

**Research Article**

## A Comparative Study of Academic Stress Level amongst Students in Military and Non-Military Diploma Nursing Program

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**Abstract:** Academic stress is a body's response to academic demands that exceed the adaptive abilities of students. This study aims to determine the comparison of the stress levels of diploma (DIII) military and non-military nursing students. The research is a quantitative research with comparative study approach. Respondents comprised 753 students, selected using total sampling technique. The results of this study indicated that the level of academic stress in military and non-military students were both at high levels, namely in 92.1% of military students and 87.4% in non-military students. Statistical test using non-parametric Mann Whitney test suggested that there was no difference in academic stress levels of military and non-military students with a value of Mann Whitney test  $> 0.05$  (0.528). Suggestion for researchers to conduct research with quasi experiment design, by providing interventions to students to reduce academic stress levels.

**Keywords:** Academic Stress, Students, Military, Non-Military.

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### INTRODUCTION

Academic stress is defined as a body's response to academic-related demands that exceed the adaptive abilities of students (Wilks, 2008). This stress is an interaction between environmental stressors, student assessments and reactions to the same thing (Kadapatti & Vijayalaxmi, 2012). It is estimated that 10-30% of students experience some level of academic stress during their academic career, while undergoing educational studies in higher institutions (Alsulami et al, 2018).

Status as a student becomes a burden and responsibility that must be carried out by individuals, regardless of the duties and obligations of being a student in accordance with the regulations performed in their places of study. The education system in higher education also has the effect of increasing the level of stress experienced by students due to several sources including overcrowded lecture halls, semester assessment systems, inadequate resources and facilities (Awing & Agolla, 2009), distribution of courses as well as many things that they have to be memorized (Deb, Strodl, & Sun, 2015). Other specific individual factors including in the causes of stress are financial

management, changes in the atmosphere of life, difficulty managing between personal, academic life, and etc (Goff, 2011).

Students who undergo nursing education tend to have higher stress, which often has a negative impact on academic performance and psychological well-being of students. During nursing education and practice, nursing students are often exposed to various stressors that may directly or indirectly impede their learning and performance. Clinical practices run by students presenting challenges that can cause students to experience stress (Gomathi, Jasmindebora, & Baba, 2017).

Based on preliminary studies conducted by researchers, it was found from interviews that students said the academic stress of military students they felt was due to the high discipline factors and the semi-military regulations that they had to obey, such as having to take part in a morning-assembly which could affect the value of discipline, required to follow semi-military and on campus activities that can also affect loyalty, such as weekly ceremonies and other activities in the Iskandar Muda military area.

Meanwhile, the data obtained from the interviews with non-military students was they said that they often felt lack of appetite, headaches, sleeping difficulty and sometimes cried when experiencing something beyond their abilities, and they also said that there were several reasons related to their lectures such as, the density of class schedules, deadline assignments, preparation of confusing presentation material, students also said that it was difficult to really focus on learning because it they were not able to manage their time optimally between curricular and extracurricular activities. Based on the phenomenon mentioned above, researchers are interested in conducting research on "A Comparative Study of Academic Stress Level of Military and Non-Military Three-Year Diploma (D-III) Nursing Program Students".

## STUDY METHOD

The type of this research was a quantitative comparative study. Samples were all students in 1<sup>st</sup>, 2<sup>nd</sup>.

And 3<sup>rd</sup> year of military and non-military nursing students, selected using total sampling technique. To obtain the data, the researcher used the PSS-14 questionnaire. Then, it was analyzed using Univariate analysis. Ethical approval was obtained from the Nursing Ethics Committee of Nursing Faculty, Syiah Kuala Univesity.

## RESULT

### Respondent's characteristics

Analysis of the characteristics of the respondents (Table 1) showed that most military and non-military nursing students were more predominantly female with a late adolescent age, their parents' job was non-civil servant. Based on parents' income, military students were more dominant in the  $\geq$  UMP (Provincial Minimum Wage) and non-military nursing students were more dominant in the  $<$ UMP. The status of parents of military and non-military students was more dominantly married.

