

ISSN 2354-8428  
e-ISSN 2598-8727

JURNAL KEPERAWATAN

# KOMPREHENSIF

COMPREHENSIVE NURSING JOURNAL

**Published by :**

Vol. 10 Special Edition, August 2024

**Sekolah Tinggi Ilmu Keperawatan  
PPNI Jawa Barat**



JURNAL KEPERAWATAN KOMPREHENSIF	VOL. 10	Special Edition	Bandung August 2024	ISSN 2354-8428	e-ISSN 2598-8727
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## Research Article

# The Effect of Hardiness Training on Academic Burnout in Nursing Students in STIKep PPNI Jawa Barat

Wawat Wati Rosmayanti<sup>1</sup> | Diwa Agus Sudrajat<sup>1\*</sup> | Tria Firza Kumala<sup>2</sup>

<sup>1</sup>STIKep PPNI Jawa Barat,  
Bandung, West Java –  
Indonesia

<sup>2</sup>FITKes Universitas  
Jenderal Achmad Yani,  
Cimahi, West Java

**\*contact**

diwasudrajat75@gmail.com

Received : 27/07/2024

Revised : 25/08/2024

Accepted : 30/08/2024

Online : 31/08/2024

Published : 31/08/2024

### Abstract

**Aims:** Academic burnout in nursing students is a result of academic demands, lack of interest, and incompetence, necessitating immediate action and hardiness training.

**Method:** This study surveyed 50 nursing students with academic burnout using the MBI-SS questionnaire. The sample was randomly selected, and statistical tests included Wilcoxon nonparametric and Mann-Whitney.

**Results:** There is a significant difference or influence on the scores before and after being given hardiness training with the Wilcoxon test results in the intervention group (Asymp. Sig. (2-tailed) = 0.000), there is an influence on the results of the Mann-Whitney test after being given hardiness training in the intervention and control groups with the data results being (Asymp. Sig. (2-tailed) 0.002), which means that this research has a significant influence-because the Asymp. Sig. (2-tailed) < 0.05.

**Conclusion:** Providing Hardiness training can reduce the level of academic burnout in nursing students.

### Keywords:

Academic, Burnout Syndrome, Hardiness Training, Nursing Students

## INTRODUCTION

Nursing students are one of the professions that demand high cognitive, emotional, and physical skills. Nursing students also face rigorous academic demands, intense clinical practice, as well as great social responsibility, which will ultimately make nursing students vulnerable to academic burnout, where Academic Burnout means exhaustion of physical conditions, emotional states, and mental states caused by being involved in emotionally stressful situations for long periods of time. Zhang, Gan, and Cham say academic burnout in students is characterized by a sense of fatigue due to the demands of the learning system (exhaustion), lack of interest in their academic tasks (cynicism) and feeling incompetent (reduced efficacy). (1)

Results In a study of nursing students at

FIKES Jendral Soedirmn University, the majority of nursing students experienced moderate burnout (56.4%). Research results Priasmoro (2) obtained data that the majority of students at the Faculty of Nursing, Riau University experienced moderate burnout. In research Hidayati (3) in Purwokerto with the results of a picture of the majority of nursing students experiencing moderate burnout.

From the results of Bullock (4) research, it was found that medical students with burnout were two to three times more likely to have the desire to end their lives than students who did not experience burnout. Furthermore, according to Maslach (5) Students who experience Academic Burnout will miss classes (absenteeism), do not do assignments well, and get poor exam results

until they have the potential to be expelled from college.

Overall, burnout in nursing students is a serious problem that can affect quality of life and learning outcomes. Therefore, further efforts are needed to reduce the level of burnout in nursing students through a sustainable and integrated approach. One way to overcome burnout is with hardiness training (6)

Hardiness is a very important concept to consider in the context of nurse burnout. The concept of hardiness was first proposed by Kobasa as a personality type that positively influences various individual circumstances and serves as a resistance when individuals face stressful events (6)

The ability of student nurses to cope with stress and pursue optimal performance in challenging situations can help prevent burnout and improve the quality of health services. Hardiness is a concept used to explain how individuals can cope with stress and pursue optimal performance in challenging situations. Three main components are at the center of hardiness: commitment, control, and challenge. Commitment is the desire to be involved and play a role in challenging situations, control is the belief that individuals can influence the outcome of the situation, and challenge is the interpretation of life changes experienced to help people adapt to the environment (7)

