THE CORRELATION BETWEEN ACADEMIC STRESS AND ACADEMIC MOTIVATION IN FIRST-YEAR NURSING STUDENTS

Hedena Tabitha Purba[1], Neva Cahyani Telaumbanua[2], Sohndic Christino[3], Ineke Patrisia[4*],
Santa Maya Pramusita[5]

[1-5]Faculty of Nursing Universitas Pelita Harapan, Tangerang, Banten, Indonesia
Email: *ineke.patrisia@uph.edu*

ABSTRACT

Academic stress is a common phenomenon in academic environments, particularly among first-year students. Several students have reported that academic stress can influence their learning motivation, as evidenced by findings from this study. This research aims to examine the relationship between academic stress and academic motivation among first-year nursing students at a private university in Indonesia. A non-experimental quantitative research method with a cross-sectional approach was employed. The study population consisted of 419 first-year nursing students, with a sample size of 205 students selected through simple random sampling. The research instruments included the Educational Stress Scale for Adolescents (ESSA) by Sun et al. (2011) and the Academic Motivation Scale (AMS) by Vallerand et al. (1992). The ESSA instrument demonstrated high validity and reliability, with a Cronbach's Alpha of 0.932. The AMS questionnaire, validated and adapted into Indonesian by Natalya (2018), assessed intrinsic and extrinsic motivation as well as amotivation, showing robust psychometric properties (RMSEA $\leq$ 0.08; GFI $\geq$ 0.9; CR $\geq$ 0.7; $\alpha \geq$ 0.7). Data analysis utilized Pearson correlation tests, revealing a significant relationship between academic stress and academic motivation ($p = 0.001$, $p < 0.05$). The findings indicate that increased academic stress can enhance academic motivation, highlighting the concept of positive stress (eustress). Future studies are encouraged to design interventions aimed at helping students balance academic stress and motivation using experimental methods.

Keywords: Academic stress, Learning, Motivation, Students, Nursing

INTRODUCTION

Entering college requires individuals to adapt to a new environment. According to Erindana et al. (2021), the adaptation process upon entering college involves an interaction between individuals and their surroundings, with mutual influences. The transition from high school to university presents significant challenges, and many students face difficulties adjusting to this new environment (Rahayu & Arianti, 2020). Hasanah (2017) also found that first-year students often experience stress, even when they have strong academic motivation to pursue nursing.

Research by Amelia (2014) at an Indonesian university reported that 8.4% of first-year students struggled with adapting to their new environment. Similarly, Resubun et al. (2022) found that 70% of nursing students encountered challenges in adapting. These difficulties often become significant hurdles for first-year students. A preliminary study further indicated that while 8.4% of first-year students in general struggled with adaptation, this percentage was higher among nursing students.

First-year students face transitions in various aspects of their academic and social

lives, including changes in learning methods and materials that differ from high school curricula (Rinaldi et al., 2016). The learning approaches used in high schools, such as Group Investigation and Student Team Learning Modification, emphasize students developing materials through independent research from various sources like books and the internet, followed by group discussions (Mulyati, 2016). In contrast, the college learning environment, particularly in nursing education, involves more complex and demanding methods.

Mardiati (2018) highlights that difficulties in adapting can disrupt students' interactions with peers, seniors, and lecturers, hinder the learning process, and even trigger identity crises, all of which can lead to stress. Additionally, the numerous academic demands of college life further contribute to academic stress (Way, 2021). Academic stress often stems from emotional tension, the adaptation process, lifestyle changes, and the challenges of managing heavy coursework (Dewi, 2016; Rahmawati, 2014; Rosyidah et al., 2020).

Nursing education, in particular, poses unique challenges designed to prepare students for a career that demands responsibility and resilience. Common challenges include clinical placements, where students must quickly adapt to the differing demands of various healthcare settings (Wardani et al., 2022). Nursing students are also subjected to high expectations, requiring them to meet rigorous academic and professional standards while dealing with emotionally and psychologically challenging situations, such as witnessing patient suffering, death, or grieving families (Lestari, 2022). Furthermore, nursing students often struggle to balance the demands of lectures, clinical practice, and personal life due to their busy schedules (Utami, 2023).

