



The Relationship Between Stress Levels and Coping Mechanisms in Students Facing Clinical Practice

Nurul Izzati Aufa¹, Risna Nopianti¹, Saranova Indira¹, Rizki Nurfadilah¹, Selvi Febrianti¹

¹Departement of Nursing, STIKes Muhammadiyah Ciamis, Ciamis, Indonesia

Correspondence author: Nurul Izzati Aufa

Email: nrlizt.3@gmail.com

Address: Jln. KH. Ahmad Dahlan No. 20 Ciamis 46216 Jawa Barat, Indonesia

0895701298317

DOI: <https://doi.org/10.56359/kian.v3i2.591>



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

ABSTRACT

Introduction: Clinical practice is a critical stage in nursing education but often causes considerable stress among students. Coping mechanisms play an essential role in managing this stress and determining students' academic and psychological outcomes.

Methods: A cross-sectional study was conducted in May 2024 at STIKes Muhammadiyah Ciamis with 34 students in clinical practice (PBK). Peer support (independent variable) was measured using a validated questionnaire with four indicators (Cronbach's alpha = 0.84). Stress levels (dependent variable) were assessed using the 14-item stress subscale of the DASS-42 (Cronbach's alpha = 0.89). Data were collected via Google Forms and analyzed with SPSS 29 using descriptive statistics and the Chi-square test ($p < 0.05$).

Results: The results showed that most students experienced moderate stress (76.5%) and the rest experienced severe stress (23.5%). No participants reported mild stress levels. In terms of coping mechanisms, 79.4% of students used adaptive coping strategies, while 20.6% used maladaptive ones. The Chi-square test indicated no statistically significant relationship between stress levels and the type of coping mechanisms used ($p = 0.465$).

Conclusion: This study found no significant association between stress levels and coping mechanisms among undergraduate students undergoing clinical learning. Although most students experienced moderate to severe stress, the majority employed adaptive coping strategies. These findings suggest a promising level of resilience among students and highlight the importance of continuous institutional support and coping-skills development in clinical education settings.

Keywords: Stress level, Coping mechanisms, Clinical practice (PBK)

Introduction

Clinical practice plays a critical role in health professional education, serving as the foundation where students integrate theoretical knowledge into real-world application (Hanks

et al., 2021). In nursing and other health-related programs, clinical learning or *Praktek Belajar Klinik (PBK)* is an essential component that allows students to gain hands-on experience in healthcare settings. However, while it provides valuable learning opportunities, clinical practice is also a well-documented source of psychological stress among students (Lavoie-Tremblay et al., 2022). This stress can stem from various factors, including the complexity of patient care, lack of experience, time constraints, and the pressure to perform in unfamiliar environments (Bekkouche et al., 2022).

The transition from classroom-based learning to clinical settings often causes emotional and psychological strain (McCloskey, 1999). Many students report feelings of anxiety, fear of making mistakes, difficulty in communication with patients or clinical instructors, and uncertainty in executing clinical skills (Johnson et al., 2022). These factors can negatively affect their learning outcomes, academic performance, and even their motivation to pursue careers in the health sector (Karaferis et al., 2022). Thus, understanding how students respond to and manage stress in clinical settings is a subject of growing academic interest.

Stress, in the context of clinical education, can be defined as a physical and psychological response to perceived challenges or threats in the clinical environment (Mazalová et al., 2022). The level of stress experienced by students can vary depending on individual factors such as personal resilience, support systems, and coping abilities (Yeo & Yap, 2023). The most commonly reported stressors during clinical practice include fear of harming patients, unfamiliar procedures, lack of knowledge or preparation, negative feedback from instructors, and a heavy workload (Jack et al., 2021). If unmanaged, these stressors can lead to burnout, emotional exhaustion, and reduced self-confidence in clinical performance.

