

# DESCRIPTION OF ACADEMIC LEARNING ENVIRONMENT UNDERGRADUATE NURSING STUDY PROGRAM FACULTY OF NURSING UNIVERSITAS PADJADJARAN

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## Abstract

**Introduction:** A stressful, authoritarian, and lack of collaboration learning environment can reduce students' motivation and interest in learning resulting in learning outcomes that are not optimal. Efforts to improve the quality of the learning environment need to be done by assessing the learning process, teachers, academic achievement, learning atmosphere and social environment. The purpose of this study will be to identify the description of the academic learning environment.

**Methods:** This descriptive cross-sectional study was conducted on 271 participating students as a sample. The sampling technique used is proportionate stratified random sampling to obtain an assessment of the academic learning environment from various strata, namely the first year, second year, third year and final year students. The instrument used was the Dundee Ready Educational Environment Measure (DREEM) which consisted of 50 statement items. Items and average scores are obtained as a whole and at each level. Data were analyzed with SPSS and Microsoft Excel.

**Results:** The results of this study show that the academic learning environment score is 133.75/200, included in more positive than negative category. Based on the sub-dimensions, the results of the learning process were (33.41/48), teachers (30.98/44), academic achievement (23.39/32), learning atmosphere (29.79/48), and social environment (16.17/28). Academic achievement is the sub-dimension with the highest rating and social environment is the sub-dimension with the lowest score.

**Conclusions:** The assessment of the academic learning environment is included in the more positive than negative category, meaning that the implementation of nursing education has been going well even though there are deficiencies. DREEM will assess the parts that are already positive, need to be improved and need to be repaired.

**Keywords:** academic learning environment, DREEM, educational programs, undergraduate nursing

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student

## INTRODUCTION

The academic learning environment in education is an integral part of preparing students for skills to become superior and competent nurse candidates. This academic learning environment also has a direct influence on student enthusiasm, happiness, fulfillment and desired outcomes for students and leads to the quality of educational programs (Riquelme, et al., 2009). Soemantri, Roff, and McAleer (2008) state that a collaborative, democratic and supportive learning environment can increase the involvement of nursing students in learning. However, the gap that occurs with the existence of an academic learning environment in nursing institutions that is competitive, authoritarian, full of pressure and stress can reduce student motivation and interest in the learning process (Sayed and El-Sayed, 2012). In addition, the characteristics of the tasks and learning processes in nursing institutions tend to be too difficult with too much learning content and little learning time causing academic fatigue in nursing students (Harden and Laidlaw, 2021). This challenge leads to an academic setback in nursing education, namely 49.1% of nursing students have the intention to change majors and 45.4% have the intention not to continue their career as nurses in the future due to the poor academic learning environment that students have. These results will describe how nurses progress in the future and can exacerbate conditions with a reduced number of nurses (Li et al., 2021).

The academic learning environment has broad components that include communication and activities between lecturers and students,

appropriate physical structures and services that reflect the quality of the curriculum, teaching, learning, and support students to become practitioners in the future (Till, 2004; Mohd Said, Rogayah and Hafizah, 2009; Aghamolaei and Fazel, 2010; Brown, Williams and Lynch, 2011). Student assessment of the academic learning environment is an excellent starting point for attention in nursing education. Furthermore, the learning environment will play an important role in relation to the way students behave, develop academically, and feel comfortable and safe during the learning process (Genn, 2001). To improve the quality of the learning environment, one way that can be done is through student assessment of their learning environment (Mayya and Roff, 2004). Research conducted by Brien et al. (2008) shows that students' assessment of the learning environment has a strong correlation and influence between good scores and student achievement, satisfaction, and learning success. Student assessment of the learning environment is a strong predictor of learning outcomes and the effectiveness of educational programs at universities (Al-Ayed and Sheik, 2008; Arzuman, Yusoff and Chit, 2010).

Student assessment of the academic learning environment will vary depending on the level or year of student entry or grade. First year students have a more positive assessment of the academic learning environment compared to sophomore students and so on (Bakhshialiabad et al., 2015). This is in line with the research results of Mohd Said, Rogayah and Hafizah (2009) and Shrestha et al. (2019) which showed a decrease in scores in second, third and fourth grade students. This happens because the

judgment of the learning environment is formed because of the learning experiences possessed by students, and these learning experiences will be different at each level (Closs, Mahat and Imms, 2022). Students who have had a longer learning experience will be more familiar with the academic learning environment that is formed at the institution (Closs, Mahat and Imms, 2022). However, this pattern is not always consistent (Brown, Williams and Lynch, 2011).

Assessment of the academic learning environment has been used to identify various aspects of the learning environment in nursing education institutions. It is known that nursing students' assessment of the academic learning environment tends to be more positive. Among them, studies conducted at Universitas Gadjah Mada (Indonesia), Gujranwala Medical College (Pakistan), and Kulliyah of Nursing (Malaysia) have resulted in a positive assessment of the learning environment (Rahayu, 2006; Mohd Said, Rogayah and Hafizah, 2009; Noreen et al., 2018). However, the assessment of the academic learning environment at King Saudi University (Saudi Arabia) and Hormozgan University (Iran) is in the bad category (Genn, 2001; Aghamolaei and Fazel, 2010).

The learning environment is directly related to student learning motivation and interest. Meisha (2022) conducted research on learning motivation in 271 UNPAD scholarship students and found that some UNPAD partnership students (51.3%) had low learning motivation. Furthermore, the interest in learning was examined by Friska (2018) on 232 students and found that almost half of the students, including UNPAD (42.2%), had no interest in learning. In addition, the decrease in motivation and interest in

learning is related to increasing the incidence of stress and academic fatigue in students. Regarding the level of stress in nursing students (Salpahany, 2021), another study found that 178 people (66%) were in the moderate stress category, 75 people (27.4%) were moderate stress, and 18 people (6.6%) were mild stress. Specifically, the stress level experienced by nursing students of UNPAD was 66% moderate stress, 27.4% severe stress and 6.6% mild stress (Selsa, 2021). Furthermore, the research conducted by Sumarni, Mediawati and Yulianita (2021) on 278 UNPAD nursing students found that 25.18% had a mild degree of academic burnout, 74.1% moderate, and 0.72% severe. Ramadhanti et al. (2019) state that 98.2% of the stressors that nursing students of UNPAD have come from education. Based on these conditions, it is necessary to increase and improve the quality of the academic learning environment at the Faculty of Nursing, Universitas Padjadjaran. In addition, in Indonesia, assessments of the academic learning environment are rarely carried out in nursing education institutions, including at Universitas Padjadjaran. Therefore, the purpose of this research is to find out the description of the academic learning environment at the Faculty of Nursing, Universitas Padjadjaran.

