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ORIGINAL RESEARCH

Stressors and Coping Strategies as Perceived among Nursing Students during Related Learning Experience (RLE)

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Abstract

Background: Stress in relation to academic studies is identified to be one of the reasons behind suicide cases in higher education institutions around the world. Locally, there is none to less studies that explored this area among nursing students. As stress is inevitable in nursing students' Related Learning Experience (RLE), recognizing the stressors that affect their quality of RLE is necessary.
Purpose: This study aimed to investigate the stressors and coping strategies that nursing students commonly use in managing stress during their RLE and their relationship to each other.
Methods: A descriptive correlational research design with total enumeration sampling was employed. A pilot-tested questionnaire was used to gather data from 191 junior and senior nursing students from two nursing schools in Iligan City. Weighted mean, standard deviation, percentages, and Spearman rho were used to analyze the data.
Results: The findings show that the "Clinical Instructor" (Mean=3.01) is perceived to cause higher stress among all the intrapersonal and interpersonal stressors identified. Students highly utilize both intrapersonal (Self-Concept Mean=3.75) and interpersonal strategies (Role Function Mean=4.13, Interdependence Mean=3.46) to cope with stress. When students' clinical "skill confusion" increases, they tend to work less with others (r=-0.259, p=0.000). When "staff nurses" cause them less stress, their use of positive "self-concept" decreases as well (r=0.152, p=0.035). Furthermore, when students are stressed with their "Duty-mates," they rely more on "physiological" coping mechanisms (r=0.160, p=0.027). When their "clinical instructor" causes them stress, they cope less with "physiological" (r=-0.237, p=0.001) and "interdependence" strategies (r=-0.317, p=0.000).
Conclusion: Among all the stressors, clinical instructor causes more stress to the students. The students' perceived stressors affect their effective use of intra and interpersonal coping strategies. Nurse educators, nursing schools and regulating bodies can consider these results in designing a holistic curriculum and helping students manage stress healthily.

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1. Introduction

The rate and level of stress and depression among students in different academic fields is alarming (El Ansari et al., 2014; Monteiro et al., 2014). For the past two years, there were approximately three completed suicide cases in a higher education institution in Southern Philippines, with one of the primary causes identified to be stress in relation to their academic studies (Mindanao State University-Iligan Institute of Technology Clinic, 2018). At present, World Health Organization (WHO) claims that more than 700,000 adolescents die to suicide yearly. For many years, it has become a serious public health concern (World Health Organization, 2023). In India, academic stress is identified to be one of the reasons behind suicide cases among students in higher education institutions (Hindustan Times, 2023). In fact, many studies associate stress to increased adolescents' risk for suicidal behavior. In the presence of stress, factors that are biologic and cognitive in nature, including personality factors, such as

being perfectionist, increase suicidal ideation and behavior (O'Connor et al., 2020; Stewart et al., 2019).

Stress is defined as a particular relationship between the person and the environment appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being (Hutmacher, 2021). However, it may be defined differently by people depending on the situation they are in (Fink, 2016). In the life of nursing students, juggling academic classes, clinical and community duties, and other responsibilities or workload, stress is inevitable. In fact, globally, nursing is considered the most challenging and stress-provoking among all other professions (Ching et al., 2020; Rayan, 2019). Many studies claimed that nursing students endure more stress from various sources than other non-nursing students (Ching et al., 2020; Tharani et al., 2017).

Several studies identified various sources of stress for students under the nursing program (Alghamdi et al., 2019; Lavoie-Tremblay et al., 2022; Milton-Wildey et al., 2014). They are summarized into academic, clinical, social, and personal stressors. Some of them claimed that academic stressors cause higher stress than all other sources which involves large bulk of workload, demanding schedules for different course subjects, exhausting course requirements that entail long hours of studying (Alghamdi et al., 2019; Lavoie-Tremblay et al., 2022; Milton-Wildey et al., 2014). Other studies include the lack of time for rest and leisure, tests, or exams in varying mode, low or failing grades, meeting deadlines and expectations (Chaabane et al., 2021; McCarthy et al., 2018).

On the contrary, several studies also claimed that students' clinical training is the highest source of stress among students (Admi et al., 2018; Ching et al., 2020; Aljohani et al., 2021; Chaabane et al., 2021). The students' clinical training or Related Learning Experience (RLE) is the core component of nursing education, as it is basically skills or practice-based, which makes nursing unique among all other professions. In the Philippines, according to the Commission on Higher Education Memorandum Order No. 14, 2009, a nursing student is required to complete 2,346 hours of RLE. This is composed of teaching-learning opportunities designed to develop the competencies of students utilizing processes in various health situations (Commission on Higher Education, 2009). However, this requirement can be stressful to the students. Their clinical training might even impact how they perceive stress on their future nursing career (Aljohani et al., 2021; Chaabane et al., 2021; Lavoie-Tremblay et al., 2022). Clinical stressors include lack of confidence in one's skills, unfamiliarity with the clinical setting, technology or equipment, fear of committing errors, patient care itself and harming the patients (Admi et al., 2018; Aljohani et al., 2021; Chaabane et al., 2021; Ching et al., 2020). Other studies include witnessing death and suffering of patients, negative relationships with clinical instructor and hospital staff, disconnection of theory from actual clinical practice, as well as the noise, smell, and crowdedness of hospitals (Al-Gamal et al., 2018; Bam et al., 2014).