Yusriyyah (2020) found that nursing students frequently encounter difficulties applying theoretical knowledge during clinical practice. Anxiety, particularly when communicating with patients, is a common issue that can lead to academic stress. If nursing students fail to manage stress effectively, this can result in prolonged academic stress, which adversely impacts their learning process. In addition to academic stress, other factors, such as academic motivation, also play a crucial role in influencing learning outcomes (Astuti et al., 2021).

The researchers observed that many first-year students reported feeling overwhelmed by academic demands and struggling to adapt to new learning environments. These challenges often result in decreased

learning motivation. An initial survey conducted with 30 first-year students at a private university revealed that 56% experienced stress, 50% reported symptoms of depression, and 66% faced difficulties with their studies. Additionally, findings related to academic motivation indicated that 53% struggled to focus during lectures, 37% disliked learning, 30% lacked support, 67% faced challenges in completing coursework, 30% were unenthusiastic about learning, and 63% were dissatisfied with their learning experience. Given these challenges, this study seeks to examine the relationship between academic stress and academic motivation among first-year nursing students.

METHOD

This study employed a cross-sectional correlational research design with a quantitative approach. The aim of this design was to develop mathematical models, theories, and hypotheses related to the observed phenomena (Maharani & Mustika, 2016).

The population for this study consisted of all first-year nursing students, totaling 419 individuals. A sample was selected using a simple random sampling technique, wherein participants were randomly chosen from the population. Sampling was conducted online by distributing questionnaires through digital platforms. The Microsoft Excel **RAND** formula was used to randomly generate names, and selected participants were included in the study based on the inclusion criteria: first-year students and respondents who participated in the VR test. Using the Slovin formula, the required sample size was determined to be 205 respondents. Only those willing to participate in the study were included in the final analysis.

Two validated questionnaires were utilized for data collection. The first was the Academic Motivation Scale (AMS), developed by Vallerand et al. (1992) to measure seven types of motivation derived from intrinsic, extrinsic, and amotivation constructs. The AMS consists of 30 items, covering various aspects of academic motivation, and has been adapted into Indonesian by Natalya and Purwanto (2018). The adaptation process involved a construct validity test, which demonstrated strong reliability ($\alpha \geq 0.7$) and goodness-of-fit measures (RMSEA ≤ 0.08; GFI ≥ 0.9; CR ≥ 0.7), making it suitable for this study. The second questionnaire was the Educational Stress Scale for Adolescents (ESSA), developed by Sun et al. (2011), which measures academic stress across five

dimensions: pressure, workload, concerns about grades, self-expectations, and despondency. The ESSA consists of 16 items and uses a four-point Likert scale with options ranging from strongly disagree (1) to strongly agree (4).

To ensure the validity and reliability of the instruments, a VR test was conducted on the ESSA questionnaire with a sample of 36 respondents from Pelita Harapan University (df = 34, r table = 0.329). The validity test showed an r value ranging from 0.509 to 0.849, confirming that all items were valid (r count > r table). Reliability testing produced a Cronbach's Alpha score of 0.932, indicating high reliability. The data were further tested for normality using the Skewness-Kurtosis test and QQ plots. The Skewness-Kurtosis test assessed the symmetry and shape of the data distribution, while the QQ plots confirmed that data points were evenly distributed along the reference line (Silalahi et al., 2019). Results from both tests confirmed that the data for academic stress and academic motivation were normally distributed. Following the normality test, the Pearson correlation test was used for statistical analysis, as both variables were measured on a ratio scale and satisfied the normality assumptions.

RESULT

The demographic data of the study population, as presented in Table 1, indicate that the majority of participants were female, comprising 165 students or 80.5% of the total sample.

Table 1. Distribution of demographic characteristics of respondents based on gender

Category	Frequency (n)	Percentage (%)
Gender		
Male	40	19.5%
Female	165	80.5%

Table 2. Bivariate table for Academic Stress and Academic Motivation

Variable	Mean	Deviation Standard	Academic Stress	Pearson Test Result
• Total Motivation	3.25	8.94	Mean 2.71; Deviation Standard 6.59	r: 0,390, sig: 0.001
• Intrinsic motivation	3.19	4.11		r: 0,141, sig: 0.044
• Extrinsic motivation	3.19	4.39		r: 0.309, sig: 0.001
• *Amotivation*	1.90	1.93		r: 0.320, sig: 0.001

This study employed bivariate data analysis techniques to explore the relationships between variables. The significance of the correlations was determined by a p-value threshold of <0.05. As shown in Table 2, the mean score for academic stress was 2.71. Among the components of academic motivation, intrinsic motivation and extrinsic motivation both had the highest mean scores at 3.19, while amotivation had a lower mean score of 1.90. The total

motivation score was the highest overall, with a mean value of 3.25.