## **METHODS**

### *Study design*

This study was designed using a quantitative research approach with a cross-sectional descriptive survey. The research was conducted at the Faculty of Nursing, Universitas Padjadjaran.

### *Population, samples, and sampling*

The population in this study were all active undergraduate nursing students starting from the first, second, third, and

fourth grades totaling 845 students. This study used a proportionate stratified random sampling technique with the aim of obtaining a representative sample by looking at the stratified population of UNPAD nursing students, which consists of several heterogeneous grades (not the same). Sample selection was carried out based on predetermined inclusion and exclusion criteria. The inclusion criteria include: 1) active students who are enrolled at academic system, 2) have never taken a leave of absence from college, and 3) are willing to take part in research until the end. The exclusion criteria were: 1) students who refused to participate, 2) students who were on leave from college or had taken leave from college.

Furthermore, the number of samples was calculated using the Slovin formula with an error tolerance of 5% so that the sample in this study was 271 students. Then, calculated based on the proportionate stratified random sampling formula, the distribution of the number of samples based on level was obtained, namely 77 first year, 67 second year, 73 third year and 54 final year. Next, randomization of the sample was carried out using Microsoft Excel using a list of student identification numbers. The sample is students whose primary number was selected during randomization (Figure 1).

#### *Instruments*

The instrument used in this research is the Dundee Ready Education Environment Measure (DREEM) which was developed by Sue Roff (1997) and has been translated into Indonesian by Soemantri et al. (2008). This questionnaire has been widely used by nursing educational

institutions in various countries and measures all components related to the learning environment (Soemantri et al., 2010). DREEM has been tested for validity and reliability in Soemantri et al. (2008) with Cronbach's alpha reliability results of 0.88, which means that the scale tested proved to be reliable with data reliability classified as very high. This questionnaire contains 50 statement items with five sub-assessments, namely: learning process, teachers, academic achievement, learning atmosphere and social environment using a Likert scale divided into two categories for favorable and unfavorable. Each statement is given five answer choices with each value as follows: for favorable statements, namely strongly disagree (0), disagree (1), undecided (2), agree (3), and strongly agree (4). For unfavorable statements, namely: strongly agree (0), agree (1), undecided (2), disagree (3), strongly disagree (4). The unfavorable statements are at numbers 4, 8, 9, 17, 25, 35, 39, 48 and 50.

#### *Procedure*

Data collection procedures are carried out online using Google Forms. In this form students receive an explanation regarding instructions for filling out the questionnaire and proceed with an informed consent form. After that, students will fill in data on demographic characteristics and the DREEM questionnaire. If the respondent does not understand the statement items contained in the form, then they can ask the researcher via the contact listed on the form. After the data are collected, editing, coding, data entry, tabulating and analysis are then carried out.

#### *Data analysis*

Table 1. Interpretation of scores based on sub-variables

Sub-Variable	Score	Interpretation
Learning Process	0-12	Very poor
	13-24	Teaching is viewed negatively
	25-36	A more positive perception
	37-48	Teaching highly thought of
Teachers	0-11	Abysmal
	12-22	In need of some retraining
	23-33	Moving in the right direction
	34-44	Model teachers
Academic Achievement	0-8	Feelings of total failure
	9-16	Many negative aspects
	17-24	Feeling more on the positive side
	25-32	Confident
Learning Atmosphere	0-12	A terrible environment
	13-24	There are many issues which need changing
	25-36	A more positive atmosphere
	37-48	A good feeling overall
Social Environment	0-7	Miserable
	8-14	Not a nice place
	15-21	Not too bad
	22-28	Very good socially

Data analysis was carried out descriptively by adding up the scores of the research results and calculating the overall average value for each respondent. Furthermore, the data were processed with SPSS and categorization was carried out based on scores, namely 0-50 very poor, 51-100 plenty of problems, 101-150 more positive than negative, and 151-200 excellent. An analysis was also performed on each sub-variable and the results were interpreted (Table 1). Then, the results for each statement item were analyzed and categorized as <2 corrected, 2-3 improved and >3 positive (Roff, 2001). Data are displayed in tabular form.

*Ethical clearance*

This research was approved by the health research ethics commission at Universitas Padjadjaran, with certificate No. 1190/UN6.KEP/EC/2022. All respondents have made informed consent. All research data are only used for

Table 2. Demographic Data Characteristics of Undergraduate Students of the Faculty of Nursing (n=271)

Characteristics	n	%
<b>Gender</b>		
Male	20	7.4
Female	251	92.6
<b>Campus</b>		
Jatinagor	194	71.6
Pangandaran	77	28.4
<b>Class</b>		
First Year	54	19.9
Second Year	73	26.9
Third Year	67	24.7
Final Year	77	28.4
<b>Academic Learning Environment</b>		
Excellent	59	21.8
More positive than negative	195	72
Plenty of problems	17	6.3
Very poor	0	0

research purposes and can only be accessed by researchers.

**RESULTS**

*Demographic characteristics*

Table 2 describes the results of the characteristics of the respondents in the frequency distribution. Most of the respondents were women, namely 251 people (92.6%) while men were 20 people (7.4%). Based on the campus area, Jatinangor campus students have more students, namely 194 (71.6%) compared to

Pangandaran campus students, namely 77 (28.4%). Based on the level of education, first, second, third, and final year students were 54 (19.9%), 73 (26.9%), 67 (24.7%) and 77 (28, 4%), respectively. Respondents who had an excellent assessment of the academic learning environment were 59 (21.8%), 195 (72%) were more positive than negative, 17 (6.3) had many problems and none of them had a very poor rating.