Regrettably, stress can have numerous negative effects on student nurses. Stress can affect health and memory, decrease concentration or ability to focus and motivation leading to poor academic performance. Successively, decreased academic performance can lead to higher stress levels, catching the student in an unhealthy cycle of distress. It adversely affects the students' well-being and quality of life (Ching et al., 2020; Durgun Ozan et al., 2020; Lavoie-Tremblay et al., 2022; Ribeiro et al., 2018). As increased stress in the clinical area affects memory and attention, it also increases the risk of committing errors especially in drug administration, as well as decreases one's capacity to promptly recognize and address critical needs of the patients (Alvarez et al., 2019).

In general, students cannot eradicate stress, but they can reduce it, and so coping strategies is an element that helps to preserve their psychosocial well-being. It is the deliberate use of cognitive and behavioral strategies to manage internal or external demands or any stressful events. It aimed to preserve mental health by overcoming stress instead of avoiding it. These coping strategies could either be helpful or less helpful. It could bring out good results when used successfully, and psychological distress when used unsuccessfully (Lavoie-Tremblay et al., 2022; Mahomed et al., 2019).

Indeed, stress is recognized to affect the physical and psychological well-being and quality of life of nursing students. Current studies that explore stressors among nursing students were of international origin which involve diverse social, cultural, and environmental factors (Aljohani et al., 2021; Alvarez et al., 2019; Cheng et al., 2023). Internationally, a lot of studies (Admi et al.,

2018; Aedh et al., 2015; Alghamdi et al., 2019; Bam et al., 2014; Ching et al., 2020; Hirsch et al., 2018; Ismaile, 2017; Lavoie-Tremblay et al., 2022; Msiska et al., 2019; Shdaifat et al., 2018; Toqan et al., 2023) and systematic reviews (Chaabane et al., 2021; Labrague et al., 2017; McCarthy et al., 2018; Ribeiro et al., 2018) explore the various sources and levels of stress and coping mechanisms among nursing students in the many facets of their nursing education, especially in their academic and clinical trainings. Locally, only one study (Labrague et al., 2018) was found that explored stressors and coping strategies among 153 nursing students in the Northern Philippines but none in the Southern Philippines. Two other studies (Labrague, 2021; Labrague, 2022) from the same author explore stress and nursing students' coping skills during the Covid-19 pandemic in the Central Philippines. Moreover, most of the studies (Monteiro et al., 2014; Rayan, 2019) explored the influence of various factors such as demographics (age, gender, and emotion), mindfulness and self-efficacy on students' coping and stress, but none explores how stressors influence their utilization of coping strategies. Lastly, there is an increased need and urgency to conduct the study, as stress was being identified as one of the causes of completed suicides in a university in Southern Philippines. Hence, this study aimed to investigate the stressors and coping strategies that nursing students commonly used during their RLE and their relationship to each other.

2. Methods

2.1. Research design

This study used a descriptive correlational research design to describe the common clinical stressors of the selected nursing students during their RLE and their coping strategies. It is deemed to be the most appropriate design (Polit & Beck, 2022) to determine any significant relationship between the independent variable, stressors and the dependent, students' coping strategies.

2.2. Setting and samples

This study employed total enumeration sampling with a total of one hundred ninety-one (191) junior and senior nursing students. Two out of the four nursing schools in Iligan City, Southern Philippines, consented to participate in the study. One school is a government institution, while the other is a private one. The names of the participating schools would not be divulged to uphold confidentiality as per their request. The return rate was 100% from the two selected schools. The transition of the new educational system which is the K-12 curriculum resulted to the lack of second year college students. Thus, the selection of the respondents was delimited to the third- and fourth-year nursing students who were known to already have clinical exposures. They were officially enrolled during the second semester of school year 2019. These nursing students were exposed to related learning experience for an estimated 153 hours for the whole semester having four rotations each for three weeks and eight hours per day of duty. They were also at least 18 years old. First year students were excluded from the study. Students who did not complete at least four clinical rotations during the second semester of school year 2019 were also excluded.

