The Effect of Academic Self-Efficacy Training Toward The Nursing Students’ Academic Burnout Participating In Block-System Learning

Maria Lupita Nena Meo¹, I Gusti Ayu Pramitharesthi ², Adriani Natalia M. ¹

Abstract

Introduction: Dense block system and online learning during the covid-19 pandemic has led to complaints of boredom, tiredness and fatigue causing academic fatigue syndrome (academic burnout). Unresolved academic burnout will lead to a decline in academic achievement and decrease of interest in education. This also affects the performance of educational institutions. Therefore, it is necessary to take action to address academic burnout in students. This research aims to determine the effect of academic self-efficacy training on academic burnout experienced by nursing students.

Methods: The method used was quantitative-experimental with Pre-test Post-test Design with control group. The research was conducted at two nursing education institutions in Indonesia during July-August 2020. A total of 90 research respondents were selected with simple random sampling technique. The instrument used in this study was the Maslach Burnout Inventory-Student Survey (MBI-SS). Research data was then analyzed using paired t test and Independent test.

Results: Paired t test in the treatment group obtained p value = 0.000. This means that there is a difference in academic burnout before and after intervention in this group, while the test results in the control group obtained p value = 0.170 meaning that there is no difference before and after intervention. Independent t test result showed the value of p = 0.000, indicating differences in academic fatigue in these two groups.

Conclusion: Academic efficacy training is effective in reducing academic burnout in nursing students who participated in lectures with the block system.

Keywords
academic burnout; effect; self-efficacy

INTRODUCTION

Since education circumstances hit by the Covid-19 pandemic, universities or colleges have carried out various learning scenarios that are more flexible. One of the suitable learning systems during this pandemic is block-system learning. If in conventional lectures, the duration of learning is only once a week for each subject, in block-system learning, the meeting becomes more full, dense and longer. The goal is to increase academic achievement, learning satisfaction, and especially material targets to the maximum according to the demands of the curriculum (Mizhquiri, 2019). Block-system learning combines the study

¹ Nursing Study Program, Sam Ratulangi University
² Nursing Professional and Undergraduate Study Program, Udayana University

Corresponding Author:
Maria Lupita Nena Meo; Nursing Study Program, Sam Ratulangi University, North Sulawesi, Indonesia
Bahu, Malalayang District, Manado City, North Sulawesi
Email: lupitanenameo@unsrat.ac.id
hours of each previous face-to-face meeting of a course, becoming more compact. This block-system is currently being implemented by the majority (80%) of nursing study programs in Indonesia in teaching core courses, while the rest (20%) for general subjects are still taught using the conventional system.

The desire to achieve the target material for lectures through the block system actually creates socio-emotional problems among the students. Instead of promising academic achievement, many students complained that they were bored with piling up assignments. Research on the use of the block-system, for example for the Maternity 1 course with a study load of 4 credits that was taken in 4 weeks, where 3 times were carried out by face-to-face interaction with an allocation of 100 minutes every activity, reported that a number of students admitted to feeling tired and bored that lead to syndrome academic burnout (Mizhquiri, 2019). Initial study at the two institutions that were the location of this research, was also found that most of students (70-90%) who took block-system learning, reported complaining of fatigue and boredom due to the tight lecture schedule (Prabhasuari, 2020)

Burnout syndrome is a social and emotional problem felt by students recently (Kaur et al., 2020). The problem is caused by academic demands (emotional exhaustion), a sense of pessimism and a lack of interest in academic tasks (cynicism), and feelings of inadequacy, as a student (inefficiency) (Valero-Chillerón et al., 2019). Research findings suggest that people with academic burnout may experience some symptoms, such as low interest in academic problems, reluctance to attend lectures constantly, being affiliated in class activities, feeling nothing or feeling insignificant in academic activities, and are unable to solve academic problems (Valero-Chillerón et al., 2019). All this results in a decrease in performance and will even lead to suicide attempts (Ishak et al., 2013; Valero-Chillerón et al., 2019).

Various interventions are suggested to prevent and overcome the academic burnout phenomenon, including training and counseling related to cognitive and addictive behavior, psychotherapy, social support, relaxation and physical exercise. These interventions have been shown to reduce the risk of the problem by reducing stress and improving the students' life quality (Ishak et al., 2013). Cognitive social therapy is one of the interventions that will be developed in this study to reduce students' academic burnout. The social cognitive theory developed by Bandura provides theoretical justification that self-efficacy affects academic success by increasing students' sense of well-being and increasing their persistence to complete challenging academic tasks (Bandura, 1977). Selection of academic efficacy development interventions to overcome academic fatigue is based on the findings of research that academic self-efficacy has a negative relationship to all dimensions of academic burnout (Bresó, Schaufeli and Salanova, 2011; Charkhabi, Abarghuei and Hayati, 2013; Yu, Chae and Chang, 2016; Kaur et al., 2020) Based on the literature search, publications regarding the effectiveness of academic self-efficacy interventions to reduce academic burnout with the target population are nursing students, have never been done before in Indonesia. Therefore, this study aims to determine the effect of academic self-efficacy training interventions on the academic burnout in nursing students participating block-system learning.