Table 3. Average Scores of Dimensions and Sub-Dimensions of Academic Learning Environment (n=271)

Categories	Level of Grade	Mean	Interpretation
<b>Dimension</b>			
Academic Learning Environment (max=200)	First Year	144	More positive than negative
	Second Year	128.37	More positive than negative
	Third Year	133.84	More positive than negative
	Final Year	125.67	More positive than negative
	All	133.75	More positive than negative
<b>Sub-Dimensions</b>			
Learning Process (max = 48)	First Year	35.30	A more positive perception
	Second Year	32.39	A more positive perception
	Third Year	33.36	A more positive perception
	Final Year	32.07	A more positive perception
	All	33.41	A more positive perception
Teachers (max=44)	First Year	34.57	Model teachers
	Second Year	30.10	Moving in the right direction
	Third Year	30.03	Moving in the right direction
	Final Year	28.24	Moving in the right direction
	All	30.98	Moving the right direction
Academic Achievement (max = 32)	First Year	24.13	Confident
	Second Year	22.37	Feeling more on the positive side
	Third Year	23.81	Feeling more on the positive side
	Final Year	23.06	Feeling more on the positive side
	All	23.39	Feeling more on the positive side
Learning Atmosphere (max = 48)	First Year	32.56	A more positive atmosphere
	Second Year	28.09	A more positive atmosphere
	Third Year	30.21	A more positive atmosphere
	Final Year	27.39	A more positive atmosphere
	All	29.79	A more positive atmosphere
Social Environment (max = 28)	First Year	17.44	Not too bad
	Second Year	15.42	Not too bad
	Third Year	16.44	Not too bad
	Final Year	14.91	Not a nice place
	All	16.17	Not too bad

Based on Table 3, it is known that the mean value for the total score of the dimensions of the academic learning environment is 133.75/200, meaning that it is in the more positive than negative category. Data analysis shows that the highest average score is owned by first-year students more than other students. Then, in each sub-dimension it is known that the learning process (33.41/48) means that the learning process has been carried out with a more positive approach; teachers (30.98/44) means that teachers show a positive attitude during teaching; academic achievement (23.39/32) means that students are on the positive side in achieving their learning success; the learning atmosphere (29.79/48) means that students need a more positive atmosphere; and the social environment (16.17/28) means that the social environment is not too bad. These results state that, in terms of sub-dimensions, the order of the lowest mean value to the highest is the social environment, learning atmosphere, learning process, teachers and academic achievement. The results for each sub-dimension for each level are also known and overall first year students have the highest average score in all sub-dimensions (Table 3).

## DISCUSSION

The goal of nursing education is to design a curriculum that enables students to become excellent and successful nurses in the future. The learning environment is the most important determining factor in the successful implementation of a full curriculum in nursing educational institutions (Noreen, Khan and Nehra, 2018). The learning environment consists of many components such as the physical environment (facilities and infrastructure), teachers, students, and other support

systems that can motivate student involvement (Hutchinson, 2003). Student assessment of the learning environment can help provide educational institutions with barriers and opportunities for improving student learning (McAleer, Sean and Roff, 2001). The results of this study can provide a solution on how to form an interesting learning environment that suits the needs of students, which in turn will reduce the risk of academic retardation (Hamid, Faroukh and Mohammadhosein, 2013).

The results of the study showed that the learning environment for the Faculty of Nursing UNPAD was in the more positive than negative category and also that most students had the same assessment, which was good or more positive than negative (72%). This is in line with the results of various studies which state that the academic learning environment in nursing education institutions tends to be in the more positive than negative category or positive results (Hamid, Faroukh and Mohammadhosein, 2013; Noreen, Khan and Nehra, 2018; Shrestha et al., 2019; Jayaweera et al., 2021; Imen et al., 2022). These results are influenced by various factors including the quality of human resources (students, teachers, and other supporting parties) as well as material resources (facilities and infrastructure and curriculum) available to students, one of which is nursing education institutions tend to have a more up to date curriculum. so that student learning needs can be met properly (Ezomike and Madubogwu, 2020).

In nursing educational institutions, the learning environment must be integrated between theory and clinical practice to obtain balanced learning outcomes (Sharkawy et al., 2013). The

learning environment does not only have an impact on student academic results, but can reflect on student careers in the future. Nursing education institutions can integrate theory-based learning and practice in each subject so that student competency regarding practical skills can be achieved. Competition in theory and practice is achieved through various methods including e-module (Perdana et al., 2017), virtual reality (Bayram and Caliskan, 2020), simulation (Lin, 2015), case study and project-based learning (Li, Ye and Chen, 2019).

The first sub-dimension in this study is the learning process (33.41/48), namely the learning process has been carried out with a more positive approach, meaning that the learning methods and curriculum used by institutions are able to present learning that encourages students to be active, student-centered learning, able to develop competency and student confidence, well focused, appropriate study time, and achievement of learning objectives (McAleer and Roff, 2013; Rochmawati et al., 2014). Assessment of the learning process has an important role in evaluating the learning process, conveying clear learning objectives, learning centered on lecturers or students, evaluating learning processes and fun learning activities for students (Sitepu and Isnayanti, 2021).

Based on the analysis of each statement item, the item that has a positive value is item 16, namely students assess that the learning carried out can develop their competence (3, 1/4) and the item that needs to be improved (lowest score) is item 25 that is, learning places too much emphasis on information that is factual or too rigid (2, 17/4) and teaching and learning activities are too centered on teachers or lecturers (2, 59/4). Nahar et

al. (2011) found that student-centered learning curricula tend to achieve higher learning achievement. Student participation in skills development emphasizes more than just factual knowledge transfer (Hoellwarth and Moelter, 2011). Student participation is marked by affective states (showing interest and pleasure), behavioral states (active involvement in each task), cognitive involvement (concentration), and being able to plan for the future (Sinatra, Heddy and Lombardi, 2015; Perry, 2022). The lecture method using PowerPoint has dominated the teaching strategy in nursing education, namely the teachers conveys the content of the material and students only become passive listeners (Benner et al., 2009). The role of the teachers must be changed to become a learning facilitator, not just a transmitter of knowledge (Harden and Laidlaw, 2021). Johnson (2015) recommends that learning should focus on providing experiences to students such as case studies, simulations, problem-based learning, and group learning. Problem-based learning is a learning approach that is preferred by students (El-Gilany and Abusaad, 2013). Nursing students feel more challenged if they are involved in student-centered learning and are comfortable collaborating. A meta analysis study by Lei et al. (2018) states that there is a fairly strong and positive correlation between overall student involvement and academic achievement Souza and Jyothi (2019) (2019) state that the results of the learning environment have a strong positive correlation with the learning process.

The second sub-dimension is the teachers (30.98/44), meaning that the teachers show a positive attitude during teaching. The positive attitudes shown by



the teachers include having sufficient knowledge, being patient and not authoritarian, not ridiculing students, having good communication with students, being able to provide objective assessments and constructive criticism, and not showing anger. (McAleer and Roff, 2013; Rochmawati et al., 2014). The interactions and relationships between teachers and students can predict student academic achievement and are related to achievement. Hamre and Pianta (2001) state that conflict between lecturers and students can decrease student academic performance.