2.3. Data collection

The researchers categorized the stressors into interpersonal and intrapersonal based on Betty Neuman's System Model (McEwen & Wills, 2019). Coping strategies were also categorized into self-concept, physiological, role function, and interdependence according to Roy's Adaptation Model (Roy, 2009). However, existing research instruments do not gather the data necessary to address the objectives of the study, which are the stressors and coping strategies of nursing students during RLE based on the two models. Hence, a researcher-made questionnaire, a Likert scale type questionnaire was used. Questions were constructed from related literatures, various books, journals, and personal experience of the authors themselves. The crafted instrument was checked by seven experts in the field for content validity. Selected subject matter experts (SMEs) in the field of study were three guidance counsellors and four nurses. The three guidance counselors have worked in the university for at least 15 years. They have conducted several studies related to stress and coping strategies of university students in general. Two nurses were Clinical Instructors and two were staff nurses who have also worked for at least 15 years in their respective fields. All of them have conducted studies related to stress and coping. The seven SMEs evaluated each item of the constructed questionnaire with content validity ratio that ranges from 0.84 to 1. Five items that did not reach at least 0.99 or above the critical value were removed. The final

questionnaire has 55 items with two parts: the first part is the identified clinical stressors, which is divided into two subsections: interpersonal and intrapersonal; and the second part is the identified coping strategies, which is also divided in another two subsections: interpersonal and intrapersonal. The students' perceived interpersonal and intrapersonal stressors and effective coping strategies were determined using a 5-point Likert Scale; 1-Never, 2-Almost Never, 3-Sometimes, 4-Most of the time, 5-Always. The respondents' answers relating to their perceptions regarding the stressors were scored as: Highly Stressor (4.25-5.00), Quite a bit of Stressor (3.43-4.24), Moderately Stressor (2.82-3.42), Some Stressor (1.81-2.81), and Low Stressor (1.00-1.80). Whereas responses regarding the coping strategies utilized by the respondents were interpreted as: Very High Coping Strategy (4.25-5.00), High Coping Strategy (3.43-4.24), Moderate Coping Strategy (2.82-3.42), Low Coping Strategy (1.81-2.81), Poor Coping Strategy (1.00-1.80). The instrument was also pilot tested to determine the questionnaire's reliability. The Cronbach's Alpha of .854 with 35 items for the clinical stressors and .840 with 20 items for coping strategies indicated that the instrument had high reliability. Demographic data on age and sex were also obtained using the instrument. Data were gathered for three months from February 18 to May 18, 2019.

2.4. Data analysis

The researchers tallied, organized, and analyzed the actual data from the respondents using the SPSS software version 19. Weighted mean, standard deviation, and percentages were used to describe the clinical stressors and coping strategies of the selected nursing students. Spearman correlation coefficient was used to determine the degree of correlation between the two variables, the stressors, and coping strategies. P-value was used to determine the significance of relationships between the independent variable and the dependent variable.

2.5. Ethical considerations

Permission was sought from the College of Nursing Research Ethics Committee to conduct the study. This is to ensure that the study was conducted as thoroughly and ethically as possible. This study was granted ethical clearance and approved by the College of Nursing Research Ethics Committee, MSU-IIT (02/16/2019). Proper communication and coordination were done with and through the Deans of the selected Nursing Schools in Iligan City, the Clinical Coordinators, and College Evaluators. After the study was approved, the respondents were informed about the study in complete detail before obtaining their consent. They were assured that they would have full confidentiality throughout the study and data obtained would not be disclosed elsewhere, except for the intended study and certainly would not be used against them. The respondents were provided an opportunity and enough time to ask questions, which have been answered to the best of the researchers' ability. Therefore, the individuals have not been forced to give consent. It was freely given by the students who volunteered to participate in the study.

3. Results

3.1. Demographic characteristics of the respondents

A total of 191 nursing students completed the questionnaire with 100% return rate. As portrayed on Table 1, the majority of them are females, which accounts 76%, while males comprise only 24%. The respondents were at least 19 years of age; more than half (61%) of them were 21-22 years old while the rest (39%) were 19-20 years old.

Table 1. Frequency distribution of the respondents according to age and gender

Characteristics	Frequency (f)	Percentage (%)
Gender		
Female	146	76.4
Male	45	23.56
Age (year)		
19-20	70	36.65
21-22	121	63.35

3.2. Perceived intrapersonal stressors of nursing students during RLE

Table 2 portrays the intrapersonal stressors that commonly caused or increased nursing students' stress level during their RLE subcategorized into knowledge insufficiency, fear of clinical area, and skills confusion. As depicted in the table, intrapersonal stressors are considered by the respondents as some stressor or rarely caused them stress. Most students revealed that being not certain with the protocols in the clinical area and the etiology and disease condition of the patient causes them some stress under Knowledge Insufficiency category. Under Fear of the Clinical Area, the handwritings in the patient's chart that are difficult to read and understand give them moderate stress. Being unable to systematically perform a certain procedure as presented in the book or following the procedures manual also give them moderate stress, under Skills Confusion.