The analysis revealed a significant relationship between academic stress and total motivation. Further examinations showed that academic stress was significantly correlated with intrinsic motivation, extrinsic motivation, and overall motivation. These findings suggest that academic stress is closely linked to various aspects of academic motivation, confirming a relationship between the two constructs.

DISCUSSION

This study demonstrates a significant relationship between academic stress and academic motivation among first-year nursing students. Conducted on a sample of 205 respondents using a cross-sectional approach and the Pearson test, these findings align with Marliana's (2022) research, which also identified a positive relationship between academic stress and learning motivation. Marliana suggested that increased academic stress correlates with heightened academic motivation. While both studies used a cross-sectional approach, Marliana's sample included first- to third-year nursing students, whereas this study focused solely on first-year students. The larger sample size and specific focus on first-year students provide a more targeted exploration of this demographic.

Similarly, a study by Muliani (2020) confirmed a relationship between academic stress and learning motivation among nursing students. This study employed a cross-sectional approach with 145 participants and analyzed data using the Spearman Rank Test. While the statistical methods differ, both studies targeted first-year nursing students, reinforcing the validity of this study's findings.

In contrast, research by Way (2021) and Amirudin & Rangga (2019) found no relationship between academic stress and learning motivation. These discrepancies may stem from differences in the sample population. Their studies focused on fourth-year nursing students and nursing professional students who, by this stage, have likely developed effective coping mechanisms to manage academic stress. First-year students, on the other hand, face unique challenges related to adjusting to academic demands, which could explain the variation in results.

Addressing academic stress and motivation is critical for student well-being. According to Sujadi (2021) and Agustiningsih (2019), counseling programs can help mitigate academic stress and foster motivation.

Institutions are encouraged to provide resources such as counseling services and workshops to support nursing students in managing stress and enhancing their academic motivation. Students are also advised to proactively seek help from lecturers, counselors, or psychologists when needed.

Future researchers investigating the relationship between academic stress and academic motivation may find this study valuable as a reference and source of additional information. It is recommended that future studies build upon the current findings to explore the specific factors influencing academic stress and motivation among first-year nursing students. Moreover, researchers could design and implement interventions aimed at balancing academic stress and motivation, utilizing experimental methods to evaluate their effectiveness.

A limitation of this study is that data collection was conducted only once using a cross-sectional design, which prevents the establishment of causal relationships and limits the generalizability of the findings. Additionally, the sampling technique employed was simple random sampling, which may have introduced bias due to the characteristics of the population. Since data collection was conducted online, the researchers were unable to assess potential obstacles or gauge the respondents' level of engagement when completing the questionnaire. These factors may have influenced the results and their interpretation. To address these issues in future research, it is recommended to conduct data collection multiple times, use a total sampling technique, and gather data directly from respondents to ensure more reliable findings.

CONCLUSION

This study examined the relationship between academic stress and learning motivation among first-year co-educational students, with a focus on how academic stress correlates with the various types of motivation (intrinsic, extrinsic, and amotivation). The findings indicate a significant relationship between academic stress and academic motivation. Based on these results, the author recommends that future research explore interventions or strategies that universities and educators can implement to help manage academic stress and enhance student motivation.

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REFERENCES

Agustiningsih, N. (2019). Gambaran Stress Akademik dan Strategi Koping Pada Mahasiswa Keperawatan. Jurnal Ners Dan Kebidanan (Journal of Ners and Midwifery), 6(2), 241–250. https://doi.org/10.26699/jnk.v6i2.art.p241-250

Amelia, S., Asni, E., & Chairilsyah, D. (2014). Gambaran Ketangguhan Diri (Resiliensi) Pada Mahasiswa Tahun Pertama Fakultas Kedokteran Universitas Riau. Jom FK, 1(2), 1–9. Available at: https://jom.unri.ac.id/index.php/JOMFDOK/article/view/2841