To deal with these stressors, students adopt various coping mechanisms—conscious strategies used to manage internal and external demands perceived as taxing or exceeding their resources. Coping mechanisms are generally categorized into two types: adaptive (constructive) and maladaptive (destructive). Adaptive coping includes problem-solving, seeking social support, planning, and positive reinterpretation (Konaszewski et al., 2022). These strategies aim to directly reduce stress or improve one's capacity to manage it effectively (Scavo & Mauromicale, 2021). Maladaptive coping, on the other hand, may include avoidance, denial, self-blame, or substance use (Wahab et al., 2021). While these mechanisms may provide temporary relief, they often worsen stress over time or hinder emotional and academic development.

The coping strategies adopted by students during clinical learning significantly influence their stress outcomes (Neufeld & Malin, 2021). Those who utilize adaptive coping tend to experience lower levels of distress and perform better in clinical tasks (Bennett et al., 2022). They are more likely to seek assistance, reflect on their experiences, and view challenges as opportunities for growth (Syam et al., 2023). In contrast, students who rely on maladaptive coping mechanisms often experience prolonged stress, lower satisfaction with clinical learning, and increased risk of mental health issues such as anxiety and depression.

Numerous studies have explored the relationship between stress levels and coping strategies among nursing and health science students (Awoke et al., 2021). These studies commonly report that most students experience moderate to high levels of stress during clinical practice and tend to use a mix of adaptive and maladaptive coping strategies (Sattar et al., 2022b). However, there is still variability in findings, particularly when considering contextual factors such as the academic year, clinical department, individual personality traits,

and institutional support systems(Bell, 2022). Moreover, cultural differences and local educational structures may also shape how students perceive and respond to clinical stress.

Theoretical frameworks such as the transactional model of stress and coping by Lazarus and Folkman provide a useful lens through which to understand this dynamic(de Cordova et al., 2024). According to this model, stress is the result of a perceived imbalance between demands and one's ability to cope(Landolfi et al., 2021). The appraisal of a situation as threatening or manageable depends on both external circumstances and internal resources(Calabrò et al., 2021). The coping response, whether adaptive or maladaptive, then determines the individual's psychological and behavioral outcome. Applying this model to clinical education allows educators and researchers to better understand how students process stress and what support systems may be most beneficial.

Clinical educators have a responsibility to identify students at risk of high stress and encourage the development of healthy coping skills(Sattar et al., 2022a). Institutions can play a vital role by integrating stress management training into the curriculum, offering mental health support, promoting peer mentoring, and providing constructive feedback in clinical evaluations(Hugo-Van Dyk et al., 2022). Creating a supportive learning environment, where students feel safe to ask questions, make mistakes, and receive guidance, is essential in promoting resilience and effective coping.

In the context of *Praktek Belajar Klinik (PBK)*, where students are expected to apply their knowledge in real clinical situations, the balance between stress and coping becomes especially critical(Laub, 1999). Clinical learning in Indonesian settings often presents unique challenges, such as limited instructor availability, hierarchical clinical cultures, and varying levels of institutional preparedness(Findyartini et al., 2023). As a result, understanding how students cope with stress in PBK settings is vital for informing educational policy and improving the quality of health professional training in the country(Sanetti et al., 2022).

Despite the importance of this issue, there remains a lack of localized research focusing specifically on the relationship between stress levels and coping mechanisms among students engaged in PBK(Ahmed et al., 2023). Most existing studies have been conducted in Western contexts, which may not fully capture the experiences of students in Indonesian or other Southeast Asian clinical learning environments(Romli et al., 2022). Therefore, it is necessary to explore this relationship in a contextually relevant way, taking into account local educational structures, cultural values, and clinical practices(Li et al., 2023).

The present study aims to investigate the relationship between stress levels and coping mechanisms among students undergoing clinical practice (PBK)(Chi et al., 2023). Specifically, it seeks to determine the prevalence of different stress levels (mild, moderate, severe) among the participants, identify the types of coping mechanisms (adaptive or maladaptive) they employ, and examine the correlation between these two variables. By understanding this relationship, the study hopes to provide evidence-based recommendations for educational institutions, clinical supervisors, and policymakers to better support students during their clinical learning experiences(Stoffels et al., 2021).