Hardiness is a process of examining attitudes and skills to change the perception of situations perceived as threatening to be less threatening, which ultimately allows to develop a person's personality that is wiser and able to handle events in life (8). Assessing life events positively can increase one's resilience when dealing with sources of stress that are the main cause of burnout or fatigue (7) Previous research conducted by Eka Dian Aprilia used Pearson correlation technique in its data analysis and found the correlation coefficient  $r = -0.560$  and  $p = 0.00$  ( $p < 0.01$ ). These results indicate a significant negative relationship between hardiness and burnout in nurses at Hospital

'X' Aceh, meaning that the higher the hardiness, the lower the burnout value and vice versa, the lower the hardiness, the higher the burnout value in nurses at Hospital 'X' Aceh. (9)

The importance of this research is carried out on nursing students seeing from the explanation of previous researchers that nursing students have more demands and workloads, especially in conducting clinical practice when they have to deal with patients directly. Therefore, researchers are now trying to conduct a preliminary study by screening using google form to nursing students at STIKep PPNI West Java by asking questions in accordance with the academic burnout research instrument, namely Maslach Burnout Inventory- Survey Student (MBI-SS).

The results of the Maslach Burnout Inventory- Survey Student (MBI-SS) screening of students who filled out the questionnaire were 171 nursing students from all levels, undergraduate programs totaling 133 students and D3 totaling 38 students, with the results of the academic picture of mild burnout 45.0%, moderate burnout 54.4%. Therefore, researchers are now trying to conduct research on nursing students who experience burnout, either mild, moderate or severe burnout.

## METHODS

This research is a type of quantitative research that uses a quasi-experiment two group pretest design and posttest design. Where in this study there are intervention variable groups and control variable groups. The effect of treatment is assessed by comparing the value before intervention with the value after intervention (10). This method was used to analyze "the effect of Hardiness training on Academic Burnout in West Java STIKEP PPNI Students".

## RESULTS

Describes the results of research that has been conducted on Stikep PPNI West Java

students, which was held on July 4-7, 2023. The number of respondents was 50 students who were divided into 2 groups, namely 25 intervention groups and 25 control groups. Data processing using SPSS version 26.0 and presented based on univariate and bivariate analysis. These results will describe the results of the study in accordance with the research objectives in the planned univariate analysis and bivariate analysis, then will be explained and compiled with the discussion, where the results are

visualized in the form of tables and narratives.

### Univariate Analysis

Univariate analysis is an analysis to discuss quantitative data about how the characteristics of respondents including study program, age, gender, besides that univariate analysis is used to show the distribution of burnout data in students and compare the results before and after the hardiness training intervention.

**Table 1. Distribution of Respondent Characteristics**

Variables	Category	n	%	Homogeneity
Study Program	S1	46	92	0.14
	D3	4	8	
Age	Mean	20.52	-	0.44
	Min-Max	18-23		
Gender	Female	39	78	1.00
	Male	11	22	
Group	Intervention	25	50.0	-
	Control	25	50.0	

Source: Primary Data, July 2023

Based on the results of research conducted on nursing students, it shows that the characteristics of respondents for the age category illustrate that the average respondent is 20.52 years old, while the results of homogeneity data to determine homogeneous or inhomogeneous data on age with the results of 0.44 which means homogeneous because  $p \text{ value} > 0.05$ . Based on the characteristics of the study program category, there are more S1 students totaling 46 students and D3 students totaling 4 students, while based on gender there are more women with 39 people and 11 men. This shows from a total of 50 respondents that the majority of S1 nursing students are female and the minority are male, while the results of homogeneous data on gender are declared homogeneous because the data results are  $p \text{ value} = 1.00$ .