MATERIALS AND METHODS

Based on the objectives above, the research used was quantitative approach through quasi-experimental research design with a pre-test and post-test design with a control group. This study began with a measurement of academic burnout in Indonesia therefore, this study aims to determine the effect of academic self-efficacy training interventions on the academic burnout in nursing students participating block-system learning.

The population of this study were all students in semester 3 with the result criteria that they had attended / taken the Nursing Maternity 1 block lecture and would be respondents. The exclusion criteria were students who dropped out during the research process. The number of samples from the total population above were 98 respondents, where they were divided into equal numbers for the
experimental group and the control group. At the time of the research process, 8 respondents of the experimental group dropped out so that the total final samples were 90 respondents. The sample technique used was simple random sampling. The research took place from August-September 2020 at two State Universities (PTN) in Indonesia.

Research respondents were divided into two groups, namely the experimental group and the control group. The experimental group received treatment in the form of self-efficacy training through 4 stages, namely goal setting, strategic training, modeling and feedback. The training used the lecture method and online Focus Group Discussion (FGD). The training was carried out in 4 sessions over 2 weeks. Each training session was carried out for 2 hours. The trainer was a professional with the field of mental nursing (mental nursing specialist).

The measurement of the dependent variable used the Maslach Burnout Inventory-Student Survey (MBI-SS) developed by Tomaszewski (Tomaszewski-Barlem et al., 2014). Total instrument items amounted to 14 items consisting of: 5 items of emotional exhaustion, 4 items of disbelief, and 5 items of reversed professional efficacy. The question components in the questionnaire were composed of positive (favorable) and negative (unfavorable) questions. Each item was assessed using a 6-point Likert scale. A higher number of points accumulated is interpreted as having a higher probability of academic burnout.

The Cronbach α value of academic burnout is 0.781, while the validity value is 0.21-0.71 (Prabhasuari, 2020). The two groups show the normality test where the data research is normally distributed, therefore the data can analyze using the paired t test to assess differences in the level of academic burnout pre-test and post-test for each group. Meanwhile, to see differences about academic burnout of the control and experimental groups can be used the independent t test.

This study has considered the ethics of such informed consent, anonymity and confidentiality together and have received permission from the dean of the faculty where research is conducted with license numbers 945 / UN12.1 / LT / 2020.

![Figure 1. Participant eligibility criteria](image-url)
RESULTS

The results in Table 1 above shows that the majority of respondents’ ages from the groups are diverse. Respondents in the experimental group dominated by 18 years old respondents, while the control group was 19 years. This differs from gender characteristics. The respondents in both groups were dominated by female sex.

Table 2 shows the comparison of the mean scores for every dimension in academic burnout both the pretest and posttest in the two groups. In the experimental group, the average value of the emotional fatigue dimension during the pre-test was 17.0, and decreased to 15.2 during the post-test. For the disbelief dimension, the pre-test average score was 15.3 and decreased to 10.7 during the post-test. Meanwhile, the average pre-test value for the reversed professional efficacy dimension was 19.5 and decreased to 12.2 during the post-test.

The average score of academic burnout in the control group which is illustrated in Table 2 also changes but is not significant. The emotional exhaustion dimension has an average pre-test score of 17.5 and increases to 18.4 during the post-test. The disbelief dimension has an average value of 17.0 and decreases but was not significant to 15.1 during the post test. While the pre-test average value for the dimension of reversed professional efficacy was 16.2, decreasing to 17.6 during the post-test.

The results of the Paired Samples Test analysis for the experimental group showed that the value of \( p = 0.000 < p = 0.05 \), it was concluded that there was a significant difference about academic burnout before and after being given academic self-efficacy training. In the control group, the Paired Samples Test results showed \( p \) value = 0.170> \( p = 0.05 \), so this can be concluded that there was no significant difference between pretest and posttest academic burnout because there was

| Characteristics | Experimental Group (n = 41) | Control Group (n = 49) |
|-----------------|-----------------------------|------------------------|
| N %             | N %                         |
| Age             |                             |                        |
| 19 years        | 15 37                       | 42 86                  |
| 18 years        | 23 56                       | 7 14                   |
| 17 years        | 3 7                         | 0 0                    |
| Sex             |                             |                        |
| Male            | 4 10                        | 5 10                   |
| Female          | 37 90                       | 44 90                  |