Amirudin, I., & Rangga, E. (2019). Stress Dan Motivasi Belajar Mahasiswa Profesi Keperawatan. Jurnal Wacana Kesehatan, 4(1), 420-425. https://doi.org/10.52822/jwk.v4i1.94

Astuti, L., Marleni, L., & Aini, L. (2021). Tingkat Stres Terhadap Motivasi akademik Di Masa Pandemi Corona Virus Disease 19 (Covid 19) Pada Mahasiswa Keperawatan Stik Siti Khadijah Palembang. Healthy Tadulako Journal (Jurnal Kesehatan Tadulako), 7(2), 68–74. https://doi.org/10.22487/htj.v7i2.64

Dewi, C. I. A. S., & Wibawa, I. M. A. (2016). Pengaruh stres kerja dan motivasi kerja terhadap kinerja karyawan pada PT. Bank BPD Bali cabang Ubud. E-jurnal Manajemen, 5(12), 7583-7606. Available at: https://ojs.unud.ac.id/index.php/manajemen/article/view/22480

Erindana, F. U. N., Nashori, H. F., & Tasaufi, M. N. F. (2021). Penyesuaian Diri Dan Stres Akademik Mahasiswa Tahun Pertama. Motiva: Jurnal Psikologi, 4(1), 11. https://doi.org/10.31293/mv.v4i1.5303

Hasanah, U. (2017). Hubungan Antara Stres Dengan Strategi Koping Mahasiswa Tahun Pertama Akademi Keperawatan. Jurnal Wacana Kesehatan, 2(1), 16. https://doi.org/10.52822/jwk.v2i1.44

Lestari, N. K. I. (2022). Hubungan antara kecerdasan emosional dan kecerdasan spiritual dengan perilaku caring mahasiswa prodi sarjana keperawatan institut teknologi dan kesehatan bali [skripsi]. Denpasar: Institut Teknologi dan Kesehatan Bali. Available at: https://repository.itekes-bali.ac.id/medias/journal/2022_NI_KADEK_INDAH_LESTARI.pdf

Maharani, L., & Mustika, M. (2016). Hubungan self awareness dengan kedisiplinan peserta didik kelas viii di SMP Wiyatama Bandar Lampung. KONSELI: Jurnal Bimbingan dan Konseling (E-Journal), 3(1), 57–62. Available at: https://download.garuda.kemdikbud.go.id/article.php?article=483750&val=5886&title=Hubungan%20Self%20Awareness%20dengan%20Kedisiplinan%20%20Peserta%20Didik%20Kelas%20VIII%20%20di%20SMP%20Wiyatama%20Bandar%20Lampung%20Penelitian%20Korelasional%20Bidang%20Bk%20Pribadi

Mardiati, I., Hidayatullah, F., & Aminoto, C. (2018). Faktor Eksternal Tingkat Stres Mahasiswa Keperawatan dalam Adaptasi Proses Pembelajaran. The 7th University Research Colloqium 2018 STIKESPKU Muhammadiyah Surakarta, 173–179. Available at: https://repository.urecol.org/index.php/proceeding/article/view/104

Marliana, E., Kurniawan, V. E., & Zatihulwani, E. Z. (2022). Stress Akademik Dan Motivasi Belajar Mahasiswa Dalam Pembelajaran Daring Pada Masa Pandemi Covid-19 Di Stikes Husada Jombang: Motivasi Belajar, Pembelajaran Daring, Stress Akademik. Prima Wiyata Health, 3(2), 11-24. Available at: https://e-journal.shj.ac.id/ojs/index.php/PWH/article/view/16/15

Muliani, R., Imam, H., & Dendiawan, E. (2020). Relationship Between Stress Level and Academic Procrastination Among New Nursing Students. The Malaysian Journal of Nursing, 11(03), 63–67. https://doi.org/10.31674/mjn.2020.v11i03.010

Mulyati, T. (2016). Kemampuan Pemecahan Masalah Matematis Siswa Sekolah Dasar (Mathematical Problem Solving Ability of Elementary School Students). EDUHUMANIORA: Jurnal Pendidikan Dasar, 3(2), 1–20. Available at: https://ejournal.upi.edu/index.php/eduhumaniora/article/view/2807/1833

Natalya, L., & Purwanto, C. V. (2018). Exploratory and confirmatory factor analysis of the academic motivation scale (AMS)–Bahasa Indonesia. Makara Human Behavior Studies in Asia, 22(1), 29-42. https://doi.org/10.7454/hubs.asia.2130118