**Table 2. Overview of academic burnout of nursing students before and after being given a hardiness training intervention in the intervention group i**

Burnout Level	Intervention Group			
	Pre-test		Post-test	
	N	%	N	%
No Burnout	0	0	0	0
Mild Burnout	6	24	18	72
Moderate Burnout	19	76	7	28
Severe Burnout	0	0	0	0
<b>Total</b>	<b>25</b>	<b>100</b>	<b>25</b>	<b>100</b>

Source: Primary Data, July 2023

**Table 3. Dimensions of Academic burnout in the Intervention group**

Dimensions of Academic Burnout	Intervention Group			
	Pre-Test		Post-Test	
	n	%	n	%
<b>Exhaustion</b>				
No	0	0	1	4.0
Lightweight	3	12.0	13	52.0
Medium	20	80.0	11	44.0
Weight	2	8.0	0	0
<b>Cynicism</b>				
No	0	0	3	12.0
Lightweight	9	36.0	18	72.0
Medium	16	64.0	4	16.0
Weight	0	0	0	0
<b>Professional Efficacy</b>				
No	0	0	1	4.0
Lightweight	8	32.0	18	72.0
Medium	17	68.0	6	24.0
Weight	0	0	0	0

Source: Primary Data, July 2023

Based on table 1 shows that the pre-test of the intervention group experienced the highest academic burnout in the moderate category (76%), and the highest number of post-tests was in the mild category (72%).

Based on the results of the SPSS test in table 2 above, the highest pre-test value is in the dimension of exhaustion with an amount of 80.0% and is in the moderate category, when the post-test is carried out the highest number of values is in the dimension of cynicism and reduced personal accomplishment with an amount of 72.0% in the mild category. Based on the results of the dimensions of academic burnout, students experience a decrease between the pre-test and post-test which can be interpreted as good.

**Table 4. Overview of Academic Burnout of nursing students before and after being given a hardiness training intervention in the Control group**

Burnout Level	Control Group			
	Pre-test		Post-test	
	n	%	n	%
No Burnout	0	0	0	0
Mild Burnout	10	40.0	8	32.0
Moderate Burnout	15	60.0	17	68.0
Severe Burnout	0	0	0	0
<b>Total</b>	<b>25</b>	<b>100</b>	<b>25</b>	<b>100</b>

Source: Primary Data, July 2023

**Table 5. Dimensions of academic burnout in the control group I**

Dimensions of Academic Burnout	Control Group			
	Pre-Test		Post-Test	
	n	%	n	%
<b>Exhaustion</b>				
No	0	0	0	0
Lightweight	5	20.0	8	32.0
Medium	20	80.0	16	64.0
Weight	0	0	1	4.0
<b>Cynicism</b>				
No	1	4.0	1	4.0
Lightweight	16	64.0	14	56.0
Medium	8	32.0	10	40.0
Weight	0	0	0	0
<b>Professional Efficacy</b>				
No	1	4.0	1	4.0
Lightweight	8	32.0	8	32.0
Medium	16	64.0	16	64.0
Weight	0	0	0	0

Source: Primary Data, July 2023

The results of the research in tables 4 and 5 above show that the description of academic burnout in nursing students in the control group with the highest number of pre-test values is in the moderate category as much as (60%), after the post-test the highest value remains in the moderate category only the number of values increases to (68%). Based on the results of the data in the control group, the dimensions of student academic burnout have increased and some are of fixed value in each dimension.

### Bivariate Analysis

Bivariate analysis aims to test the hypothesis of the effect of Hardiness training on academic burnout in students in the intervention group and control group. Statistical analysis used is Wilcoxon and Man Whitney.

**Table 6. Identifying differences in academic burnout experienced by nursing students before and after being given hardiness training in the intervention group and control group I**

	Category	N	Asymp. Sig.
Intervention	Score Drop	21	0,000
	Pretest -	4	
	Score Improvement		
	Intervention	Similarity Score	
	Total	25	
Control	Score Drop	10	0,833
	Pretest -	12	
	Score Improvement		
	Control	Similarity Score	
	Total	25	

Source: Primary Data, July 2023

Based on the results of the Wicoxon test using IBM SPSS Software Version 26 with the statistical test results in this study, the Asymp. Sig. (2-tailed) of 0.000, which means that the p value  $<0.05$ , it can be said that the hypothesis is accepted, which means that there is a difference in burnout levels before and after being given a hardiness intervention for West Java STIKEP PPNI nursing students with academic burnout. In the control group with a significance value of 0.833, it can be said that the hypothesis is rejected because it is more than 0.05.

In the last special objective in this study, namely to identify differences in academic burnout in nursing students after intervention in the intervention group and control group using the Mann-Whitney nonparametric statistical test, therefore the results of the Mann-Whitney statistical test are visualized in the form of table 7 below.