Table 2. Perceived intrapersonal stressors of nursing students during RLE

Stressors	Mean	(SD)	Interpretation
Intrapersonal			
Knowledge Insufficiency	*2.43*	*.846*	*Some Stressor*
Not certain with the protocols in the clinical area.	2.57	.830	Some Stressor
Not certain with the procedures I'll be performing to my patient.	2.53	.839	Some Stressor
Not certain with the etiology and disease condition of my patient.	2.57	.764	Some Stressor
Not certain with the drugs of my patient	2.52	.863	Some Stressor
Not certain with my general and specific objectives before going to duty	1.97	.934	Some Stressor
Fear of Clinical Area	*2.73*	*0.984*	*Some Stressor*
Worried with certain protocols of the hospital	2.79	1.055	Some Stressor
Worried with the location of equipment and drugs in the clinical setting	2.69	.965	Some Stressor
Worried with the location of the respective wards or departments of the hospital	2.39	.898	Some Stressor
Worried that the institution is not conducive for learning.	2.37	.953	Some Stressor
Worried that the handwritings in the patient's chart are difficult to read and understand	3.41	1.047	Moderately Stressor
Skills Confusion	*2.66*	*0.902*	*Some Stressor*
Not able to systematically perform a certain procedure as presented in the book or manual.	2.91	.907	Moderately Stressor
Not able to follow the prioritization of the problems identified in my nursing care plans.	2.77	.888	Some Stressor
Not able to apply and perform all the interventions listed on my nursing care plans.	2.57	.797	Some Stressor
Not able to check and evaluate my patient's condition adequately after doing nursing interventions and medications are given.	2.50	.945	Some Stressor
Not able to anticipate the need of my patient in accordance with his/her situation	2.54	.972	Some Stressor

3.3. Perceived interpersonal stressors of nursing students during RLE

Table 3 shows the interpersonal stressors that caused or increased students' stress level during their clinical exposure subdivided into staff nurses, duty-mates, clinical instructor, patients, and significant other/s. Similar with intrapersonal, these interpersonal stressors caused students some stress. It can also be noted that the Clinical Instructor factor is considered a moderately stressor, which causes students higher stress among all the other identified stressors with the highest mean of 3.01. One of the circumstances that very often gives them stress is when their clinical instructor converse or scolds them in a loud tone of voice. Under Staff Nurses factor, students identified that situations like when the staff nurses offer them an opportunity to perform a procedure without their clinical instructor knowing it give them moderate stress. Likewise, unable to answer or satisfy patient and/ or their SOs on any of their queries caused moderate stress.

3.4. Perceived intrapersonal and interpersonal coping strategies during RLE

Table 4 depicts the coping strategies that the respondents commonly used to manage stress during their clinical exposures, categorized into intra- and interpersonal. Students recognized

coping strategies involving Self-Concept, Physiological care, Role Function, and Interdependence to be effective and helpful in managing and dealing stress during their RLE. They very often employ all the identified strategies or consider them High Coping strategy, except for Physiological which they only consider a Moderate Coping strategy.

Table 3. Perceived interpersonal stressors of nursing students during RLE

Stressors	Mean	(SD)	Interpretation
Interpersonal			
Staff Nurses	*2.70*	*0.941*	*Some Stressor*
To establish rapport to the staff nurses	2.59	.859	Some Stressor
To approach the staff nurses	2.51	.876	Some Stressor
When my concerns and queries are not entertained by the staff nurses	2.77	.917	Some Stressor
When I do not know who the staff nurses on-duty during my shift are	2.79	.974	Some Stressor
When the nurses offer me an opportunity to perform a procedure without my clinical instructor knowing it	2.85	1.078	Moderately Stressor
Duty-Mates	*2.33*	*1.049*	*Some Stressor*
To establish rapport with my duty mates	2.10	1.161	Some Stressor
To coordinate and/or collaborate with my duty mates.	2.09	1.022	Some Stressor
When I do not know who my duty mates are	2.27	1.095	Some Stressor
When I cannot accomplish any task(s) with my duty mates	2.55	1.034	Some Stressor
When I cannot gain knowledge and skills from my duty mates	2.63	.930	Some Stressor
Clinical Instructor	*3.01*	*1.090*	*Moderately Stressor*
When my clinical instructor is present during a procedure I am performing	2.85	1.116	Moderately Stressor
When my clinical instructor converse with me in a loud tone of voice	3.39	1.225	Moderately Stressor
When my clinical instructor has high expectation of me	3.24	1.102	Moderately Stressor
When I cannot gain knowledge and skills from my clinical instructor	2.85	.942	Moderately Stressor
To approach my clinical instructor	2.74	1.064	Some Stressor
Patients and significant other/s	*2.79*	*1.056*	*Some Stressor*
To build rapport with my patients and their significant others	2.63	1.072	Some Stressor
To approach my patient(s) and/or their significant other(s)	2.60	1.114	Some Stressor
If whether my patient and their significant others accept me as their primary care provider	2.86	1.059	Some Stressor
When I am not able to provide comfort to my patient(s) and/or their significant other(s) just when they needed most	2.79	.990	Some Stressor
When I am not able to satisfy the queries related to their situation by the patient(s) and/or significant other(s)	3.06	1.047	Moderately Stressor