**Table 1.** Characteristics of Respondents (n = 753)

| Characteristics of Respondents          | Military Students (f, %) |      | Non-military students (f, %) |      |
|---|--------------------------|------|------------------------------|------|
| Sex                                     |                          |      |                              |      |
| a. Male                                 | 129                      | 22,3 | 39                           | 22,4 |
| b. Female                               | 450                      | 77,7 | 135                          | 77,6 |
| Age                                     |                          |      |                              |      |
| a. Early                                |                          |      | 1                            | 6    |
| b. Late                                 | 579                      | 100  | 173                          | 99,4 |
| Parents' Job                            |                          |      |                              |      |
| a. Civil Servant                        | 230                      | 39,7 | 59                           | 33,9 |
| b. Non-Civil Servant                    | 349                      | 60,3 | 115                          | 66,1 |
| Parents' Income                         |                          |      |                              |      |
| a. $\geq$ UMP (Provincial Minimum Wage) | 321                      | 55,4 | 89                           | 51,1 |
| b. $<$ UMP (Provincial Minimum Wage)    | 258                      | 44,6 | 85                           | 48,9 |
| Parents' Status                         |                          |      |                              |      |
| a. Married                              | 525                      | 90,7 | 165                          | 94,8 |
| b. Widow                                | 24                       | 4,1  | 6                            | 3,4  |
| c. Widower                              | 30                       | 5,2  | 3                            | 1,7  |

### Academic stress level of Student

The academic stress level of military and non-military three-year diploma nursing students in Banda

Aceh city as measured by PSS-14 can be seen in table 2 as follows:

**Table 2.** Frequency Distribution of Academic Stress Level of Military and Non-Military Three-Year Diploma (D-III) Nursing Program Students (n = 753)

| Stress level of students | Military students |      | Non-military students |      |
|--------------------------|-------------------|------|-----------------------|------|
|                          | f                 | %    | f                     | %    |
| Low                      | 46                | 7.9  | 22                    | 12.6 |
| High                     | 533               | 92.1 | 152                   | 87.4 |
| Total                    | 579               | 100  | 174                   | 100  |

Based on table 2 it can be concluded that the level of academic stress of students from both agencies was in the high academic stress category (92.1% military students, and 87.4% non-military students).

### Comparison of students' academic stress levels

Comparison of students' academic stress levels from the results of the study can be seen in the following.

**Table 3.** Differences in the Level of Academic Stress of Military and Non-Military Three-Year Diploma (D-III) Nursing Program Students (n = 753)

| No | Military students<br>(n = 579) |           | Non-military student (n=<br>174) |           | <i>Mann whitney</i> |
|----|--------------------------------|-----------|----------------------------------|-----------|---------------------|
|    | <b>MR</b>                      | <b>SR</b> | <b>MR</b>                        | <b>SR</b> |                     |
|    | 374.26                         | 216697.50 | 386.11                           | 67183.50  | 0.528               |

In the mann whitney test, p value was 0.528 > 0.05 to compare the scores of military and non-military students, therefore it can be concluded that there was no significant difference in the academic stress levels of military and non-military students at the time of the study.

## DISCUSSION

Stress is a non-specific body response to the actions or demands placed on him (1907 in Prabowo, 2014). Academic stress is defined as a response or reaction that arises because there are too many demands and tasks that must be performed by students (Olejnik and Holschuh, 2016). Students are very susceptible to stress, especially academic stress which can be sourced from monotonous situations, noise, full of assignment, hopeless expectations, lack of self-control, disrespected, ignored, lost opportunities, conflicting demands and deadlines lecture assignments.

The results showed that the level of academic stress in military and non-military students were both in the category of high academic stress. The results of this study are also supported by research conducted by Rahmayani, Liza, and Syah (2019). The results showed that students who experience the most academic stress are in the high category (51.6%). The same research results obtained from Hamadi, et al (2018), showed that students who were categorized into high stress were (56.52%).

The high academic stress in military and non-military nursing students is also influenced by several factors including the density of academic activities that result in the lack of free time, study on campus accompanied by field practice, and preparation for final exams, writing scientific papers and nurse competency tests.

The factors that cause high stress on students are in consistent with the opinion of Gomathi, Jasmindebora, and Baba (2017) which states that stress on students is influenced by several factors, one of them is academic factors caused by several conditions in the form of lack of vacation / rest, inability to balance study time and free time, inability to concentrate on study, unsatisfied campus facilities, getting lower grades than expected, inability to enjoy lessons and class presentations, difficulty understanding the language used by lecturers, low interest in learning, poor, relationships with lecturers, practical work, losing too

many classes, students experience increased-tension before clinical rotations as well as written examinations especially their final exams.