**Table 7. Identifying the comparison of Academic Burnout Syndrome in nursing students after the intervention in the experimental group and control group**

Mann-Whitney Statistical Test			
Academic Burnout Syndrome	Mann-Whitney U	Z	Asymp. Sig.
	150.500	-3.145	0,002

Based on the results of the Man-Whitney test, the mean rank was 19.02 in the intervention group and 31.98 in the control group. And the results of statistical tests using Man-Whitney obtained the results of Asymp.sig. (2-tailed)  $0.002 <0.05$ . So it can be decided that "The hypothesis is accepted" because there is a significant difference from the difference in the results of the intervention post-test and the control group post-test, which means "there is an effect of Hardiness Training on Academic Burnout in Nursing Students of West Java STIKEP PPNI.

## DISCUSSION

### **An overview of the academic burnout syndrome of nursing students before and after being given a hardiness training intervention in the intervention group**

The results of the study showed that the academic burnout of West Java STIKEP PPNI nursing students for the intervention group decreased in the moderate category and increased in the mild category where the score on the pre-test intervention in the moderate category (76%) changed to (28%), and the mild category (24%) changed to (72%). This study shows that hardiness

plays an important role in reducing academic burnout in nursing students. The ability to face academic pressure with confidence and optimism will help individuals to stay focused, be able to overcome challenges or problems, and feel more capable in dealing with academic loads. Similar research was also revealed by Fahmiddan Widyastuti (2018) which states that the higher the characteristics of hardiness, the stronger the individual's endurance in dealing with events that are stressful and cause burnout.

The results of the intervention group in the exaution domain are different where when the post- test is carried out in the moderate category the frequency value is 0, in the mild category the number of frequencies is 3, in the moderate category the number of frequencies is 20, and in the severe category the number of frequencies is 2, after being given hardiness training the results of the post-test change from the category of no exaution there is a frequency of 1, in the mild category there are 13, in the moderate category there are 11 people, and in the severe category the number of frequencies is 0, this can happen because students are able to commit and begin to be motivated to realize their life goals, when someone

realizes their life goals clearly, they will be motivated and focused, thereby reducing the level of exhaustion. This is reinforced by psychologist Salvatore (11), who states that hardiness is an individual's psychological quality that helps them face and overcome burnout, and life changes more effectively.

The results of the intervention group in the cynicism domain in the intervention group can also be seen to have experienced good changes where when the pre-test the category of no cynicism amounted to 0 turned into 3, in the mild category amounted to 9 turned into 18, and in the moderate category 16 turned into 4. Judging from the results that have experienced better changes in the attitude of cynicism, this is reinforced by Blanchard (12) explaining that in applying hardiness by applying the control method, individuals will view and face directly the problems in their lives, by controlling the pressure within themselves, and being able to address and survive unpleasant experiences.

The results of the intervention group in the reduced personal accomplishment domain, seen from the results of better changes after being given a hardiness training intervention in the intervention group, where when the pre-test was carried out the number of categories was not 0 changed to 1, the mild category 8 changed to 18, the moderate category 17 changed to 6, in this case strengthened by Popa-Velea research (13), stating that individuals who have a hardiness attitude tend to be related to readiness and confidence in themselves in facing any transitional situation (14)

### **Overview of academic burnout syndrome of nursing students before and after being given hardiness training in the control group**

Based on the description of academic burnout in the pre-test and post-test control group, this control group was not given hardiness training during the intervention period until the calculation of the results was obtained, but at the end of the research period in accordance with research ethics

the control group will get a discussion about hardiness training. And the results of the study showed that the academic burnout of West Java STIKEP PPNI nursing students for the control group experienced an increase in the moderate category and a decrease.(15)

The results of the control group in the exhaustion dimension increased in the severe category where the pre-test results of 0% turned into 4.0%. and in the moderate category decreased from 80% to 64.0%, and an increase in the mild category from 20.0% to 32%. It can be concluded that the results in the number of control groups in the exhaustion category have increased the number of burnouts and some have decreased, this is reinforced by Salvagioni (16) stating that each individual has a different reaction to burnout, characteristics such as personality dispositions contribute to how individuals respond to stressors.

The results of the control group on the cynicism dimension, in the moderate category when the pre-test was 32.0% and when the post-test was carried out, it increased to 40.0%. this happens because individuals who experience cynicism tend to see the world with a negative perspective, and can prevent them from developing themselves.