Most of the students prefer to take a break on their vacant time during RLE to manage stress. They expressed that praying before starting their day and sleeping, as well as crying when they feel tired or burned-out from stress highly helped them intra-personally. They are less likely to take vitamins and other supplements, as well as do not have enough time for exercise as other means to manage stress. In terms of interpersonal coping, most of them conveyed (1) listening attentively during hospital orientation, (2) reviewing the concepts and practice the procedures learned before reporting to duty, and (3) expressing or sharing their concerns to their families, friends, and duty-mates to be of great help to them.

3.5. Relationship between stressors and coping strategies (both intrapersonal and interpersonal)

As illustrated on Table 5, among all the Intrapersonal stressors only Skill Confusion has significant relationship with interdependence under Interpersonal Coping strategy, since its *p*-value of 0.000 is less than 0.01 level of significance. Furthermore, the Spearman's correlation coefficient r of -0.259 indicates a low degree of correlation. This means a significant negative relationship between Skill Confusion and Interdependence of Interpersonal coping strategy.

During student nurses' RLE, increased Skill confusion (interpersonal stressor) lead to decreased Interdependence (interpersonal coping).

Table 4. Perceived intrapersonal and interpersonal coping strategies of nursing students during RLE

Coping Strategies	Mean	SD	Interpretation
Intrapersonal			
Self-Concept	*3.75*	*1.128*	*High Coping Strategy*
Pray before starting my day and before going to sleep.	4.15	1.170	High Coping Strategy
Engage in recreational activities.	3.61	1.123	High Coping Strategy
Cry whenever I feel burned out/tired due to stress.	3.50	1.289	High Coping Strategy
Self-talking, reinforcing positive feedback.	3.71	1.008	High Coping Strategy
Self-awareness exercises and over-come my weaknesses by means of meditation.	3.80	1.049	High Coping Strategy
Physiological	*3.39*	*1.219*	*Moderate Coping Strategy*
Sleep adequately and take nap(s) daily	3.58	1.107	High Coping Strategy
Take a break during my vacant time	3.89	1.028	High Coping Strategy
Eat my meals three times a day and eat snacks	3.59	1.228	High Coping Strategy
Take vitamin supplements every day	2.95	1.348	Moderate Coping Strategy
Do exercise at least 30 minutes a day	2.94	1.386	Moderate Coping Strategy
Interpersonal			
Role Function	*4.13*	*0.855*	*High Coping Strategy*
Collaborate with my duty mates and refer endorsements accordingly.	4.19	.917	High Coping Strategy
Listen attentively during hospital orientation.	4.42	.734	Very High Coping Strategy
Review the concepts and practice the procedures learned Before reporting duty.	3.97	.900	High Coping Strategy
Formulate a plan of care for my patient and anticipate any possible events during my care.	3.99	.888	High Coping Strategy
Evaluate patient's condition after the nursing interventions and medication administration	4.07	.834	High Coping Strategy
Interdependence	*3.46*	*1.230*	*High Coping Strategy*
Express/ share my concerns to my duty mates	3.66	1.038	High Coping Strategy
Express/ share my concerns to my Clinical Instructor	3.30	1.290	Moderate Coping Strategy
Express/ share my concerns to the staff nurses	2.92	1.427	Moderate Coping Strategy
Express/ share my concerns to my friends	3.71	1.154	High Coping Strategy
Express/share my concerns to my family	3.72	1.241	High Coping Strategy

Table 5 also summarizes the Spearman's Correlation test results between Interpersonal Stressors' variables on Staff Nurses, Duty-Mates, Clinical Instructor and Patients and Significant others, and the respondents' identified Coping Strategies. The results portray that in all the factors under interpersonal stressor, Staff Nurses has a significant relationship with Self-Concept (intrapersonal coping); with r=0.152 and p=.035 tested at 0.05 confidence level. This implies a weak positive correlation between staff nurses and self-concept.

Also, Duty-mates with r=0.160 and p=0.027 tested at 0.05 confidence level and Clinical Instructor with r=-0.237 and p=0.001 tested at 0.01 confidence level, were both significantly correlated with Physiological coping strategy (intrapersonal). This indicates that Duty-mates, an interpersonal stressor, is positively correlated to Physiological coping strategy, an intrapersonal coping, while, the interpersonal stressor, Clinical Instructor, has a negative relationship with Physiological coping strategy of nursing students.