| Burnout academic dimension | Experimental Group (n = 41) | Control Group (n = 49) |
|---------------------------|-----------------------------|------------------------|
|                           | Pre-test        | Post-test   | Pre-test   | Post-test   |
|                           | Mean            | Mean        | Mean       | Mean        |
| Emotional Fatigue         | 17.0            | 5.2         | 17.5       | 18.4        |
| Disbelief                 | 15.3            | 10.7        | 17.0       | 15.1        |
| Reversed professional Efficacy | 19.5       | 12.2        | 16.2       | 17.6        |
| Mean score                | 51.8            | 38.1        | 50.5       | 51.1        |
| Paired Samples Test       | \( p = 0.000 \)  | \( p = 0.000 \) | \( p = 0.170 \) |
not given self-efficacy training. While the results of the Independent Samples Test showed the p value = 0.000 <p = 0.05, so it can be concluded that there was a significant difference after students received self-efficacy training both the experimental and control group.

Table 2 shows the comparison of the mean scores for every dimension in academic burnout both the pretest and posttest in the two groups. In the experimental group, the average value of the emotional fatigue dimension during the pre-test was 17.0, and decreased to 15.2 during the post-test. For the disbelief dimension, the pre-test average score was 15.3 and decreased to 10.7 during the post-test. Meanwhile, the average pre-test value for the reversed professional efficacy dimension was 19.5 and decreased to 12.2 during the post-test.

The average score of academic burnout in the control group which is illustrated in Table 2 also changes but is not significant. The emotional exhaustion dimension has an average pre-test score of 17.5 and increases to 18.4 during the post-test. The disbelief dimension has an average value of 17.0 and decreases but was not significant to 15.1 during the post test. While the pre-test average value for the dimension of reversed professional efficacy was 16.2, decreasing to 17.6 during the post-test.

The results of the Paired Samples Test analysis for the experimental group showed that the value of p = 0.000 <p = 0.05, it was concluded that there was a significant difference about academic burnout before and after being given academic self-efficacy training. In the control group, the Paired Samples Test results showed p value = 0.170> p = 0.05, so this can be concluded that there was no significant difference between pretest and posttest academic burnout because there was not given self-efficacy training. While the results of the Independent Samples Test showed the p value = 0.000 <p = 0.05, so it can be concluded that there was a significant difference after students received self-efficacy training both the experimental and control group.

**DISCUSSIONS**

From the research results described above, it was found that the majority of respondents (students) both in the treatment and control group experienced quite high academic burnout at the early weeks during following block-system learning. This can be seen from the mean values of 51.8 and 50.5. The increase in academic burnout is also reflected in 3 dimensions which are the main components of academic burnout, namely emotional exhaustion, disbelief, and low personal accomplishment. The increase accruing in the dimensions of emotional fatigue refers to the symptoms of physical, mental and emotional fatigue. Emotional fatigue is usually caused by reduced energy due to interpersonal problems faced by students (Larrivee, 2012). The second dimension is disbelief refers to indifferent behavior, loss of purpose and anti-lecture attitudes (Larrivee, 2012). The last dimension is low personal accomplishment, where students with burnout tend to reduce their workload by being absent, doing as few tasks as possible, even not doing tasks at all which are considered heavier and take longer, causing a decrease in the quality and quantity of their works (Lumongga, 2016)

The research findings show that the most factors that contribute to the increase in academic burnout experienced by students is resources. Lack of resources to support academic tasks triggers the problem of academic fatigue. The resource factors referred to include the availability of supporting facilities for lectures and interpersonal communication between students and lecturers (Charkhabi, Abarghuei and Hayati, 2013). Researchers assume that resource factors influence the increase in academic burnout at the pre-test because students have to adapt to an online learning system as a result of the global Covid-19 pandemic. Lack of internet access (inability to buy data packages or demographic problems, a place to live that does not allow quality internet access), lack of contact and interaction between lecturers and students, situations and conditions of the home environment that are ineffective for online learning, use of technology and online learning processes which is ineffective, becomes the stressors for students taking online courses (Adnan, 2020; Subedi et al., 2020)
The results of statistical analysis when comparing the two groups before and after the treatment showed the effect of giving academic self-efficacy training interventions on the academic burnout of students participating block-system learning. This is in line with the findings of several studies that assessed the relationship between academic self-efficacy and academic burnout. The results of these studies have shown that self-efficacy is related to the three components of academic burnout (Charkhabi, Abarghuei and Hayati, 2013). Other studies have found that academic burnout is associated with socially determined perfectionism and has a negative correlation with academic self-efficacy (Yu, Chae and Chang, 2016). Academic burnout has decreased after giving self-efficacy training (Bresó, Schaufeli and Salanova, 2011). Other studies have also found that emotional exhaustion and professional inadequacy are negatively correlated with students' academic self-perceptions (Kaur et al., 2020).