The results of the control group on the dimension of reduced personal accomplishment, the results showed no change in value after the pre and post test. This happens because individuals who have low self-confidence think that everything must always be stable and will feel worried if there are changes that occur because they are considered to cause insecurity, this is reinforced by (17) which states that individuals who insist on maintaining old patterns, while new behavior patterns may be needed for the sake of effectiveness against problems but are viewed skeptically (lack of confidence) because they have not felt the effects themselves.

### **Differences in academic burnout syndrome experienced by nursing students before and after being given**



### **hardiness training in the intervention group and control group.**

The results of the analysis of the Wilcoxon Sign Rank statistical test in the intervention group before and after being given Hardiness training decreased significantly with a value of  $N = 21$  people, and increased with a total of  $N = 4$  people, and the results of Asymp. Sig. (**2-tailed=0.000**  $<0.05$  then  $H_0$  is rejected and  $H_a$  is accepted, there is a higher number of lifting decreases than the number of numbers that have increased and the results of Asymp. Sig. (2-tailed)  $<0.05$  it can be said that there is an effect of Hardiness training on academic burnout in West Java STIKEP PPNI nursing students. The results of research by Mchugh (18), that the Hardiness training program effectively reduces the level of burnout felt by students and has a very positive impact on them (19)

While in the control group the number of academic burnout in students experienced a higher number of increases than the number of decreases, the number of academic burnout with an increase value of  $N = 12$  people and those who experienced a decrease of  $N = 10$  people, and 3 more people had the same score, the results of Asymp. Sig. (**2-tailed=0.833**  $>0.05$  then  $H_0$  is accepted and  $H_a$  is rejected, which means that there is an increase in academic burnout between the posttest results and the pretest results because there is an increase in the number of academic burnout by 12 people. this is reinforced by Kim (20) states that in the control groupeach individual has a different reaction to burnout, characteristics such as personality dispositions contribute to how individuals respond to stressors.

### **Comparison of academic burnout syndrome experienced by nursing students after being given hardiness training in the intervention group and control group.**

Based on the mean value between the intervention group 19.02 and the control group 31.98, to find out the significant difference, it can be seen from the Man-Whitney test results. Based on the results of

the mann withney test, the Sig. (2- tailed)  $0.02 <0.05$  then  $H_a$  is accepted and  $H_0$  is rejected, it can be concluded that there is a difference between the intervention group and the control group. This is reinforced by kobasa, that in individuals who have high hardiness, especially in control interventions with the tower tower game, individuals will be able to address themselves to the problems they face, with the intervention of commitment within themselves by having clear self-goals individuals will be happy to work hard because they can enjoy their daily tasks. happy to make something that must be utilized and filled, with the intervention of self-commitment by having clear self-goals individuals will be happy to work hard because they can enjoy their daily tasks, happy to make something that must be utilized and filled in order to have meaning and make individuals enthusiastic in welcoming their future, and in the challenge intervention by drawing using hands that are not usually overused will make respondents think of making changes in their lives as a challenge that is useful for the development of their lives.

## **CONCLUSIONS**

Based on the results of the research and discussion described in the previous chapter, the researcher concluded that: The picture of burnout of STIKEP students before and after Hardiness training in the intervention group, shows a significant difference between before and after being given hardiness training, with the pre-test intervention score in the moderate category 19 (76%), and the mild category 6 (24%), when the post-test results changed to 7 (28%) in the moderate category and 18 (72%) in the mild category. The description of burnout of STIKEP students before and after Hardiness training in the control group, shows an increase in academic burnout, where the number of post-test with moderate categories is 15 (60%), and the mild category is 10 (40%), and when the post-test changes where the moderate

category increases to 17 (68%), and the mild category decreases to 8 (32%). There is a significant difference or effect of results after being given Hardiness training on academic burnout in the intervention group and control group with the results of the Asymp. Sig. = 0,002. Academic burnout can be minimized through hardiness training for nursing students at STIKEP PPNI West Java, with the results of measuring instruments using the Maslach Burnout Inventory-Student Survey (MBI-SS) questionnaire with the results of the higher the score value, the heavier the academic burnout experienced, and vice versa the lower the academic burnout value, the lower the academic burnout experienced.

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