

Volume 10 Number 1 January 2019

# Indian Journal of Public Health Research & Development

An International Journal

#### SCOPUS IJPHRD CITATION SCORE

Indian Journal of Public Health Research and Development Scopus coverage years: from 2010 to 2018 Publisher: R.K. Sharma, Institute of Medico-Legal Publications ISSN:0976-0245E-ISSN: 0976-5506 Subject area: Medicine: Public Health, Environmental and Occupational Health Cite Score 2017- 0.03

Cite Score 2017- 0.03 SJR 2017- 0.108 SNIP 2017- 0.047



Website: www.ijphrd.com

### Coping Mechanism of Students Facing the Competency Exams Reviewed from the Factors Influence in Surya Mitra Husada Health College Kediri

Byba Melda Suhita<sup>1</sup>, Sutrisno<sup>1</sup>, Mayta Sari Dwianggimawati<sup>1</sup>, Heri Saputro<sup>1</sup>, Prima Dewi Kusumawati<sup>1</sup>, Lingga Kusuma Wardani<sup>1</sup>

<sup>1</sup>Lecturer Surya Mitra Husada Health College Kediri

#### **ABSTRACT**

Increasing the development and coaching of nursing education in the future will be directed at efforts to improve the quality of education, therefore graduated students will be optimalto show professional attitudes, mastering nursing science in an adequate level, and mastering professional nursing skills. These conditions lead coping where it is a cognitive process and behavior that aims to reduce feelings of depression that arise when dealing with stressful situations. The purpose of this study was to determine the factors that influence the coping mechanism of students facing competency exams. Data were analyzed using Logistic Regression test at a significant level of 5%. From the result of the study, it was found that several independent variables (X) influence the dependent variable (Y) with a significance value of 0.000.

Keyword: Student, Competency Exams, Coping Mechanism

#### INTRODUCTION

Competency exam is the process of measuring knowledge, skills, and behavior of students in universities that have nursing study programs. Nursing students both diploma and bachelor at the end of their studies are required to take a national competency exam. Competency exams are aimed at achieving graduate competency standards that meet work competency standards<sup>1</sup>.

The large variation in the quality of nursing and health education is showed in the implementation of national competency exam conducted by KNUKP PPNI 2008<sup>2</sup>. In line with PPNI's efforts, the Indonesian Minister of Health issued Minister of Health Regulation/1796/Menkes/per/VIII/2011 Article 2 concerning the registration of substitute health workers of Ministry of Health number 161 2010 wherein the regulation, graduation of competency exams as evidenced by competency certificates is a requirement for health workers (including nurses) so they can be registered as nurses and allowed to practice their profession/work in Indonesia.

The nurse profession must have a registration letter (STR)<sup>2</sup>. The circulation of the Permenkes letter gave warm news among nursing, especially among Nursing

College students of the Nursing College of Ngudia Husada Madura who had just stood a few years back. This competency exams will be carried out for the first time by prospective nurses in Indonesia. Before health workers are registered, health workers are required to take competency exams. In this competency exams there are three aspects that need to be considered in measuring nurses' health workers, namely knowledge, skills and attitudes. Competency exams materials are prepared referring to the competency standards listed in professional standards. Competency test material was developed and compiled by the Indonesian Health Workers Assembly (MTKI) standardization division in coordination with the Directorate General of Higher Education Ministry of National Education and LPUK and the Ad-hock Team at Indonesian Health Workers Assembly from each professional organization

#### MATERIALS AND METHOD

In this study data were collected and analyzed quantitatively using logistic regression test. The level of significance by using the significance level 0.05, where there were relationship of independents and dependent variable if  $\rho \leq \alpha$  (0.05). Data analyzed using SPSS program (Statistical Product and Service Solutions).

The instrument used was a questionnaire. A sample of 211 respondents was obtained of Surya Mitra Husada Kediri students who faced competency exam. The independent variables (X) were social support  $(X_1)$ , self concepts  $(X_2)$ , and stress level  $(X_3)$ . The dependent variable (Y) was coping mechanism of the students.