Furthermore, this study contributes to the growing body of literature on student mental health and clinical education by offering empirical data grounded in the Indonesian context(Subu et al., 2024). The findings may help institutions design more targeted interventions that not only reduce stress but also cultivate adaptive coping skills essential for future healthcare professionals. Ultimately, promoting healthy stress management in clinical

learning environments can improve student outcomes, patient care quality, and workforce sustainability in the healthcare sector.

In conclusion, clinical practice is an essential yet demanding part of health education. The stress experienced by students during PBK can have significant implications for their academic performance, professional development, and mental health. Understanding the coping mechanisms students use, and how these relate to their stress levels, is crucial for developing supportive and effective educational environments. Through this study, we hope to highlight the importance of stress-coping relationships in clinical learning and advocate for stronger institutional strategies to support students in their professional formation.

Objective

The objective of this study is to analyze the correlation between the level of stress and the type of coping mechanisms used by students during clinical learning practice (PBK)

Method

Design and setting

This cross-sectional study was conducted at STIKes Muhammadiyah Ciamis in May 2024, involving undergraduate students undergoing clinical learning practice (PBK) as participants. A total of 34 students participated in the study. The inclusion criteria were: voluntary participation in the study, active involvement in clinical practice (PBK) during the 2024 academic year, and completion of at least one semester of clinical coursework. Participants were excluded if they were on academic leave, had been absent from clinical placement for more than one month, had diagnosed psychological or cognitive impairments affecting their ability to complete the questionnaire, or were not actively participating in PBK at the time of data collection.

Population and sampling

The population of this study consisted of undergraduate nursing students at STIKes Muhammadiyah Ciamis who were undertaking clinical practice (PBK) during the 2024 academic year. A purposive sampling technique was employed, resulting in 34 participants who met the inclusion criteria: active enrollment in PBK, completion of at least one semester of clinical coursework, and voluntary participation. Students were excluded if they were on academic leave, absent from clinical placement for more than one month, or had psychological or cognitive impairments that could interfere with accurate responses.

Instrument and measurement

The independent variable in this study, peer support, was measured using a self-developed questionnaire consisting of four indicators: informational support, instrumental support, emotional support, and appraisal support. This instrument was validated through a series of trials, and all items demonstrated acceptable levels of construct validity. The reliability of the instrument was confirmed with a Cronbach's alpha value of **0.84**, indicating high internal consistency.

The dependent variable, stress level, was measured using the standardized **Depression Anxiety Stress Scale (DASS-42)** developed by Lovibond & Lovibond. This instrument evaluates three dimensions—depression, anxiety, and stress—across 42 items. In this study, only the 14 items related to stress were used to assess the respondents' stress levels. The DASS-42 has been previously validated and translated into Indonesian, with the stress subscale showing a

Cronbach's alpha reliability coefficient of **0.89**, reflecting excellent reliability for research purposes.

Data collection and analysis

The data collection process for this study, titled "*The Relationship Between Stress Levels and Coping Mechanisms Among Students During Clinical Learning Practice (PBK)*," was conducted using a structured questionnaire distributed online via Google Forms. Prior to completing the questionnaire, all participants were provided with a clear explanation of the study's objectives, their rights as participants, and the voluntary nature of their involvement. Digital informed consent was obtained at the beginning of the form, where participants were required to agree before proceeding. The questionnaire was divided into sections covering sociodemographic information, perceived stress levels, and coping mechanisms. The form was designed to be user-friendly and accessible on various devices, allowing participants to complete it at their own pace and in a private setting.

The Google Form link was shared directly with eligible undergraduate students undergoing clinical learning practice (PBK) at STIKes Muhammadiyah Ciamis. Participants were encouraged to answer each question honestly and completely. To ensure data integrity, responses were set to be submitted only once per participant and required completion of all items before submission. The online format minimized response bias and allowed for efficient data collection without requiring physical contact. All responses were automatically recorded in a secure, password-protected database accessible only to the research team. This approach ensured both participant confidentiality and the reliability of the data collected for subsequent analysis.