Rahayu, M. N. M., & Arianti, R. (2020). Penyesuaian Mahasiswa Tahun Pertama Di Perguruan Tinggi: Studi Pada Mahasiswa Fakultas Psikologi Uksw. Journal of Psychological Science and Profession, 4(2), 73. https://doi.org/10.24198/jpsp.v4i2.26681

Rahmawati, M. (2014). Menulis ekspresif sebagai strategi mereduksi stres untuk anak-anak korban kekerasan dalam rumah tangga (KDRT). Jurnal Ilmiah Psikologi Terapan, 2(2), 276-293. Available at: https://ejournal.umm.ac.id/index.php/jipt/article/view/2002

Resubun, H., Zainuri, I., & Khotijah, S. (2022). Hubungan Tingkat Stres Dengan Kemampuan Penyesuaian Mahasiswa Perantauan Di Mojokerto. Available at: https://repositori.ubs-ppni.ac.id/bitstream/handle/123456789/1221/MANUSCRIB_201801150.pdf?sequence=4&isAllowed=y

Rinaldi, A., Bagasworo, D., Monica, N., Ramadhani, V. (2016). Pelatihan "Hello Academia" Kepada Mahasiswa Baru Pada Masa Transisi Dari SMA Ke Universitas.

Rosyidah, I., Efendi, A.R., Arfah, M.A., Jasman, P.A., Pratami, N. (2020). Gambaran Tingkat Stres Akademik Mahasiswa Program Studi Ilmu Keperawatan Fakultas Keperawatan UNHAS. Jurnal ABDI (Sosial, Budaya dan Sains), 2(1), 33–39. Available at: https://journal.unhas.ac.id/index.php/kpiunhas/article/view/9083

Sujadi, E. (2021). Stres Akademik dan Motivasi akademik Mahasiswa Mengikuti Pembelajaran Daring selama Pandemi COVID-19. Educational Guidance and Counseling Development Journal, 4(1), 29–41. Available at: https://ejournal.uin-suska.ac.id/index.php/EGCDJ/article/view/12679/6264

Wardani, R. A., Farani, S., Susanti, L., Fadhilah, S., Sari, K. I. P., Rusmayani, N. G. A. L., & Sari, I. P. (2022). Pengantar Asuhan Kebidanan. Yayasan Penerbit Muhammad Zaini. Available at:

https://books.google.co.id/books?hl=en&lr=&id=yCNuEAAAQBAJ&oi=fnd&pg=PA 1&dq=Wardani,+R.+A.,+Farani,+S.,+Susanti,+L.,+Fadhilah,+S.,+Sari,+K.+I.+P.,+Ru smayani,+N.+G.+A.+L.,+%26+Sari,+I.+P.+(2022).+Pengantar+Asuhan+Kebidanan.+ Yayasan+Penerbit+Muhammad+Zaini.&ots=M79OIeMi2S&sig=TAIpPbIiNxXJ9Gk Cwb__EK3vucs&redir_esc=y#v=onepage&q&f=false

Sun, J., Dunne, M. P., Hou, X.-Y., & Xu, A.-Q. (2011). Running head: Educational Stress Scale for Adolescents: Development, Validity, and Reliability with Chinese Students. Available at: https://doi.org/10.1177/0734282910394976

Utami, V. H. (2023). Model Kerja Hybrid: Sejarah, Tantangan dan Prospek (Doctoral dissertation, UNIVERSITAS ISLAM SULTAN AGUNG SEMARANG). Available at: https://repository.unissula.ac.id/28364/

Way, F., Daramatasia, W., & Yuliyanik. (2021). Hubungan Stress Akademik dengan Motivasi akademik Mahasiswa Keperawatan Semester VI dimasa Pandemi Covid-19. Media Husada Journal of Nursing Science, 3(1), 198–206. Available at: https://mhjns.widyagamahusada.ac.id/index.php/mhjns/article/view/95

Yusriyyah, S., Nugraha, D., Jundiah, S. (2020). Hubungan stres akademik dengan *academic burnout* pada mahasiswa Program Studi Sarjana Keperawatan Universitas Bhakti Kencana. Indonesian Journal. Available at: https://repository.bku.ac.id/xmlui/handle/123456789/1330