#### RESULTS

#### **General Data**

**Table 1: General data distribution** 

No.	Characteristic	%	N
1.	Religions		
	Islam	77,7 %	164
	Christian	9,5 %	20
	Catholic	8,1 %	17
	Hindu	4,7 %	10
	Buddha	0 %	0
	Total	100 %	211
2.	Sex		
	Male	46 %	97
	Female	54 %	114
	Total	100 %	211
3.	Job status		
	Work	23,2 %	49
	Not work	74,4 %	157
	Others	2,4 %	5
	Total	100 %	211
4.	Major		
	Nursing	98,6 %	208
	Midwifery (bachelor)	1,4 %	3
	Midwifery (diploma)	0 %	0
	Public health	0 %	0
	Total	100 %	211
5.	Competency exams status		
	First Taker	81,5 %	172
	Retaker	18,5 %	39
	Total	100 %	211

Based on the distribution table above shows that the majority of respondents are Islamic as many as 164 respondents (77.7%), female as many as 114 respondents (54%), not working as many as 157 respondents (74.4%), majoring in Nursing as many as 208 respondents (98.6%)

and have status as first takers were 172 respondents (81.5%) out of a total of 211 respondents.

**Logistic Regression Analysis:** In this analysis will be discussed how the factors that influence the coping mechanism of students face competency exams such as social support, self-concept, stress levels. In this analysis will also be carried out simultaneous tests, partial tests, and model interpretation.

#### 1. Assess the feasibility of a regression model

Table 2: Hosmer and Lemeshow test

Step	Chi-square	df	Sig.
1	6.094	8	.637

Hosmer and Lemeshow Test table shows that the value of the Hosmer and Lemeshow Goodness of Fit statistical value is 6.094 with a significance probability of 0.637. Which was where the significance probability value of 0.637 is greater than the significance level of 0.05, the model was fit and the null hypothesis model cannot be rejected ( $H_0$  is accepted). It means that the regression model used in this study is suitable to be used for further analysis.

#### 2. Assessing the whole model (Overall Model Fit)

Table 3: Assessing the whole model

Interation	-2 Log likelihood
Step 0	270,885
Step 1	218,580

From the data processed by SPSS above there was a decrease between the value of -2 Log Likelihood in block 0 and -2 Log Likelihood in block 1 by 270,885 - 218,580 = 52,305 this indicated that the hypothesized model was fit with the data. This means that the overall Logistic Regression model used is a good model.

## 3. Simultaneous significant test (F test and Overall Test)

**Table 4: F test (Anova)** 

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10.856	3	3.619		
Residual	36.576	207	.177	20.479	$.000^{a}$
Total	47.431	210	.1//		

- a. Predictor: (Constant), X3\_Stress,X1\_Social Support Self concept
- b. Dependent Variable: X4 Coping Mechanism

From the results of the analysis above showed that the calculated F value was 20.497 with a probability of 0.000. Because the probability was 0.000 < 0.05, H<sub>0</sub> was rejected.

Table 5: Overall test Omnimus Test of Model Coefficients

Model	Chi-Square	df	Sig.
Step	10.856	3	.000
Block	36.576	3	.000
Model	47.431	3	.000

Whereas for the Overall Test the results of SPSS output were seen in the Omnibus Tests of Model Coefficients value where the significant value shows the value of 0,000. This value is smaller than the test significance level of 0.05 therefore  $H_0$  was rejected which means that there was an effect of all independent variables (X) simultaneously.

#### 1. Partial significance test

Table 6: T test

Variabel	Sig.
X <sub>1</sub> (Social support)	0,015
X <sub>2</sub> (Self concept)	0,000
X <sub>3</sub> (Stress level)	0,137
Constant	0,000

Variable of social support showed regression coefficient value of 0.683 and Wald value of 5.930 with variable probability of 0.015> 0.05 then  $\rm H_0$  was rejected which means that there was an influence of social support with coping mechanisms students face competency exams.

Variable of self-concept showed regression coefficient value of 1.418 and Wald value of 12.714 with variable probability of 0.000 < 0.05,  $H_0$  was rejected that there was influence of self-concept with coping mechanism of students facing competency exam.

Variable of stress level showed regression coefficient value of 0.376 and Wald value of 2.207 with variable probability of 0.137 > 0.05 so  $H_0$  was accepted that there

was no influence of stress level with coping mechanism coping mechanism of students facing competency exams.