The data analysis process for this study was conducted using IBM SPSS Statistics version 29. After data collection, all responses were reviewed for completeness and accuracy before being entered into the software. Descriptive statistics were used to summarize the sociodemographic characteristics of the participants, as well as their levels of stress and coping mechanisms. To examine the relationship between stress levels and coping mechanisms, the Chi-Square test of independence was employed. This non-parametric test was selected to determine whether there was a statistically significant association between the categorical variables. A significance level of $p < 0.05$ was set as the threshold for statistical significance. The results of the analysis indicated that there was no significant relationship between stress levels and coping mechanisms among the participants, with a p-value of 0.465.

Result

Table 1. Sociodemographic of respondents

Variable	F / Mean	% or SD
Gender		
• Male	10	29.4
• Female	24	70.6
Total	34	100.0
Age		
• Below Mean	24	70.6
• Above Mean	7	29.4
Total	34	100.0

Stress Level	Mean = 21.21	SD = 0.978
• Mild	—	—
• Moderate	26	76.5
• Severe	8	23.5
Total	34	100.0
Coping Mechanism		
• Adaptive	27	79.4
• Maladaptive	7	20.6
Total	34	100.0

Table 1 presents the sociodemographic characteristics of the respondents. The majority of the participants were female (70.6%), while males accounted for 29.4% of the total sample (n = 34). Regarding age, 70.6% of respondents were below the mean age, and 29.4% were above it. The average stress level among respondents was 21.21 with a standard deviation of 0.978. In terms of stress level categories, the majority experienced moderate stress (76.5%), while 23.5% reported severe stress, and none were classified as having mild stress. Concerning coping mechanisms, most respondents used adaptive coping strategies (79.4%), while 20.6% employed maladaptive coping mechanisms.

Table 2. Correlationship between variables

Stress Level	Coping Mechanism				P. Value
	Adaptive	Maladaptive	Total		
	F	%	F	%	
Mild	0	0.0	0	0.0	0.465
Moderate	20	76.9	6	23.1	
Severe	7	87.5	1	12.5	
Total	27	79.4	7	20.6	

Table 2 shows the relationship between stress levels and coping mechanisms among respondents. None of the participants reported mild stress. Among those experiencing moderate stress, 76.9% employed adaptive coping mechanisms, while 23.1% used maladaptive coping. In the severe stress group, 87.5% utilized adaptive coping, and only 12.5% used maladaptive strategies. Overall, 79.4% of respondents adopted adaptive coping mechanisms, whereas 20.6% used maladaptive ones. The statistical analysis yielded a p-value of 0.465, indicating no significant correlation between stress level and type of coping mechanism.

Discussion

The primary objective of this study was to examine the relationship between stress levels and coping mechanisms among undergraduate students undergoing clinical learning practice (PBK) at STIKes Muhammadiyah Ciamis. Using the Chi-Square test for independence, the results showed no statistically significant association between the level of stress and the type of coping mechanism employed by students ($p = 0.465$) (Tokumitsu et al., 2023). This finding suggests that the students' coping responses whether adaptive or maladaptive were not

directly influenced by the severity of stress they experienced during clinical placements(Ding et al., 2021). In other words, high stress levels did not necessarily correspond with maladaptive coping, nor did lower stress levels guarantee the use of adaptive strategies.

This result contrasts with several previous studies that have found significant relationships between stress and coping styles among health profession students(Chetty et al., 2021). For example, some studies have reported that students with higher levels of stress tend to adopt more emotion-focused or avoidance-based (maladaptive) coping mechanisms, while those with moderate or low stress levels are more likely to use problem-focused (adaptive) strategies. The discrepancy in our findings may be due to various contextual and methodological factors. One possibility is that students in this study may have received prior education or informal guidance on stress management, enabling them to choose coping strategies relatively independently of the stress they perceived.