Based on the analysis of each statement item, it is known that there are components that are already positive and that need to be improved, namely item 2 and items 39 and 50. The positive value is indicated by item 2 (3.32/4) which describes that the teachers have sufficient knowledge. The value that must be corrected is item 39, namely the teachers show anger during learning (2/4). The response given by the teachers is influenced by the theory of fate itself, namely the perception of students about the behavior of the teachers, meaning that the feedback given by the teachers is in accordance with what is given by students (Ryan and Deci, 2022). According to Law No. 14 of 2005, the ability of lecturers in an educational institution is a factor that supports learning progress. First, lecturers are the spearhead of the success of the teaching and learning process; without quality and self-sacrifice, lecturers will not be able to produce quality students. Second, lecturers not only transfer knowledge to students but also provide examples of attitudes, behavior and personality. Third, the quality of lecturer performance is not final, meaning that lecturers always grow, develop and change

dynamically. Fourth, in the performance of lecturers who are not supported by professional competence, the teaching and learning process cannot run smoothly. Fifth, lecturers are required to have academic qualifications, competence, educational certification, physical and spiritual health, and the ability to realize educational goals (Idris and Lindrayeni, 2019)

However, what is of concern is that teachers need to reflect what students are learning, including the emotional development of students (Barkley, 2014). Teachers need to work closely with students to jointly develop strategies and determine academic achievements to be achieved. In addition, the characteristics of teachers who only like certain types of students, such as students with good grades, can form negative perceptions by students because teachers tend to be unfair and do not pay attention to students as a whole (Xu and Qi, 2019). The teacher is a role model, not only equipped with knowledge but also moral values (Palés et al., 2015; Altemani and Merghani, 2017). The role of teachers can be enhanced by providing more attention and assistance in learning, being more willing to communicate and interact, and providing more positive responses in the communication process. In building education and teacher reform, efforts must be continued by fostering a harmonious relationship between educators and students, increasing emotional communication, and shortening the distance between educators and students. This will not only help students to form high levels of self-efficacy, but also improve student academic achievement (Xu and Qi, 2019).

The third sub dimension is student academic achievement (23,39/32), meaning

that students are on the positive side in achieving their learning success which is assessed based on success in implementing learning strategies, confidence in being able to go through the learning process, and getting all learning achievements in accordance with professional needs (McAleer and Roff, 2013). Based on the analysis of each statement item, there is a component that is considered positive, namely item 10 that students feel confident that they can pass the current academic challenges (3.42/4). However, there are items that need to be improved, namely item 27 that students find it difficult to memorize the learning materials that students need (1.76/4). The learning difficulties experienced by students are related to the content of the material. Historically, nursing students were faced with learning a very large amount of material with a short learning time (Harden and Laidlaw, 2021). In addition, changes in the curriculum that occur can affect academic performance related to students' ability to adapt and develop learning strategies (Landeem et al., 2016). Curriculum changes are a sign of the development of nursing education that is adapted to current health needs. However, these changes indicate that there is an urgent need to change teaching and learning strategies (Noreen, Khan and Nehra, 2018).

Nursing students at each level of the semester experience changes in their level of difficulty. This is why nursing students need to change and adjust their learning strategies every semester, so that it becomes a barrier for students to integrate previous knowledge and skills into current practice (Brauer and Ferguson, 2015). In addition, the level of self-efficacy, preparation for independent learning and collaborative learning with

fellows students are factors that are closely related to the development of student learning strategies (Gu and Sok, 2021). A learning environment that has adequate resources or conducive determinants will enable students to be able to handle and resolve all learning stressors more effectively (Dhanapala, 2021). Learning environments can stimulate learning outcomes that facilitate academic performance by encouraging effective teaching and learning (Duruji, Azuh and Oviasogie, 2014).

The fourth sub-dimension is the learning atmosphere (29.79/48), meaning that students need a more positive atmosphere. A learning environment where the learning atmosphere supports students to learn to recognize mistakes, provide full moral support can make students enjoy the learning process so that students can build full capacity during the learning process (Nahariani, Kurdi and Priyanti, 2018). Discriminatory behavior and an unsupportive atmosphere in the learning environment, as well as negative attitudes toward nursing students lead to feelings of inferiority, embarrassment or lack of self-confidence in students. In addition, the unfriendly behavior received by nursing students enhances these feelings (Kalyani et al., 2019).

Based on the analysis of each statement item, it is known that none of the learning atmosphere sub-variables has a positive value. There are items with categories that can be improved, namely item 30 that students feel they have the opportunity to develop their interpersonal skills (2.93/4). Interpersonal skills can be improved by participating in various extracurricular activities according to the interests and talents of each student (Buckley and Lee, 2021). In addition, extracurricular activities that are attended

by students in a structured way can improve academic achievement and students' self-motivation to excel (Bovill, Cook-Sather and Felten, 2010). In addition, it was found that cheating behavior in students caused the learning atmosphere to become unfavorable. The act of cheating is a danger for nursing students because it is feared that it can trigger students to manipulate clinical data in the future when they become nurses and cheating is a violation of ethics in nursing (McCabe and Bowers, 2009). Academic fraud in nursing students is caused by students wanting to get high scores and lack of time and motivation to study (Park, Park and Jang, 2013). In addition, the learning atmosphere and peer influence can influence nursing students to commit fraud (Anuradha et al., 2017).

Efforts that can be made to overcome this problem are the faculty providing various and not identical questions for each semester, providing plagiarism checking services on assignments and essay exams, giving unique assignments in a fun way and giving enough time to complete them, socializing regulations regarding firm action against perpetrators, tightening supervision, and providing additional study time to evaluate and review learning materials (Andrews et al., 2007; Piascik and Brazeau, 2010; Park, Park and Jang, 2013). The role of a learning support system is urgently needed, such as peer or senior academic advisors to solve problems related to the learning atmosphere so that students will be better prepared and their academic performance will not be disturbed. (Nosair, Mirghani and Mostafa, 2015; Altemani and Merghani, 2017). The quality of student service plays a big role in improving the quality of the student

learning environment (Dimitriadou et al., 2015). The role of teachers is needed, where students are satisfied if lecturers are involved in learning by providing a relaxed and open learning atmosphere with a ratio and sufficient number of teachers (Nahariani, Kurdi and Priyanti, 2018). The ability to adapt in using various learning methods influences student assessments of the learning environment (Pimpanyon et al., 2000).