#### DISCUSSION

Coping mechanism: The analysis results showed that the most coping mechanism category was the problem based coping category with the number of respondents 38 with a percentage of 54.3%. This was supported by the results of research conducted by Bakhtiar and Asriani<sup>3</sup> that showed that the Problem Focused Coping strategy was more effective than Emotion Focused Coping in improving stress management<sup>3</sup>.

Coping mechanism was defined as a strategy for managing behavior to the simplest and realistic problem solving, functioning to free themselves from real or unreal problems, and coping was all cognitive and behavioral endeavors to overcome, reduce, and resist demands<sup>4</sup>. Effective coping results in permanent adaptation which was a new habit and improvement of the old situation, while ineffective coping ends with maladaptive behavior that deviates from normative desires and can harm yourself or others or the environment<sup>5</sup>.

A student who failed an exam, can do coping with this situation by: increasing the learning effort, seeking help by asking the lecturer, blaming the lecturer or giving up without any effort. Individuals also often respond to stressful situations by attacking others through self-indulgent behavior such as overeating, smoking, getting drunk and abusing drugs, shopping, playing games or the internet. Academic stress that develops into depression can also lead to suicidal behavior<sup>6</sup>.

Coping mechanisms can be learned from the onset of a problem or stressor, so that the individual aware of the impact of the stressor. Individual coping ability depends on temperament, perception, and cognitive as well as cultural background or norms in which he grew up. The coping mechanism was formed through the process of learning and remembering. Learning in question was the ability to adapt (adaptation) to the influence of internal and external factors.

The use of coping mechanisms depends on how individuals deal with the problem because humans were unique and each has a native coping mechanism, although in general coping was an automatic mechanism when individuals feel stressful and threatening situations.

There were several types of coping mechanisms that were commonly used by individuals, including adaptive coping mechanisms, namely coping mechanisms that support the function of integration, growth, learning and achieving goals and maladaptive coping mechanisms, namely coping mechanisms that are hampered by integration functions, break down growth, reduce autonomy and tend to dominate the environment.

**Social Support(X<sub>1</sub>):** Logistic Regression test results showed that social support significantly influences the coping mechanism of students facing competency exams. Sarafino<sup>7</sup> which states that social support was a form of self-acceptance of individuals or groups of people to individuals. Self-acceptance creates a perception in the individual that they were loved, appreciated and helped. In addition, Zimet, Dahlem, Zimet and Farley<sup>8</sup> stated that social support was an assistance received by individuals who came from family, friends and important people. Besides that Sakti added that individuals who get social support will easily do coping than individuals who do not or have not received social support<sup>8</sup>.

Research by Kim & Han showed that coping mechanisms seeking social support and coping mechanisms focus on solving problems related to emotional intelligence<sup>9</sup>. The higher a person's emotional control, the better or more adaptive their coping mechanism is to stress. In line with the study conducted by Iyi that one of the factors influencing coping mechanisms was social support. Sarafino<sup>7</sup> explained that interaction with others can modify and even change individual perceptions in a condition.

The social support provided around shows that people who receive support have better health than those who do not receive support. Gerungan<sup>10</sup>, gave the idea that social relations can support health and also the welfare of individuals. Health and happiness were not only influenced by social welfare. But the enjoyment, closeness, mutually supportive relationships will have less risk of diseases such as the appearance of excessive stress on someone. This means that if a good social relationship can be established, then the individual as a member of society can feel the enjoyment, closeness, interdependence, and mutual need, and support each other. So that the risk of pressure (stress) can be reduced and minimize the emergence of symptoms of disease with a better level of health.

This was reinforced by research by Hasan and Rufaidah<sup>11</sup> who reported that there was a positive

relationship between social support and coping stress. The higher social support would be the higher the stress coping that was raised. This indicated that social support influences individual coping stress. Other than that the same research was also conducted by Sakti<sup>8</sup>. This study reported that there was a positive relationship between social support and coping stress.

Researchers argue that social support had an important part that influences managing stress itself. External support would have a good impact on coping mechanisms that students face

**Self concept**  $(X_2)$ : Logistic Regression test results showed that self-concept significantly influences family coping mechanisms with schizophrenics.