Self-efficacy is defined as an individual's belief or belief in his or her ability to produce a level of performance that affects an event that can affect life (Bandura, 2004). An individual's belief to success can influence someone in overcoming how much stress, anxiety, and depression he/she experiences in threatening situations (Bandura, 2004).

In the world of universities or colleges, self-efficacy is the main factor that contributes to student success, because it affects the choices made and the actions to be taken and achieved. Self-efficacy is believed to affect students' performance and to improve their academic achievement. Academic self-efficacy refers to a person's belief that he/she can successfully achieve certain academic goals (Bandura, 1977; Sharma et al., 2018) Students who have high academic self-efficacy will see problems as challenges that must be mastered rather than as threats. They are also committed to the academic goals that have been set. They have a diagnostic task orientation, which provides useful feedback to improve performance. They view failure as the result of insufficient effort or knowledge, not as inability or incompetence. And when they experience failure, they keep trying to achieve the goals they have set (Sharma et al., 2018).

Therefore, interventions to strengthen academic self-efficacy are feasible to be applied as activities to reduce academic burnout and to improve the mental health for nursing students at universities or colleges. These are practical implications. This study has limitations where the effectiveness and efficiency of online training has not been supported by strong evidence based.

CONCLUSION

This study is one of the some studies in Indonesia that indicates that academic self-efficacy training interventions are effective in reducing academic burnout of students participating block-system learning at universities or colleges. Subsequent research focused on training models and methods so as to assess the effectiveness of the self-efficacy training models and methods used.

Acknowledgement

This research was funded by the Association of Indonesian Nurse Education Institutions (AIPNI) through the AINEC Research Award grant scheme for the 2020 fiscal year.

Conflict of Interest

This research is purely for academic work and is worthy of public reading. There was no conflict of interest whatsoever in this study.

REFERENCES

Adnan, M. (2020) 'Online learning amid the COVID-19 pandemic: Students perspectives', Journal of Pedagogical Research, 1(2), pp. 45–51. doi: 10.33902/jpsp.2020261309.

Bandura, A. (1977) 'Self-efficacy: Toward a unifying theory of behavioral change', Psychological Review.

Bandura, A. (2004) 'Self-efficacy. In N. B. Anderson', Encyclopedia of health & behavior, 2.

Bresó, E., Schaufeli, W. B. and Salanova, M. (2011) ‘Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study’, Higher
Charkhabi, M., Abarghuei, M. A. and Hayati, D. (2013) ‘The association of academic burnout with self-efficacy and quality of learning experience among Iranian students’, SpringerPlus, 2(1), pp. 1–5. doi: 10.1186/2193-1801-2-677.

Ishak, W. et al. (2013) ‘Burnout in medical students: A systematic review’, Clinical Teacher, 10(4), pp. 242–245. doi: 10.1111/tct.12014.

Kaur, M. et al. (2020) ‘Relationship of Burnout and Engagement to Pharmacy Students’ Perception of Their Academic Ability.’, American journal of pharmaceutical education, 84(2), p. 7571. doi: 10.5688/ajpe7571.

Larrivee, B. (2012) Cultivating Teacher Renewal: Guarding Against Stress and Burnout. Rowman & Littlefield.

Lumongga, N. (2016) Depresi: Tinjauan Psikologis. Kencana.

Mizhquiri, L. (2019) ‘White Paper: The Effects of Block Scheduling and Traditional Scheduling on High School Student Achievement’, p. 11. Available at: https://digitalcommons.dartmouth.edu/educl7whitepapers/1/.

Prabhasuari, I. A. (2020) Survei Burnout pada Mahasiswa Keperawatan yang Menjalani Sistem Pembelajaran Blok di Fakultas Kedokteran Universitas Udayana. Universitas Udayana.

Sharma, H. L. et al. (2018) ‘Academic Self Efficacy: A reliable Predictor of Educational Performances’, (March).

Subedi, Suraksha et al. (2020) ‘Impact of E-learning during COVID-19 Pandemic among Nursing Students and Teachers of Nepal’, International Journal of Science and Healthcare Research (www.ijshr.com), 5(September), p. 68. Available at: www.ijshr.com.

Tomaschewski-Barlem, J. G. et al. (2014) ‘Burnout syndrome among undergraduate nursing students at a public university’, Revista Latino-Americana de Enfermagem, 22(6), pp. 934–941. doi: 10.1590/0104-1169.3254.2498.

Valero-Chillerón, M. J. et al. (2019) ‘Burnout syndrome in nursing students: An observational study’, Nurse Education Today. Elsevier, 76(October 2018), pp. 38–43. doi: 10.1016/j.nedt.2019.01.014.

Yu, J. H., Chae, S. J. and Chang, K. H. (2016) ‘The relationship among self-efficacy, perfectionism and academic burnout in medical school students’, Korean journal of medical education, 28(1), pp. 49–55. doi: 10.3946/kjme.2016.9.