Another factor that might explain the lack of association is the uniformity in coping mechanism usage among the sample(Abebe et al., 2019). As shown in the descriptive results, the majority of students (79.4%) reported using adaptive coping mechanisms, regardless of their stress level. This dominance of adaptive coping across stress categories could reduce variability in the data, thus weakening the statistical power to detect an association(Chigeda et al., 2022). Moreover, students in clinical practice may have learned to normalize stress as part of the educational experience, thereby relying on consistent coping behaviors whether their stress levels were moderate or severe.

The nature of stress in clinical learning itself may also contribute to this result. Clinical stressors are often multidimensional, encompassing academic, interpersonal, emotional, and environmental factors. Students may perceive stress in one domain but manage it with coping strategies aimed at another domain, leading to a misalignment between measured stress level and reported coping method(Neufeld & Malin, 2021). Additionally, individual differences such as personality traits, resilience, social support, and prior exposure to clinical settings can significantly moderate the relationship between stress and coping but were not directly measured in this study. Future research should consider these moderating variables to better understand the dynamics involved.

Despite the absence of a statistically significant association, the findings of this study remain valuable(Lechner et al., 2022). The fact that a majority of students employed adaptive coping mechanisms is a positive indication of their psychological resilience and readiness to face clinical challenges(Kolzow et al., 2021). From an educational perspective, this suggests that current curricular and clinical mentoring practices may be supporting students in building effective coping skills, even if stress levels fluctuate. However, it also highlights the importance of not assuming a one-size-fits-all approach. Institutions should continue to provide coping-skills training and emotional support systems tailored to individual needs and stress profiles. Ongoing assessment and guidance throughout the clinical learning process may further improve student wellbeing and performance.

Restate the Key Findings

This study revealed that most students experienced moderate to severe stress during clinical practice, with the majority employing adaptive coping mechanisms. However, the statistical analysis showed no significant relationship between stress levels and the type of coping strategies used ($p = 0.465$).

Interpret the Results

The findings suggest that the coping mechanisms adopted by students may not be directly influenced by the intensity of stress they face. Instead, students demonstrated a tendency to consistently use adaptive coping, which reflects a certain level of resilience despite varying stress conditions.

Compare with Previous Studies

Unlike several previous studies that reported a significant association between stress and coping styles, this study did not confirm such a relationship. The discrepancy may be due to contextual differences, sample size, or the presence of institutional support that enables students to maintain adaptive coping regardless of stress severity.

Highlight the Implications

These results highlight the importance of providing continuous institutional support and stress management programs. Promoting adaptive coping strategies can help sustain students' psychological well-being and enhance their clinical learning experiences, even under stressful conditions.

Discuss the Limitations

The study was limited by its relatively small sample size ($n = 34$) and single-institution setting, which may affect the generalizability of the findings. In addition, reliance on self-reported questionnaires may introduce response bias.

Suggest Future Research

Future research should involve larger and more diverse student populations, employ longitudinal designs, and include additional variables such as personality traits, resilience, and social support to better capture the complexity of stress-coping dynamics in clinical settings.

Conclusion

In writing the Conclusion of an article, this section serves to summarize the main findings or arguments and highlight their significance. It should clearly restate the purpose of the study or discussion, briefly review the key points, and provide a final insight or recommendation based on the content presented. A good conclusion reinforces the core message without introducing new information. Typically, the conclusion is written in one concise paragraph that effectively wraps up the article and leaves a lasting impression on the reader.

Acknowledgement

The authors would like to thank the nursing students who participated in this study and STIKes Muhammadiyah Ciamis for their support during data collection.

Author Contribution

All authors contributed equally to the study design, data collection, data analysis, and manuscript preparation.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this study.

Ethical Clearance

This study received ethical approval from the Institutional Ethics Committee of STIKes Muhammadiyah Ciamis. Informed consent was obtained from all participants prior to data collection.