The ability of individuals to deal with events, things or circumstances that contain demands that threaten wellbeing will affect the individual's stressful conditions. Individual ability to overcome pressing demands was called a coping strategy. The used of coping strategies was directed by the way individuals accept or understand the situation and understanding was divided into two categories: primary understanding and secondary understanding. Reactions to stress vary from person to person and from time to time in the same person, because there were factors that influence this difference. among others due to age, sex, personality characteristics, intelligence, and genetic factors. In personality there was a self-concept that each individual has different self-concepts. The concept of self held important in determining and directing all behavior. Self-concept was always change because self-concept will grow from the interaction of someone with other influential people in their lives, usually parents, teachers, and friends. Thus the student's self-concept would influence what coping strategies will be used to overcome stress<sup>12</sup>.

Personality and coping basically have the same mechanism, where a person's personality will affect his perception of each situation and will affect the response he will do. The concept of self also played a role in creating what coping strategies will be used in dealing with the stress that was being faced, where individuals who have a positive self-concept will be able to create a Positive reappraisal coping strategy, which was a response by creating positive meaning in themselves whose purpose to develop themselves including involving religious matters.

Stress Level (X<sub>3</sub>): Logistic Regression test results indicated that stress levels was not significantly influence the coping mechanism of students who face competency exams. Stress was a part of every human life which was a condition caused by transactions between individuals and the environment that creates a distance between demands originating from various situations and the biological, psychological and social resources of a person. Stress that occurs in students need to be looked for early treatment solutions so as not to develop into great stress. This can be done with proper recognition and awareness about stress so that later individuals think stress is part of the challenge and not the end of everything that cannot be solved. This action was then known as the coping mechanism for stress<sup>13-15</sup>.

Conflict of Interest: None

Ethical Clearance: obtained from institute committee

Source of Funding: Authors and institute

#### **REFERENCES**

- 1. Nursing Law. Nursing Practice Number 38. Jakarta: 2014
- 2. Masfuri. Nurse Competency Test Guide. Jakarta: PPNI DPP; 2012.
- 3. Talk about MI, Asriani. Strategy Effectiveness Problem Focusing Coping and Emotion Focused Coping in Increasing Stress Management of Students in Barru 1 Public High School. J Education, Psychology, Guidance and Counseling. 2015; 5 (2): 69-82.
- Triantoro. Emotion Management. Jakarta: Earth Literacy; 20095. Rasmun. Stres, Koping Dan Adaptasi. Jakarta: Sagung Seto; 2004.
- 6. Pontes, H. M., & Griffiths MD. Assessment of Internet Gaming Disorder in clinical research:

- Past and present perspectives. *Clin Res Regul Aff.* 2014;31(1):2-4. doi:10.3109/10601333.2014.962 748
- Sarafino E. Biopsychosocial Interaction-Health Psychology. New York: John Wiley &Sons, Inc; 1994.
- Sakti EDD. Hubungan Antara Dukungan Sosial Dengan Coping Stress Pada Siswa Akselerasi. 2015.
- 9. Kim, M., & Han S. A study of Emotional Intelligence and Coping Strategies in Baccalaureate Nursing Students. 2015;7(3):275 282.
- 10. Gerungan W. *Psikologi Sosial*. Bandung: Refika Aditama; 2004.
- 11. Hasan N, Rufaidah ER. Hubungan antara dukungan sosial dengan strategi coping pada penderita stroke RSUD Dr. Moewardi Surakarta. *Talent Psikol*. 2013;2(1):42-62.
- 12. Kundu P. Journal Current social functioning in adult-onset schizophrenia and its relation with positive symptoms. *Ind Psychiatry J.* 2013;22.
- 13. Pulubuhu, D.A.T., Evans, K., Arsyad, M., Mallongi, A. Understanding the perspectives of village leaders and institutions in transforming social conflict into peace and health. Indian Journal of Public Health Research & Development, March 2018, Vol. 9, No. 3
- 14. Sunaryo. Psychology for Nursing. 2nd ed. Jakarta: EGC; 2013.
- Nur, R., and Mallongi, A., Impact of Violence on Health Reproduction Among Wives in Donggala. Pakistan Journal of Nutrition 2016.; Volume 15, Number 11, 980-988.