The high level of stress in nursing students is also influenced by the sex of students, where nursing students are more dominantly female. This can be seen from table 1 where military and non-military nursing students are equally predominantly female. Gender really influences the stress experienced. The results are in accordance with Purwati's (2012) research which states that female students found dominant stress levels in moderate and severe, the same was also stated by Agolla and Ongori (2009), and Goff (2011) which found that stress levels in women are higher than men because women use task-oriented coping more often, while men are ego-oriented.

Besides, the high stress experienced by students is influenced by age. Thapar (2012) also said that one of the factors that influence stress is age. From table 1 it is known that nursing students are more dominant in the late adolescent age category. This can also be a factor in the high stressors faced where at the end of this teenager someone will think of his future preparation. This is in line with the theory of growth and development according to Hurlock (2012) which states that the adolescent phase is a phase of formal operations because in this stage a person is confronted with a formal way of thinking that requires a person to achieve new, more mature relationships with peers and achieve social behavior that takes responsibility and also achieve emotional independence, and prepare for a career.

Apart from the problem above, there are several factors that cause high levels of stress for students, both military and non-military, students who study at both institutions are mostly from outside the city where the school located, therefore they must stay far apart from their parents, and many changes will occur. Such as changes in eating patterns, homesickness, changes in sleep patterns because they have to do the task, and must be responsible for his life. This is in line with what was proposed by Gomathi, Jasmindebora, and Baba (2017) that intrapersonal factors become stressors, such as dietary changes, marriage, homesickness, changes in sleep patterns, new life responsibilities, parental expectations, personal decline health, and financial problems.

The density of lecture schedule is also one of the factors of high student stress due to the many hours of lecture changing before the exams, so the lecture schedules become congested and cluttered. In Calaguas research (2011 in Nurhidayah & Dayfiventy, 2012) found that stressors related to lecture schedules are one of the causes of stress that is often experienced by students. From the results of preliminary studies conducted by the author, it was obtained the data related to a daily busy class schedule starting from morning to evening, the crowded-classroom is also one of the students' stressors that caused the learning condition is not conducive.

Results of the Non parametric mann withney test concluded that there was no difference in stress levels between military and non-military students ( $p$ -values = 0.528). The writer's assumption is that there was no difference in the level of stress of military and non-military students because the curriculum used is the same, which is sourced and guided by the national nursing curriculum compiled by the Indonesian Vocational Nursing Education Association.

Curriculum and learning methods do affect student's stress levels. The stress levels of their students tend to be the same because both institutions use the same curriculum: curriculum with a conventional or semi-KBK system. If the institution uses a different curriculum, for example the Competency Based Curriculum (KBK), the stress level of students will also be different and tends to be more stressful for students with the CBC curriculum. As Nurhidayah and Dayfivent's research (2012) stated that students with the KBK system are vulnerable to experience stress due to the large number of exam questions, unpredictable questions, and short exam time. This can make students stress.

There are some different student education systems applied in military and military institutions. Unlike the case with non-military students, military students emphasize more discipline and loyalty through the presence of daily morning assembly, the rules of the marching line, following extra-curricular activities that join the military, and other activities that can shape the discipline character. Forming the character of discipline and loyalty of military students through a variety of solid activities do not become a stressor that causes stress differences in the two students. This is because in institutions implementing a reward system for each activity, for example they will get 10% for assessing the presence of assembly and 5% for loyalty (extracurricular activities that are followed) that applies to all existing courses. This reward system becomes a motivation for students to participate and perform existing activities because it can add to the final grade.

Reward applies in military agencies can reduce existing stressors on students so that students will not

experience stress due to these activities. As stated by Purwanto (2006), reward is a tool to educate so that children can feel happy because their actions or work are rewarded with the aim of motivating students, so they can perform commendable actions and try to improve it.

This is supported by the research of Slamet and Ma'arif (2014) with the existence of reward and punishment on the tests given which have been proven to increase student's motivation and seriousness in answering question exercises and choices formative association test given to increase learning outcomes. While the research conducted by Aristiyani (2011) proves that being rewarded and punished can increase student's learning motivation on the length of tangent lines topic— outside the circle— thus student learning outcomes increase.

## CONCLUSION

Academic stress of military and non-military students was in the high category  $x \geq 20$ , 92.1% in military students and 87.4% in non-military students. There was no difference in the academic stress levels of military and non-military nursing diploma (D-III) students.