Clinical Instructor also has a significant moderate negative correlation with Interdependence, an interpersonal coping, with r=-0.317 and p=.000 tested at 0.01 confidence level, as perceived by the respondents during their RLE duty in the hospitals.

Table 5. Relationship between stressors and coping strategies (both intrapersonal and interpersonal)

Stressors		Coping Strategies			
		Self-Concept	Physiological	Role Function	Interdependence
Intrapersonal					
Knowledge Insufficiency	Correlation Coefficient	-.108	.084	-.083	-.127
	Sig. (2-tailed)	.136	.246	.255	.081
Fear of Clinical Area	Correlation Coefficient	-.037	.012	-.071	-.134
	Sig. (2-tailed)	.607	.872	.328	.064
Skill Confusion	Correlation Coefficient	-.070	-.007	-.110	-.259
	Sig. (2-tailed)	.339	.927	.130	.000*
Interpersonal					
Staff Nurses	Correlation Coefficient	.152	.016	-.070	-.015
	Sig. (2-tailed)	.035**	.826	.334	.832
Duty-Mates	Correlation Coefficient	-.030	.160	-.077	-.110
	Sig. (2-tailed)	.679	.027**	.290	.128
Clinical Instructor	Correlation Coefficient	.074	-.237	-.055	-.317
	Sig. (2-tailed)	.312	.001*	.450	.000*
Patients and Significant Others	Correlation Coefficient	.023	-.027	-.108	-.117
	Sig. (2-tailed)	.757	.712	.136	.106

*Correlation is significant at the 0.01 level (2-tailed).
**Correlation is significant at the 0.05 level (2-tailed).

4. Discussion

This study aimed to investigate the stressors and coping strategies that nursing students commonly used in managing stress and their relationship to each other. It has been portrayed that all the identified intrapersonal and interpersonal stressors were perceived to be “some stressor” by the respondents, except for the interpersonal stressor Clinical Instructor, which is perceived to be “moderately stressor”. This implies that this interpersonal stressor caused more stress than all the other stressors identified by nursing students. Similar findings of Shdaifat et al. (2018) point out that nursing students experience a moderate level of stress because of their teacher and nursing staff, peers, daily life, and taking care of patients. Moreover, a study in the Arab American University yielded the same results that identify teachers and nursing staff as the main stressors of nursing students in their first clinical training (Toqan et al., 2023). A phenomenological study among Malawian nursing students revealed that a lecturer who interacts in a “policing manner” induces more stress (Msiska et al., 2019). These students shared that the intimidating and unfriendly way of supervising them arouses stress, which causes them to commit mistakes more. They feel threatened whenever their teacher approach them and starts asking questions or shouts at them when doing procedures or committing errors. Because of the way their lecturers approach them, they feel nervous and avoids them. This poor lecturer-student relationship affects the clinical experience and learning of the students (Msiska et al., 2019). Students who experienced stress in the practice settings because of their teachers felt embarrassed, belittled, and stupid (Al-Qerem et al., 2021).

The instructor’s role in assisting student nurses to reach professional excellence is very important. In the same study conducted at Shiraz University of Medical Sciences (Shiraz, Iran) most of the students had the perception that their instructors have a more evaluative role than a teaching role. The clinical instructor or mentors can play an important role in student nurses' self-confidence, promote role socialization, and encourage independence which leads to clinical competency. A supportive and socializing role was identified by the students as the recommended function of a mentor. Nursing faculties can also help meet student needs by acknowledging their

complaints of heavy workloads and extra assignments, offering supportive services. The results of this study highlight the necessity of building a more connected, healthy, and positive teacher-learner relationship especially in the clinical setting. This entails the need for continuing professional education among educators that enhances their relational competence as well as effective supervision of students in the clinical practice setting (Msiska et al., 2019).

As to the utilization of coping strategies, results revealed a "High Coping Strategy" utilization of both the intrapersonal and interpersonal strategies, except for Physiological, an intrapersonal coping strategy. According to Roy (2009), Physiological coping strategy pertains to the way a person responds as a physical being to the stimuli from the environment. The goal of this coping strategy is primarily geared towards physiological integrity. It basically means that one must attend to his physical bodily needs to establish individual coping against stressors. Students may be able to benefit from this coping strategy through activities that facilitate proper physiological functioning such as eating healthy foods and instituting adequate rest and sleep patterns. Similar results were observed in the study of Toqan et al. (2023), that revealed a combination of problem-solving and avoidance, both of which are interpersonal, as well as optimism which is an intrapersonal coping strategy were occasionally utilized by students to manage stressors. While transference behaviors like feasting a deep sleep, relaxing by watching TV, taking a shower, exercise, etc. have low impact on their stressors. However, a study among nursing students in Najran University in Saudi Arabia yielded a contradicting result such that transference or shifting stress to leisure activities like sleeping, listening to music, watching movies, or sports was the most frequently employed coping strategy (Aedh et al., 2015).