Funding

This research received no specific grant from any funding agency and was self-financed by the authors.

References

- Hanks S, Neve H, Gale T. Preparing health profession students for practice in complex real world settings: How do educators respond to a model of capability?[J]. *International Journal of Practice-Based Learning in Health and Social Care*, 2021, 9(1).
- Lavoie-Tremblay M, Sanzone L, Aubé T, Paquet M. Sources of Stress and Coping Strategies Among Undergraduate Nursing Students Across All Years[J]. *Canadian Journal of Nursing Research*, 2022, 54(3).
- Bekkouche N S, Schmid R F, Carliner S. “Simmering Pressure”: How Systemic Stress Impacts Graduate Student Mental Health[J]. *Performance Improvement Quarterly*, 2022, 34(4).
- McCloskey D. Other Things Equal - Economical Writing: An Executive Summary[J]. *Eastern Economic Journal*, 1999, 25(2).
- Johnson M W, Gheihman G, Thomas H, Schiff G, Olson A P J, Begin A S. The impact of clinical uncertainty in the graduate medical education (GME) learning environment: A mixed-methods study[J]. *Medical Teacher*, 2022, 44(10).
- Karaferis D, Aletras V, Raikou M, Niakas D. Factors Influencing Motivation and Work Engagement of Healthcare Professionals[J]. *Materia Socio-Medica*, 2022, 34(3).
- Mazalová L, Gurková E, Štureková L. Nursing students’ perceived stress and clinical learning experience[J]. *Nurse Education in Practice*, 2022, 64.
- Yeo K J, Yap C K. Helping undergraduate students cope with stress: The role of psychosocial resources as resilience factors[J]. *Social Science Journal*, 2023, 60(1).
- Jack K, Levett-Jones T, Ylonen A M, Ion R, Pich J, Fulton R, Hamshire C. “Feel the fear and do it anyway” ... nursing students’ experiences of confronting poor practice[J]. *Nurse Education in Practice*, 2021, 56.
- Konaszewski K, Niesiobędzka M, Kolemba M. Social and personal resources and adaptive and non-adaptive strategies for coping with stress in a group of socially maladjusted youths[J]. *European Journal of Criminology*, 2022, 19(2).
- Scavo A, Mauromicale G. Crop allelopathy for sustainable weed management in agroecosystems: Knowing the present with a view to the future[J]. *Agronomy*, 2021, 11(11).
- Wahab S, Chun Keat T, Azmi A D, Mahadevan R, Muhamed Ramli E R, Kian Boon L. Risk of Depression Among MMT Patients: Does Coping Strategies and Perceived Social Support Play a Role?[J]. *Substance Abuse: Research and Treatment*, 2021, 15.