The last sub-dimension is the social environment (16.17/28). The social environment is not too bad but still needs to be improved. The social environment that is formed in the education unit will affect student academic performance. A positive social environment will increase the achievement of maximum learning outcomes (Benazier and Ari, 2015). Based on the analysis of each statement item, the results show that there are items that have positive values, namely item 15 which states that students have good friends in the faculty (3.27/4) and the item that needs to be improved is item 4, namely students feel too tired to follow the learning (1.14/4). Peer support can increase an individual's psychological drive and make emotional, physiological, and cognitive contributions (Yenen and Çarkit, 2021). Social support that students have can help the process of self-regulation of fatigue management and recovery of individual resources (Johnsen et al., 2018; Xi, Xu and Wang, 2020). Alone feelings and fatigue can trigger stress in nursing students (Rois et al., 2021). Stress related to academics will make students feel threatened and trigger a variety of unwanted behaviors which ultimately lead to a lack of energy, depression, difficulty concentrating, and physical discomfort while participating in learning (Chen et al., 2020). Nursing students experience a lot

of academic pressure that keeps resources drained, physical and mental compensation which makes graduates not graduate on time, decrease in learning efficiency, depression, anxiety, fear and other adverse psychological reactions (Yuhuan et al., 2022).

Poor well-being in college students is often associated with many negative consequences such as increased risk of suicide and self-harm, limited academic performance, decreased social relationships, and increased risk of errors in clinical practice (Melnyk et al., 2018). Fatigue and boredom that occur in nursing indicates that the current curriculum and learning methods need to be reviewed (Akbar and Baiturrahmah, 2019). Therefore, communication between students needs to be built by forming study groups with a proportional number so that the division of tasks will be more precise, more focused, and time used more effectively (Qin et al., 2022). In addition, cross-level support groups should be created so that they can share experiences with each other and provide psychological complaints and maintenance services by continuously increasing student participation (Wangid and Purwanti, 2020).

### **LIMITATION**

The academic learning environment is related to the management of nursing education by presenting an appropriate learning process, exemplary teaching staff, superior academic achievement, a pleasant learning atmosphere and a supportive social environment, and this is very important for the learning success of nursing students. The academic learning environment in nursing institutions will provide an overview of the process of

forming the character of nurses in the future. However, this study cannot control other variables that can affect student learning success. This study only focuses on how students assess the academic learning environment according to their perceptions. This is considered as a limitation in this study.

### **CONCLUSIONS**

Identifying the academic learning environment can help improve the quality of learning in nursing education institutions. Students assess that the academic learning environment is in the category of more positive than negative. Regarding student assessment of the sub-dimensions, improvements are needed in all five domains to create high quality academic learning environments. The academic learning environment will affect student learning motivation and achievement, so it is important to know how students evaluate their learning environment. Furthermore, focus group discussions can be conducted to explore the description of the academic learning environment. Recommendations are needed by creating a supportive environment, designing, and implementing interventions to improve sections that are considered unsatisfactory to create more effective teaching and learning.

### **CONFLICT OF INTEREST**

There is no potential conflict concerning this research.

### **REFERENCES**

- Agarwal, D., Loukas, A. and Perry, C.L. (2018) 'Examining College Students' Social Environment, Normative Beliefs, and Attitudes in Subsequent Initiation of Electronic Nicotine Delivery Systems', *Health Edu Behavior*, 45(4), pp. 532–539. doi:

- 10.1177/1090198117739672
- Aghamolaei, T. and Fazel, I. (2010) 'Medical students' perceptions of the educational environment at an Iranian Medical Sciences University.', *BMC Medical Education*, 10, p. 87. doi: 10.1186/1472-6920-10-87.
- Akbar, R. R. and Baiturrahmah, U. (2019) 'Hubungan Persepsi Mahasiswa terhadap Lingkungan Pembelajaran dan Hubungan Persepsi Mahasiswa terhadap Lingkungan Pembelajaran dan Tingkat Stres Resti Rahmadika Akbar Medical Education Unit', (January 2018).
- Al-Ayed, I. H. and Sheik, S. A. (2008) 'Assessment of the educational environment at the College of Medicine of King Saud University, Riyadh', *Eastern Mediterranean Health Journal*, 14(4), pp. 953–959.
- Altemani, A. H. and Merghani, T. H. (2017) 'The quality of the educational environment in a medical college in Saudi Arabia', pp. 128–132. doi: 10.5116/ijme.58ce.55d2.
- Andrews, K. G. et al. (2007) 'Faculty and student perceptions of academic integrity at U.S. and Canadian dental schools', *Journal of Dental Education*, 71(8), pp. 1027–1039.
- Anuradha, R. et al. (2017) 'Stress and Stressors among Medical Undergraduate Students: A Cross-sectional Study in a Private Medical College in Tamil Nadu', *Indian Journal of Community Medicine*, 42(4), pp. 222–225. doi: 10.4103/ijcm.IJCM\_287\_16.
- Arzuman, H., Yusoff, M. S. B. and Chit, S. P. (2010) 'Big Sib students' perceptions of the educational environment at the school of medical sciences, universiti sains Malaysia, using Dundee ready educational environment measure (DREEM) inventory', *Malaysian Journal of Medical Sciences*, 17(3), pp. 40–47.
- Bakhshialiabad, H., Bakhshi, M. and Hassanshahi, G. (2015) 'Students' perceptions of the academic learning environment in seven medical sciences courses based on DREEM.', *Advances in Medical Education and Practice*, 6, pp. 195–203. doi: 10.2147/AMEP.S60570.
- Barkley, E. F. (2014) *Student engagement techniques: A handbook for college faculty*. San Francisco: Jossey-Bass.
- Bayram, S. B. and Caliskan, N. (2020) 'The Use of Virtual Reality Simulations in Nursing Education, and Patient Safety', *Firstenberg (Eds.), Contemporary Topics in Patient Safety*, 1. doi: <https://doi.org/10.5772/intechopen.94108>.
- Benazier B.M, Probandari, A..N. and Randita, A. B. T. (2015) 'Perbedaan Persepsi Lingkungan Belajar Mahasiswa Achiever dan Underachiever Program Studi Kedokteran FK UNS', *NEXUS PENDIDIKAN KEDOKTERAN DAN KESEHATAN*, 4(1), pp. 31–45.
- Benner, P., Sutphen, M., Leonard, L. and Day, L. (2009) *Educating nurses: A Call for radical transformation*. San Francisco: Jossey-Bass.
- Bovill, C., Cook-Sather, A. and Felten, P. (2010) 'Students as co-creators of teaching approaches, course design, and curricula: implications for academic developers', *International Journal for Academic Development*, 16(2). doi: <https://doi.org/10.1080/1360144X.2011.568690>.
- Brauer, D. G. and Ferguson, K. J. (2015) 'The integrated curriculum in medical education: AMEE Guide No. 96', *Medical teacher*, 37(4), pp. 312–322. doi: 10.3109/0142159X.2014.970998.
- Brien, L.-A., Legault, A. and Tremblay, N. (2008) 'Affective learning in end-of-life care education: the experience of nurse educators and students', *International Journal of Palliative Nursing*, 14(12), pp. 610–614. doi: 10.12968/ijpn.2008.14.12.32066.
- Brown, T., Williams, B. and Lynch, M. (2011) 'The Australian DREEM: evaluating student perceptions of