Furthermore, among all the coping strategies identified in this study, role function was found to be utilized the most. It is defined by Roy (2009) as the primary, secondary, or tertiary roles that a person performs in the society. Being aware of one's role enables an individual to accomplish tasks effectively. Students establish role function coping by being thoroughly competent in their role as a care provider. Attentively listening to nursing endorsements, participating in hospital orientations, reviewing concepts and procedures before going to duties, and the like increase student's sense of preparedness and confidence to attend clinical duties and do their role as care giver. Bodys-Cupak et al. (2016) affirms that students feel less stressed when they are more confident and better prepared to perform procedures to their patients. Several studies (Ab Latif & Nor, 2019; Baluwa et al., 2021; Nebhinani et al., 2020) yield somewhat similar results that active coping skills and planning are the commonly used coping strategies among nursing students. A qualitative study also claims that actively confronting stressful situations by developing one's professional competence, reflection, observation, and learning from the experience of others, and previous mistakes helped them control stress (Rafati et al., 2017).

It was also disclosed in this study that among all the Intrapersonal stressors, Skill confusion has significant inverse relationship with interdependence under Interpersonal Coping strategy. Skill confusion can be rooted down from the lack of knowledge and professional abilities coupled with the responsibilities of patient care. A study in Saudi Arabia expressed that the lack of knowledge and skill proficiency is perceived to be the topmost stressor by students. This happens when they are not familiar with the medical terms, patient history, diagnosis, and treatment regimen (Aedh et al., 2015). The students experience more stress when they lack confidence and do not feel ready or prepared to perform a procedure towards their patients (Bodys-Cupak et al., 2016). Interdependence as defined by Callista Roy (2009), pertains to the coping strategy from forming close relationship to foster collaboration and coordination.

The results of this study imply that in the clinical setting, when the student nurse has increased stress from Skill confusion (interpersonal stressor) it can lead to decreased utilization of Interdependence (interpersonal coping). This means that when students are stressed due to poor performance during RLE, wrong intervention, or was not able to prioritize and implement nursing care plans accordingly, they work and talk less with others. On another note, when the Interdependence coping strategy is increased, it promotes collaboration and therefore decreases the Skill confusion as a stressor. This means that they collaborate and talk more with their others, their duty-mates, and assigned clinical instructor when students perform well and are less stressed. A longitudinal study among nursing students in Hong Kong shared similar findings. The lack of knowledge and lost confidence causes them frustrations, self-doubt, and heightened anxiety. The overwhelming stress from the clinical placement keeps them from working effectively with their peers. This often caused them to struggle in keeping up with their fellow

duty-mates (Cheng et al., 2023). However, these are contrary to the results of a cross-sectional study in Kelantan, Malaysia which found significant positive correlation of "stress from lack of professional knowledge and skills and ward staff" with emotional and instrumental supports as coping (Ab Latif & Nor, 2019). The contrasting results could be attributed to the differing demographics of the sample of this study and that of the study in Malaysia. Moreover, the instruments and methodologies used in the two studies were also different. This could be explored more on further studies.

Also, in all the factors under interpersonal stressor, Staff Nurses has a positive significant relationship with students' Self-Concept under intrapersonal coping. When the nursing student has a higher self-concept, it can be said that he or she will be likely to perform better; as he or she perceives himself or herself as a person who is able to provide quality care to the patients in the hospital and able to perform certain procedures and tasks (Duraku & Hoxha, 2018). Additionally, when the staff nurses have higher confidence on students performing procedures on patient care, this causes decreased stress on students. Decreased stress implies a lesser need for the self-concept coping strategy, since the students will be able to carry out responsibilities given to them by the staff nurses without fear or anxiety. The results somehow correspond with the study of Grobecker (2016), that claims that good relationships with the healthcare team, especially the staff nurses, and students' sense of belongingness in the clinical environment positively impacts students' self-concept, motivation, confidence, leading to a maximized learning. On the other hand, an unwelcoming or intimidating practice setting caused by an unapproachable, ignoring nursing staff can decrease students' sense of belongingness. This is strongly associated with increased distress among nursing students (Admi et al., 2018; Labrague et al., 2017; McCloughen et al., 2020).

Staff nurses are an integral piece of the nursing students' education process. Due to the nursing shortage, fewer staff is available to assist in the educational process. Faculty depends on staff nurses to assist them in clinical education of nursing students and often staff nurses are not given any direction on how to provide this assistance to both faculty and nursing students (Gorton, & Foss, 2017). Establishing proper communication to staff nurses aids the student nurses to perform properly in rendering care to the patient. The result of this study is somewhat in congruence with the study of Ismaile (2017), as well as the study of Al-Zayyat & Al-Gamal (2014), that staff nurses cause high level of stress among undergraduate student nurses during their clinical exposures. The lack of support and uncooperative nursing staff are the commonly identified great source of stress among the student nurses. They highlighted the need to employ appropriate strategies to improve this student-staff nurse relationship such as improving clear communication between the nursing school and affiliated hospital on students' preceptorship programs especially before the start of the students' exposure, as well as an integral part of the clinical instructors in the process.