- Neufeld A, Malin G. How medical students cope with stress: a cross-sectional look at strategies and their sociodemographic antecedents[J]. BMC Medical Education, 2021, 21(1).
- Bennett R J, Saulsman L, Eikelboom R H, Olaithe M. Coping with the social challenges and emotional distress associated with hearing loss: a qualitative investigation using Leventhal's self-regulation theory[J]. International Journal of Audiology, 2022, 61(5).
- Syam F, Resyadi H, Sanusi A P. UNVEILING THE JOURNEY: EXPLORING THE PERSONAL EXPERIENCE OF NOVICE EFL TEACHER IN THE CLASSROOM[J]. International Journal of Research on English Teaching and Applied Linguistics, 2023, 4(1).
- Awoke M, Mamo G, Abdu S, Terefe B. Perceived Stress and Coping Strategies Among Undergraduate Health Science Students of Jimma University Amid the COVID-19 Outbreak: Online Cross-Sectional Survey[J]. Frontiers in Psychology, 2021, 12.
- Sattar K, Yusoff M S B, Arifin W N, Yasin M A M, Nor M Z M. Effective coping strategies utilised by medical students for mental health disorders during undergraduate medical education-a scoping review[J]. BMC Medical Education, 2022, 22(1).
- Bell K. Increasing undergraduate student satisfaction in Higher Education: the importance of relational pedagogy[J]. Journal of Further and Higher Education, 2022, 46(4).
- de Cordova P B, Reilly L L, Pogorzelska-Maziarz M, Gerolamo A M, Grafova I, Vasquez A, Johansen M L. A theoretical framework for Acute Care Nurse Stress Appraisal: Application of the transactional model of stress and coping[J]. Journal of Advanced Nursing, 2024, 80(9).
- Landolfi A, Barattucci M, De Rosa A, Lo Presti A. The association of job and family resources and demands with life satisfaction through work-family balance: a longitudinal study among italian schoolteachers during the covid-19 pandemic[J]. Behavioral Sciences, 2021, 11(10).
- Calabrò A, Frank H, Minichilli A, Suess-Reyes J. Business families in times of crises: The backbone of family firm resilience and continuity[J]. Journal of Family Business Strategy, 2021, 12(2).
- Sattar K, Yusoff M S B, Arifin W N, Yasin M A M, Nor M Z M. Correction to: Effective coping strategies utilised by medical students for mental health disorders during undergraduate medical education - a scoping review (BMC Medical Education, (2022), 22, 1, (121), 10.1186/s12909-022-03185-1)[J]. BMC Medical Education, 2022, 22(1).
- Hugo-Van Dyk L, Nyoni C N, Williams M, Botha B S. Preceptor support during the COVID-19 pandemic: Recommendations for continuing development[J]. Curationis, 2022, 45(1).
- Laub J A. Assessing the servant organization; Development of the Organizational Leadership Assessment (OLA) model. Dissertation Abstracts International,[J]. Procedia - Social and Behavioral Sciences, 1999, 1(2).
- Findyartini A, Syah N A, Susilo A P, Nurokhmanti H, Qomariyah N, Greviana N, Ainin D Q, Sari S M, Claramita M. Challenges and opportunities in cultivating medical students' competencies: Participatory action research from a hierarchical cultural setting[J]. Medical Education Online, 2023, 28(1).
- Sanetti L M H, Pierce A M, Gammie L, Dugan A G, Cavallari J M. Scale-out of a Total Worker Health® approach for designing interventions to reduce teacher stress: pilot implementation evaluation[J]. BMC Public Health, 2022, 22(1).