## SUGGESTION

It is recommended that further researchers conduct Quasi-experiment research design by providing interventions to students to reduce the students' academic stress levels.

## REFERENCES

1. Aristiyani, Lia. (2011). *Pengaruh Pemberian Reward Dan Punishment Terhadap Hasil Belajar Peserta Didik Kelas Viii Semester 2 Pada Materi Pokok Panjang Garis Singgung Persekutuan Luar Lingkaran MTs Hasan Kafrawi Mayong Jepara Tahun Pelajaran 2010/2011*.
2. Agolla, J. E., & Ongori, H. (2009). An Assessment of Academic Stress Among Undergraduate Students: The case of University of Botswana. *Educational Research and Reviews*, 4(2), 063–070.
3. Alsulami, S., Al Omar, Z., Binnwejim, M., Alhamdan, F., Aldrees, A., Al-bawardi, A., ... Alhabeeb, M. (2018). Perception of Academic Stress Among Health Science Preparatory Program Students In Two Saudi Universities. *Advances in Medical Education and Practice*, 9, 159–164. <https://doi.org/10.2147/amep.s143151>.
4. Deb, S., Strodl, E., & Sun, J. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school

- students. *International Journal of Psychology and Behavioral Sciences*, 5(1), 26-34.
5. Goff, A.-M. (2011). Stressors, Academic Performance, and Learned Resourcefulness in Baccalaureate Nursing Students. *International Journal of Nursing Education Scholarship*, 8(1), 1–135.
  6. Gomathi, S., Jasmindebora, S., & Baba, V. (2017). Impact Of Stress On Nursing Students. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, 4(4), 107–110.
  7. Hamadi, Wiyono, J., & Rahayu, W. (2018). Perbedaan Tingkat Stress Pada Mahasiswa Yang Bekerja Dan Tidak Bekerja Di Universitas Tribhuwana Tungadewi Malang Fakultas Ekonomi Jurusan Manajemen Angkatan 2013. *Nursing News*, 3(1), 369–378.
  8. Hurlock, E. B. (2012). *Psikologi Perkembangan, Suatu Pendekatan Sepanjang Rentang Kehidupan (terjemahan)*. Jakarta: Erlangga.
  9. Kadapatti, M., & Vijayalaxmi, A. (2012). Stressors of Academic Stress - A Study on Pre-University Students. *Indian Journal of Scientific Research*, 3(1), 171–175.
  10. Nurhidayah, E., Dayfiventy, Y. (2012). Stressor dan Koping Mahasiswa pada Penerapan Kurikulum Berbasis Kompetensi: Jurnal diterbitkan. *Fakultas Keperawatan Universitas Sumatera Utara*.
  11. Olejnik, S.N dan Holschuh, J.P. (2016). *College rules 2 nd Edition How to study, survive, and succes*. New York: Ten Speed Press
  12. Purwanto, M, & Ngalim. 2006. *Ilmu Pendidikan Teoritis & Praktis*. Bandung: Remaja Rosdakarya
  13. Prabowo, E. (2014). *Konsep dan Aplikasi Asuhan Keperawatan Jiwa*. Jakarta : Nuha Medika
  14. Rahmayani, R. D., Liza, R. G., & Syah, N. A. (2019). Gambaran Tingkat Stres Berdasarkan Stressor pada Mahasiswa Kedokteran Tahun Pertama Program Studi Profesi Dokter Fakultas Kedokteran Universitas Andalas Angkatan 2017. *Jurnal Kesehatan Andalas*, 8(1), 103–111. Retrieved from <http://jurnal.fk.unand.ac.id/index.php/jka/article/view/977>
  15. Thapar A, Collishaw S, Pine DS, & Thapar AK (2012). Depression in Adolescence. Child & Adolescent Psychiatry Section, Department of Psychological Medicine and Neurology, *School of Medicine, Cardiff University*.
  16. Slamet Dan Maarif, Samsul. (2014). *Pengaruh Bentuk Tes Formatif Assosiatif Pilihan Ganda Dengan Reward Dan Punishment Score Pada Pembelajaran Matematika Siswa Sma*. 3 (1).
  17. Wilks, S. E. (2008). Resilience amid Academic Stress: The Moderating Impact of Social Support among Social Work Students. *Advances in Social Work*, 9(2), 106–125