As to the duty-mates stressor and physiological coping strategy having a positive significant relationship, when the stressor, duty mates, is increased, there will be a higher need for the physiologic coping strategies. For the student nurse to combat the stress brought about by their duty mates, the student nurses usually attend to his or her physical bodily needs. This facilitates proper physiological functioning; by this the student nurses can perform their duties well, with the ample hours of rest, balanced diet, and exercise. A healthy student nurse can provide their competent skills during their duties. The results of this study imply that an increased stressor on duty-mates necessitates an increased physiologic coping strategy. Several studies also report that problems in communication and interactions among student nurses and their groupmates during their supervised clinical or practical trainings to be a significant root of academic stress (Hirsch et al., 2018).

Lastly, the clinical instructor as a stressor has a negative significant relationship with both the physiological and interdependence coping strategies. During the clinical exposure of the student nurses, the clinical instructor has their own expectations and requirements to be complied with, therefore causes increased stress to the students on duty. In this study, the more the Clinical Instructor becomes a stressor, the lesser is the utilization of physiologic coping strategy by the student nurses. This is because the time that should be spent for eating, sleeping, taking a break and the like will be more likely spent on completing requirements and improving patient care to meet the instructor's expectations (Guro & Buenavidez, 2023).

When the interpersonal stressor, clinical instructors, causes students more stress, they utilize Interdependence coping strategy less. This means that they share concerns less with each other when they are stressed by their instructor. When the instructor's approach or expectation/s cause them stress or pressure, it can lead them to focus their full attention on their individual patients to meet deadlines and these expectations. When the stress brought upon by the Clinical Instructor increases, the team dynamics is also affected as well as the ability of the group to perform their nursing responsibilities efficiently and effectively as a team (Delawala, 2020). Various studies affirm these results such that over dedication to academic studies and inefficient management of stress adversely affect their quality of life, social and family relationships (Quah, 2014). It also harmfully impacts the student nurses' sleep, mood, affinity, and ability to perform some physical exercise, their over-all physiological and mental health (Hirsch et al., 2018). Ismaile (2017) also attributes the stress brought about by their teachers to unclear or undefined expectations from both sides. Setting of clear learning objectives and outcomes for each clinical duties will help resolve and prevent instructors from having unrealistic and unconstructive expectations from their students.

5. Implications and limitations

The findings of this study imply the need for the nursing educators to reflect on what role and attitude they have when supervising students during their RLE, whether more of the strict, non-approachable, non-accommodating or the other way around. A balance of imposing appropriate discipline in the right tone and timing in the clinical area and the provision of the much-needed support, and a clinical environment conducive for learning will better help students manage stress during the RLE. As stress is known to have various impact on the academic performance and quality of life of the students, this result highlights the importance for the nursing administrators to consider and regularly monitor student feedback when it comes to what causes them stress. This study also has implications also for nursing administrators as well as nursing regulating bodies to review the current curriculum and consider the inclusion of programs and strategies that help students manage stress more efficiently especially in their RLE. Effective curriculum should offer students quality nursing education but should not cause them stress that could compromise their academic performance as well as over-all quality of life.

This study has limitations. It is purely descriptive and correlational; hence no direct causal relationships can be drawn from the findings. Great insights on nursing students' stressors and coping during their RLE can be derived from the study, nonetheless. Also, the instrument used was a researcher-crafted one which has only undergone content validity. Appropriate psychometric tests of construct validity should be done for it to be widely used for future studies. Lastly, although the study employed total enumeration sampling, data were gathered from only two out of three schools in Iligan City who gave consent. Upscaling the sample size could enhance generalizability.

6. Conclusion

This study concludes that stressors are inevitable and integral in nursing students' related learning experience. All intrapersonal and interpersonal stressors experienced by the nursing students rarely cause them stress except for the Clinical Instructor. The impact of Clinical instructor causes more stress to the students among all other stressors. Responding to and confronting these stressors resulted to high intrapersonal and interpersonal adaptive coping utilization among these students. The current study only describes the common stressors and coping strategies of nursing students as well as its significant relationship. Further studies on other factors such as demographic data, effectiveness of various coping techniques and existing stress management programs are recommended.

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Author contribution

All the authors contributed in the conceptualization, review of related literature, data collection and analysis, writing of the manuscript and approved the final output. GSR repackaged the manuscript for publication approved by the rest of the authors.

Conflict of interest

There is no conflict of interest for all the authors of this study.

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