- academic learning environments within eight health science courses', *International Journal of Medical Education*, 2, pp. 94–101. doi: 10.5116/ijme.4e66.1b37.
- Buckley, P. and Lee, P. (2021) 'The impact of extra-curricular activity on the student experience', *Active Learning in Higher Education*, 22(1), pp. 37–48. doi: 10.1177/1469787418808988.
- Chen, Y. et al. (no date) 'Higher Academic Stress Was Associated with Increased Risk of Overweight and Obesity among College Students in China'.
- Closs, L., Mahat, M. and Imms, W. (2022) 'Learning environments' influence on students' learning experience in an Australian Faculty of Business and Economics', *Learning Environments Research*, 25(1), pp. 271–285. doi: 10.1007/s10984-021-09361-2.
- Dhanapala, R. M. (2021) 'The Effect of Learning Environment on Academic Performance from Students' Perspective. doi: 10.11216/gsj.2021.03.49602
- Dimitriadou, M. et al. (2015) 'Baccalaureate nursing students' perceptions of learning and supervision in the clinical environment.', *Nursing & Health Sciences*, 17(2), pp. 236–242. doi: 10.1111/nhs.12174.
- Duruji, M. M., Azuh, D. and Oviasogie, F. (2014) 'LEARNING ENVIRONMENT AND ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN EXTERNAL EXAMINATIONS: A STUDY OF SELECTED SCHOOLS IN OTA, pp. 5042–5053.
- El-Gilany, A.-H. and Abusaad, F. E. S. (2013) 'Self-directed learning readiness and learning styles among Saudi undergraduate nursing students', *Nurse Education Today*, 33(9), pp. 1040–1044. doi: 10.1016/j.nedt.2012.05.003.
- Ezomike, U. O., Madubogwu, C. I. and Azuike, E. (2020) 'Evaluation of the Educational Environment of a new Medical School in Southeast Nigeria', *Nigerian Journal of Clinical Practice*, 23(10), pp. 1462–1469. doi: 10.4103/njcp.njcp\_221\_20
- Friska, M. S. (2018) Hubungan Minat Belajar Keperawatan dengan Prestasi Belajar Mahasiswa Fakultas Keperawatan Universitas Padjadjaran. Universitas Padjadjaran.
- Ganyaupfu, E. M. (2013) 'Teaching Methods and Students' Academic Performance', *International Journal of Humanities and Social Science Invention ISSN (Online)*, 2(9), pp. 2319–7722. Available at: www.ijhssi.org.
- Genn, J. M. (2001) 'AMEE Medical Education Guide No. 23 (Part 2): Curriculum, environment, climate, quality and change in medical education – a unifying perspective', *Medical Teacher*, 23(5), pp. 445–454. doi: 10.1080/01421590120075661
- Gu, M. and Sok, S. (2021) 'Factors affecting the academic achievement of nursing college students in a flipped learning simulation practice', *International Journal of Environmental Research and Public Health*, 18(11). doi: 10.3390/ijerph18115970
- Hamid, B., Faroukh, A. and Mohammadhosein, B. (2013) 'Nursing students' perceptions of their educational environment based on DREEM model in an Iranian university', *Malaysian Journal of Medical Sciences*, 20(4), pp. 55–62. Available at: www.mjms.usm.my.
- Hamre B. K. and Pianta, R. C. (2001) 'Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade', *Child Development*, 72(2), pp. 625–638.
- Harden, R. M. and Laidlaw, M. J. (2021) Essential skills for a medical teacher: an introduction to teaching and learning in medicine. Edinburgh: Elsevier.
- Hoellwarth, C. and Moelter, M. J. (2011) 'The implications of a robust curriculum in introductory

- mechanics', *American Journal of Physics*, 79(5), pp. 540–545. doi: 10.1119/1.3557069.
- Hutchinson, L. (2003) 'Educational environment', *BMJ (Clinical research ed.)*, 326(7393), pp. 810–812. doi: 10.1136/bmj.326.7393.810.
- Idris, M. and Lindrayeni, R. A. (2019) 'The Impact of Level of Education, Teaching Experience and Gender on Professionalism and Performance: The Case Study of Universitas Muhammadiyah Palembang's Academic Teaching Staffs', *International Journal of Human Resource Studies*, 9(1), p. 99. doi: 10.5296/ijhrs.v9i1.13727
- Imen, R. et al. (2022) 'Tunisian DREEM: Nursing Students' Perception of the Learning Environment', *Open Journal of Nursing*, 12(11), pp. 745–757. doi: 10.4236/ojn.2022.1211052
- Jayaweera, P. et al. (2021) 'Evaluation of learning environment among Nursing undergraduates in state universities, Sri Lanka', *BMC Nursing*, 20(1), pp. 1–8. doi: 10.1186/s12912-021-00714-z
- Johnsen, T. L. et al. (2018) 'Directive and nondirective social support in the workplace - is this social support distinction important for subjective health complaints, job satisfaction, and perception of job demands and job control?', *Scandinavian Journal of Public Health*, 46(3), pp. 358–367. doi: 10.1177/1403494817726617.
- Johnson, K. Z. (2015) 'Student engagement in nursing school: A secondary analysis of the National Survey of Student engagement data', *ProQuest Dissertations and Theses*, p. 117. Available at: <https://www.proquest.com/dissertations-theses/student-engagement-nursing-school-secondary/docview/1697861849/se-2?accountid=135034>.
- Kalyani, M. N. et al. (2019) 'How do nursing students experience the clinical learning environment and respond to their experiences? A qualitative study', *BMJ Open*, 9(7), pp. 1–8. doi: 10.1136/bmjopen-2018-028052
- Laili, L. and Ni'mah Suseno, M. (2016) 'Kesejahteraan Spiritual dan Burnout pada Mahasiswa Pendidikan Dokter', *Psikologika: Jurnal Pemikiran dan Penelitian Psikologi*, 21(2), pp. 167–178. doi: 10.20885/psikologika.vol21.iss2.art6
- Landeen, J. et al. (2016) 'The impact of curricular changes on BSCN students' clinical learning outcomes', *Nurse Education in Practice*, 21, pp. 51–58. doi: 10.1016/j.nepr.2016.09.010
- Lei, H., Cui, Y. and Zhou, W. (2018) 'Relationships between student engagement and academic achievement: A meta-analysis', *Social Behavior and Personality*, 46(3), pp. 517–528. doi: 10.2224/sbp.7054
- Li, S., Ye, X. and Chen, W. (2019) 'Practice and effectiveness of "nursing case-based learning" course on nursing student's critical thinking ability: A comparative study.', *Nurse Education in Practice*, 36, pp. 91–96. doi: 10.1016/j.nepr.2019.03.007
- Li, Y. et al. (2021) 'Psychological distress among health professional students during the COVID-19 outbreak', *Psychological Medicine*, 51(11), pp. 1952–1954. doi: 10.1017/S0033291720001555
- Lin, H.-H. (2015) 'Effectiveness of simulation-based learning on student nurses' self-efficacy and performance while learning fundamental nursing skills', *Technology and health care: official journal of the European Society for Engineering and Medicine*, 24 Suppl 1, pp. S369-75. doi: 10.3233/THC-151094
- Mayya, S. S. and Roff, S. (2004) 'Students' perceptions of educational environment: A comparison of academic achievers and under-achievers at Kasturba Medical College, India', *Education for Health*, 17(3), pp. 280–291. doi:

- 10.1080/13576280400002445
- McAlear, S and Roff, S. (2001) A practical guide to using the Dundee Ready Education Environment Measure (DREEM). In J. M. Genn (Ed.), Curriculum, environment, climate, quality and change in medical education: A unifying perspective. AMEE Education Guide no. 23. Scotland: AMEE.
- McAlear, S. and Roff, S. (2013) 'A Practical Guide to Using the Dundee Ready Education Environment Measure (DREEM)'. Available at: [www.gppro.co.uk/swacpo/%0Adocument/dreems2.doc](http://www.gppro.co.uk/swacpo/%0Adocument/dreems2.doc)
- McCabe, L. D. and Bowers, J. W. (2009) 'The Relationship between Student Cheating and College Fraternity or Sorority Membership', *NASPA Journal*, 45(4), pp. 573–722.
- Meisha, S. (2022) Gambaran Motivasi Belajar Mahasiswa Fakultas Keperawatan Universitas Padjadjaran Terhadap Pembelajaran Daring di Masa Pandemi COVID-19. Universitas Padjadjaran.
- Melnyk, B. M. et al. (2018) 'A National Study Links Nurses' Physical and Mental Health to Medical Errors and Perceived Worksite Wellness.', *Journal of Occupational and Environmental Medicine*, 60(2), pp. 126–131. doi: 10.1097/JOM.0000000000001198.
- Mohd Said, N., Rogayah, J. and Hafizah, A. (2009) 'A study of learning environments in the Kulliyah (Faculty) of Nursing, International Islamic University Malaysia', *Malaysian Journal of Medical Sciences*, 16(4), pp. 15–24.
- Nahar, N. et al. (2011) 'Students' Perception of Educational Environment of Medical Colleges in Bangladesh', *Bangabandhu Sheikh Mujib Medical University Journal*, 3(2). doi: 10.3329/bsmmuj.v3i2.7060
- Nahariani, P., Kurdi, F. and Priyanti, R. P. (2018) 'The Perception of Indonesian Nursing Students on the Learning Environment in Clinical Practice', *Jurnal Ners*, 13(2), pp. 233–238. doi: 10.20473/jn.v13i2.9770
- Noreen, K., Khan, K. A. and Nehra, R. A. (2018) 'Students' Perception of Learning Environment Using Dundee Ready Education Environment Measure (Dreem) Inventory', *Pakistan Journal of Public Health*, 8(2), pp. 112–116. doi: 10.32413/pjph.v8i2.154
- Nosair, E., Mirghani, Z. and Mostafa, R. M. (2015) 'Measuring Students' Perceptions of Educational Environment in the PBL Program of Sharjah Medical College', pp. 71–79. doi: 10.4137/JMECD.S29926
- Palés, J. et al. (2015) 'Educational climate perception by preclinical and clinical medical students in five Spanish medical schools', *International Journal of Medical Education*, 6, pp. 65–75. doi: 10.5116/ijme.5557.25f9
- Park, E. J., Park, S. and Jang, I. S. (2013) 'Academic cheating among nursing students', *Nurse Education Today*, 33(4), pp. 346–352. doi: 10.1016/j.nedt.2012.12.01
- Perdana, F.A., Sarwanto, S., Sukarmin, S. and Sujadi, I. (2017) 'Development of e-module combining science process skills and dynamics motion material to increasing critical thinking skills and improve student learning motivation senior high school', *International Journal of Science and Applied Science*, 1(1), pp. 45–54.
- Perry, A. M. (2022) 'Student Engagement, No Learning without It', *Creative Education*, 13(04), pp. 1312–1326. doi: 10.4236/ce.2022.134079
- Piasek, P. and Brazeau, G. A. (2010) 'Promoting a culture of academic integrity', *American Journal of Pharmaceutical Education*, 74(6), pp. 1–2. doi: 10.5688/aj7406113
- Pimparyon, P. et al. (2000) 'Educational environment, student approaches to school', 22(4), pp. 359–364.
- Qin, L. et al. (2022) 'Reduction of Academic Burnout in Preservice Teachers: PLS-SEM Approach',