- Ahmed M, Umar I A, Azkiya R, Ghofur S A. Stressors and Coping Mechanism Strategies of Islamic Boarding School Students[J]. *International Journal of Academic Studies in Science and Education*, 2023, 1(1).
- Romli M H, Wan Yunus F, Cheema M S, Abdul Hamid H, Mehat M Z, Md Hashim N F, Foong C C, Hong W H, Jaafar M H. A Meta-synthesis on Technology-Based Learning Among Healthcare Students in Southeast Asia[J]. *Medical Science Educator*, 2022, 32(3).
- Li S, Miles K, George R E, Ertubey C, Pype P, Liu J. A critical review of cultural competence frameworks and models in medical and health professional education: A meta-ethnographic synthesis: BEME Guide No. 79[J]. *Medical Teacher*, 2023, 45(10).
- Chi X, Jiang W, Guo T, Hall D L, Luberto C M, Zou L. Relationship between adverse childhood experiences and anxiety symptoms among Chinese adolescents: The role of self-compassion and social support[J]. *Current Psychology*, 2023, 42(15).
- Stoffels M, van der Burgt S M E, Stenfors T, Daelmans H E M, Peerdeman S M, Kusurkar R A. Conceptions of clinical learning among stakeholders involved in undergraduate nursing education: a phenomenographic study[J]. *BMC Medical Education*, 2021, 21(1).
- Subu M A, Dias J M, Mottershead R, Ahmed F R, Narulita S, Maryuni M, Zakiah Z, Nurbaeti I, Mohamed Al Marzouqi A, Al-Yateem N. Exploring mental health stigma among Indonesian healthcare students towards individuals with mental illnesses: a qualitative study[J]. *International Journal of Qualitative Studies on Health and Well-being*, 2024, 19(1).
- Tokumitsu K, Sugawara N, Okayasu H, Kawamata Y, Shinozaki M, Sato Y, Sato A, Uchibori Y, Komatsu T, Yasui-Furukori N, Shimoda K. The relationship of stress coping styles on substance use, depressive symptoms, and personality traits of nurses in higher education institution[J]. *Neuropsychopharmacology Reports*, 2023, 43(4).
- Ding Y, Fu X, Liu R, Hwang J, Hong W, Wang J. The impact of different coping styles on psychological distress during the covid-19: The mediating role of perceived stress[J]. *International Journal of Environmental Research and Public Health*, 2021, 18(20).
- Chetty O, Henderson R M, Gurayah T. Coping Styles and Sources of Stress of Undergraduate Health Science Students: An Integrative Review[J]. *South African Journal of Occupational Therapy*, 2021, 51(2).
- Abebe B T, Weiss M, Modess C, Roustom T, Tadken T, Wegner D, Schwantes U, Neumeister C, Schulz H, Scheuch E, al. ET, Abu-Saad K, Murad H, Barid R, Olmer L, Ziv A, Younis-Zeidan N, Kaufman-Shriqui V, Gillon-Keren M, Rigler S, Berchenko Y, al. ET, Achey M A, Beck C A, Beran D B, Boyd C M, Schmidt P N, Willis A W, Riggare S S, Simone R B, Biglan K M, Dorsey E R, , 等. Mindfulness virtual community[J]. *Trials*, 2019, 17(1).
- Chigeda F, Ndofirepi T M, Steyn R. Continuance in organizational commitment: The role of emotional intelligence, work-life balance support, and work-related stress[J]. *Global Business and Organizational Excellence*, 2022, 42(1).
- Lechner M, Liu J, Masterson L, Fenton T R. HPV-associated oropharyngeal cancer: epidemiology, molecular biology and clinical management[J]. *Nature Reviews Clinical Oncology*, 2022, 19(5).
- Kolzow D R, Smith C C C, Serrat O, Dilie H M, Zeeshan S, Ng S I, Ho J A, Jantan A H, Massey J, Sulak T, Sriram R, Dennis R S, Bocarnea M, Hai T N, Van Q N, Herbert S L, So-Jung Kim, Kyoung-Seok Kim Y-G C, Guillaume DR O, Honeycutt DR A, Cleveland DR C S,

Bocârnea M C, Dimitrova M, Tabae F, Page D, Wong T, Russell E J, Bugenhagen M J, Melchar D E, Bosco S M, Curry EMBA M B, McCurry B, Akdol B, Sebnem Arikboga F, Ucar A C, Alphan L, Elci M, Langhof J G, Gldenbergs S, Shah S J A, Richards T, Torbert W, Das G, Duncan J, Landen R, Van Quaquebeke N, Felps W, MacLeod L, Armstrong D E, Nixon C, Srader D W, Enright S M, Raso R, Xu Y, Yap S F C, Hyde K F, Cunha J A C DA, Santos M G DOS, Souza L J DE, Alssabak N A M, Macau F R, Abdelaal M, Pedder D, Egel E, Fry L W, Faris N, Parry K W, Opatokun K A, Hasim C N, Syed Hassan S S, Karlsson Minganti P, Campbell R A, Smith B J B A B J, Shah S J A, Bano M, Kalmbach H, Mir A M, Rivai V, Arifin A, Islam G, Kartini K, Siti Suriani O, Kriger M, Seng Y, Okoroh J S, Baig S, Tischler L, Giambatista R, McKeage R, McCormick D, Abbasi A S, Rehman K, Abbasi O H, Graber D R, McCuddy M, Baig S, McMurray A. J A J, Pirola-Merlo A, Sarros J C J C, 等 . Unit 5 Theories of Leadership[J]. International Journal of Organizational Leadership, 2021, 1(1).