior, attitudes, and emotions of nurses towards patients treated. In positions associated with many people, a person's ability to manage emotions is very important because they will be more empathetic, communicative, and more sensitive to the needs of others. In this case, it is emotions that take the most roles. Learning and maintaining emotions in accordance with the situation that occurs is to regulate what is felt is a major component in work that is engaged in social services. This ability is known as emotional intelligence. With emotional intelligence, nurses can recognize and regulate their emotions in responding to existing sources of stress, so they can process the sources of stress experienced in such a way in the form of an appropriate solution [4].

The results of this study unsupported the opinion of Khasawneh [31] who said that emotional intelligence can help an organization in forming a conducive organizational climate. Goleman [32] said that emotional intelligence is the ability to feel, understand, and effectively apply emotional power and sensitivity as a source of human energy, information, connections, and influence.





Based on the analysis of the results of this research and the discussion that has been described, that the locus of control, emotional intelligence, and organizational climate directly affects work stress. Locus of control, emotional intelligence and high organizational climate resulted in a decrease in work stress levels. Locus of control also directly influence the organizational climate. That is, locus of control results in conducive organizational climate.

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Conflict of Interest

The authors have declared no conflict of interest.

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