- Sustainability (Switzerland), 14(20). doi: 10.3390/su142013416
- Rahayu, G. (2006) 'Educational climate at nursing study program Gadjah Mada University as measured using DREEM', *The Indonesian Journal of Medical and Health Profession Education*, 1(1).
- Rahmatpour, P. et al. (2019) 'Academic burnout as an educational complication and promotion barrier among undergraduate students: A cross-sectional study.', *Journal of Education and Health Promotion*, 8, p. 201. doi: 10.4103/jehp.jehp\_165\_19
- Raja, S. (2021) *Gambaran Tingkat Stres Mahasiswa Keperawatan Universitas Padjadjaran Selama Pembelajaran Daring di Masa Pandemi COVID-19*. Universitas Padjadjaran.
- Ramadhanti, I. F., Hidayati, N. O. and Rafiyah, I. (2019) 'Gambaran Stressor dan Strategi Koping pada Mahasiswa Tahun Pertama Fakultas Keperawatan Universitas Padjadjaran', *Jurnal Pendidikan Keperawatan Indonesia*, 5(2). doi: 10.17509/jpki.v5i2.16635
- Rane, Z.A. (2010) 'Factors that influence students learning achievement'.
- Riquelme, A. et al. (2009) 'Measuring students' perceptions of the educational climate of the new curriculum at the Pontificia Universidad Católica de Chile: Performance of the Spanish translation of the Dundee Ready Education Environment Measure (DREEM)', *Education for Health: Change in Learning and Practice*, 22(1), p. 112.
- Rochmawati, E., Rahayu, G. R. and Kumara, A. (2014) 'Educational environment and approaches to learning of undergraduate nursing students in an Indonesian school of nursing', *Nurse Education in Practice*, 14(6), pp. 729–733. doi: 10.1016/j.nepr.2014.08.009
- Rois, R. et al. (2021) 'Prevalence and predicting factors of perceived stress among Bangladeshi university students using machine learning algorithms', *Journal of Health, Population and Nutrition*, pp. 1–12. doi: 10.1186/s41043-021-00276-5
- Ryan, R. M. and Deci, E. L. (2022) Overview of self-determination theory: An organismic-dialectical perspective. In Ryan, R.M. and Deci, E.L. (eds.), *Handbook of self-determination research*. University of Rochester Press.
- Sakiz, G., Pape, S. J. and Hoy, A. W. (2012) 'Does perceived teacher affective support matter for middle school students in mathematics classrooms?', *Journal of School Psychology*, 50(2), pp. 235–255. doi: 10.1016/j.jsp.2011.10.005
- Shargawi S.A, El-Houfey A.A. and Hassan, A. (2013) 'Students' Perceptions of Educational Environment in the Faculties of Nursing at Assuit, Sohag and South Valley Universities', *Ass. Univ. Bull. Environ. Res*, 16(2).
- Shrestha, E. et al. (2019) 'Perception of the learning environment among the students in a nursing college in Eastern Nepal', *BMC Medical Education*, 19(1), pp. 1–7. doi: 10.1186/s12909-019-1835-0
- Sinatra, G. M., Heddy, B. C. and Lombardi, D. (2015) 'The Challenges of Defining and Measuring Student Engagement in Science', *Educational Psychologist*, 50(1), pp. 37–41. doi: 10.1080/00461520.2014.1002924
- Sitepu, A, R, D. and Isnayanti, D. (2021) 'HUBUNGAN PERSEPSI MAHASISWA TENTANG LINGKUNGAN BELAJAR TERHADAP PRESTASI AKADEMIK DI FAKULTAS KEDOKTERAN UNIVERSITAS MUHAMMADIYAH SUMATERA UTARA', *Jurnal Ilmiah Maksitek*, 6(1), pp. 12–17.
- Skordi, P. and Fraser, B. J. (2019) 'Validity and use of the What Is Happening In this Class? (WIHIC) questionnaire in university business statistics classrooms', *Learning Environments Research*, 22(2), pp. 275–295. doi:

- 10.1007/s10984-018-09277-4.
- Soemantri, D., Roff, S. and McAleer, S. (2008) 'Student perceptions' of the educational environment in the midst of curriculum change', *Medical Journal of Indonesia*, 17(1), pp.57-63.
- Soemantri, D., Herrera, C. and Riquelme, A. (2010) 'Measuring the educational environment in health professions studies: a systematic review', *Medical Teacher*, 32(12), pp. 947–952. doi: 10.3109/01421591003686229
- Souza, D. and Jyothi, J. (2019) 'Impact of Educational Environment and Learning Approaches on Academic Outcome of Undergraduate Nursing Students Nayak Shalini G, MSc, MPhil Nursing', *International Journal of Caring Sciences*, 12(3), p. 3. Available at: [www.internationaljournalofcaringsciences.org](http://www.internationaljournalofcaringsciences.org)
- Suhendar, R. F., Rafiyah, I. and Witdiawati (2021) 'Gambaran tingkat adversity quotient mahasiswa keperawatan Universitas Padjadjaran yang mengikuti pembelajaran jarak jauh pada masa pandemi covid-19', *Proceeding Seminar Nasional Keperawatan*, 7(April)
- Sumarni, T., Mediawati, A. S. and Yulianita, H. (2021) 'Academic burnout among undergraduates nursing students', *Jnc*, 4(3), pp. 255–264.
- Till, H. (2004) 'Identifying the perceived weaknesses of a new curriculum by means of the Dundee Ready Education Environment Measure (DREEM) Inventory', *Medical Teacher*, 26(1), pp. 39–45. doi: 10.1080/01421590310001642948.
- Wangid, M. N. and Purwanti, I. Y. (2020) 'Implementation of group activity to solve academic Burnout elementary school students', *Jurnal Prima Edukasia*, 8(2), pp. 135–144. doi: 10.21831/jpe.v8i2.33267.
- Xi, Y., Xu, Y. and Wang, Y. (2020) 'Too-much-of-a-good-thing effect of external resource investment—a study on the moderating effect of psychological capital on the contribution of social support to work engagement', *International Journal of Environmental Research and Public Health*, 17(2), pp. 1–19. doi: 10.3390/ijerph17020437.
- Xu, Z. Z. and Qi, C. (2019) 'The relationship between teacher-student relationship and academic achievement: The mediating role of self-efficacy', *Eurasia Journal of Mathematics, Science and Technology Education*, 15(10). doi: 10.29333/ejmste/105610.
- Yehia Sayed, H. and Gaber El-Sayed, N. (2012) 'Students' perceptions of the educational environment of the nursing program in Faculty of Applied Medical Sciences at Umm Al Qura University, KSA', *KSA.] Journal of American Science*, 8(4), pp. 1545–1003. Available at: <http://www.americanscience.org>.
- Yenen, E. T. and Çarkit, E. (2021) 'Fear of COVID-19 and general self-efficacy among Turkish teachers: Mediating role of perceived social support', *Current Psychology (New Brunswick, N.J.)*, pp. 1–9. doi: 10.1007/s12144-021-02306-1
- Yuhuan, Z. et al. (2022) 'The association between academic stress, social support, and self-regulatory fatigue among nursing students: a cross-sectional study based on a structural equation modelling approach', *BMC Medical Education*, 22(1), pp. 1–10. doi: 10.1186/s12909-022-03829-2
- Zhou, L. et al. (2022) 'Perceived Social Support Promotes Nursing Students' Psychological Wellbeing: Explained With Self-Compassion and Professional', *Frontiers In Psychology*, 13(April). doi: 10.3389/fpsyg.2022.835134