

COMPARATIVE ANALYSIS OF ACADEMIC SELF-EFFICACY &
PSYCHOLOGICAL DISTRESS AMONG PUBLIC & PRIVATE SECTOR
NURSING STUDENTS IN PESHAWAR, KP

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Abstract

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Introduction: According to the previous literature, self-efficacy has an important role in individual's performance. In the academic context, academic self-efficacy is a crucial factor which enhanced the student's academic performance and reduced psychological distress. **Aim:** This survey aimed to study the association between academic self-efficacy and psychological distress among undergraduates particularly nursing students of public and private institutions. **Method:** The analytical cross sectional study was carried out from July till November 2025, involving n=288 nursing students from five public and private nursing colleges in Peshawar, KP, by using convenient sampling technique. The GSES and K-10 Scales were used to assess ASE and PD. Analysis of the collected data were done through SPSS version 27. Pearson's correlation was applied to identify the association between ASE and PD. While Independent sample t-test assess the differences on based of variables (ASE and PD), demographics and types of institutions. **Results:** Most of nursing students had high to moderate ASE with a slight difference in mean T score GSES of public (28.9568) and private (28.0604). The ASE had a weak positive association with PD having $r=0.017$ and $P=0.769$. The average T Score PD Scale for public was (29.1295) for private (27.2685). In term of gender, ASE was approximately same with a slight difference in mean score (28.1235, male) and (28.9683, female) while PD (27.2716, male) and (29.3175, female). **Conclusion:** Academic self-efficacy

and psychological stress are weakly positive correlated but not statistically significant. Psychological distress was slightly higher in public than private nursing students and in terms of Gender the female students also reported higher psychological distress than males. Strategies to increase Academic self-efficacy and academic performance as well as ameliorate psychological distress.

INTRODUCTION

In the continually changing healthcare setting, the significance of professional in the field of nursing has grown meaningfully. Nurses are engaged in activities organized to provide care to patients; these activities demand updated academic knowledge and clinical skills in order to be at pace in the field of medical care [7]. In this process, they come across various obstacles, including hard course work, patient clinical practice and professional requirements. The key to their success is the principle of self-efficacy, a psychological construct that would determine a person in his ability to do something and reach a goal [1].

Among the various theories that aim to explain the processes that derive and regulate behaviour, Social cognitive Theory is absolutely one of the most prominent. On the basis of Social Cognitive theory of Albert Bandura. It is commonly acknowledged that self-efficacy has a critical role in determining motivation and learning capacity [2]. Additionally, it is crucial in controlling stressors that ultimately affect how people behave and perform [3]. It is the Notion that students can improve their Academic Self Efficacy (ASE) by putting psychological struggle with the help of their family, peers, and teachers in an educational setting [2].

Academic self-efficacy is the term used in the educational setting to describe the confidence of student's in their capacity to tackle academic difficulties [4]. It includes trusting in multiple domains such as learning efficacy, self-regulatory efficacy and academic achievement. This considerably influences their career success and academic results [5]. In a broader sense, ASE refers to convictions about one's capability to perform particular educational and career behaviors. Since ASE is considered a major impact of student learning in the 21st century, identifying the factors influencing students' self-efficacy is a major concern for researchers and educators. It has been demonstrated that academic self-efficacy has a major impact on aspirants and performance [5]. Nursing education is extremely challenging, in spite of its importance. Students are frequently come in contact with psychological distress, such as stress, anxiety and depression, when stabilizing theory and clinical practice. Academic performance and self-efficacy are adversely affected by such distress [6].

1.1 BACKGROUND

Numerous studies conducted internationally have exhibits how significant academic self-efficacy is in predicting both academic success and student maintenance. At the time of the COVID-19 pandemic, e.g. Xu et al. (2023) discussed the role of mindfulness and social support as a mediator in the formation of academic self-efficacy. According to their findings, these elements noticeably improved chines undergraduates nursing students' self-efficacy and reduced psychological distress [8]. In the same way, a study found that students' academic self efficacy in Egypt was negatively altered by higher levels of psychological distress [9].

Furthermore, there is a concerning and well-documented prevalence of psychological distress among Medical and nursing students in a diversity of international settings. Research shows that people

who are more psychologically distressed typically perform worse academically than people who are less distressed [10]. According to a study it was discovered that psychological distress was much more prevalent among Egyptian undergraduate medical students, with 59% of them reporting high levels of stress. This is consequently, resulted in higher rates of anxiety (73%) and depression (65%). According to a study conducted in 2017, 442 medical students at Fayoum University in Egypt constantly had high estimates of anxiety (64.4%) and depression (60.8%) [11].

These results highlighted that psychological stress has adverse effects on educational attainment. Specifically, distress can lower students' confidence, reduced their academic self-efficacy, and eventually impair their performance. Planning interventions to maximize students' academic performance and mental health thus needed an understanding of the components that either promote or undermine self-efficacy.

In the south Asian context, recent data of 2024 from Pakistan has also presented that undergraduate nursing students' self efficacy is positively correlated with their academic performance and quality of life [12]. The results show that self-efficacy tends to increase as students advance through their academic careers, which is important. Therefore, self-efficacy is a dynamic trait which varies with time and can be affected by previous experiences in learning institutions, institutional resources and individual coping mechanisms.

1.2 Problem Statement

While the critical role of Academic Self-efficacy and its relationship with psychological distress among nursing students have been explored by previous studies – particularly under clinical settings and during the COVID-19 pandemic. Such conclusions tended to be narrowly based on particular areas of stress, as opposed to the overall institutional environment within which the students are learning. It is interesting to note that the relative effect of various institutional setting, including public and private nursing colleges in Khyber Pukhtunkhuwa, on the academic self-efficacy and psychological distress among students has not been investigated yet. Given the substantial disparities in resources, academic pressure and support system between public and private institutions. These relationships are imperative in the determination of specific interventions that can be used to improve the well-being and academic achievement of students in different learning environments.

1.3 Rationale

Although there was a clear lack of research on comparison of academic self-efficacy and psychological stress within the local context. This research also investigated the Nursing student's Academic Self-efficacy and Psychological distress in institutional context which was not significantly identified in previous studies. Besides, the current research might help nursing educators to develop effective strategies to increase self-efficacy thus contributing to academic success and preparing students to effectively practice their profession.

1.4 Research Objectives were

- Assess the relationship between academic self-efficacy and psychological distress among nursing students in public and private institutions of Peshawar, KP.
- Compare the difference between academic self-efficacy and psychological distress among nursing students of Peshawar, KP.

1.5 Research Questions

- What is the relationship between academic self-efficacy and psychological distress among nursing students in each institutional group in Peshawar, KP?
- Is there a significant difference in academic self-efficacy and psychological distress among nursing students of public and private institutions in capital of KP?

1.6 Operational Definitions**1.6.1 Academic Self-Efficacy**

The degree of self-assurance that a learner holds on his or her ability to effectively accomplish scholarly activities and meet the school requirement is tested. The evaluation was done with the help of Generalized self-efficacy scale, where scores were produced by the perceived competence of the student in the academic environment [13].

1.6.2 Psychological Distress

The degree of perceived stress, anxiety or depressed mood that limits day-to-day functioning was measured. Assessment is done through K-10 scale which was a validated measure of the level of psychological distress in the past one month [14].

1.7 Significance

The importance of the study is based on the fact that it contributes to a broader perspective in the knowledge of the mental health of nursing students. Learning more about their mental health is crucial because academic achievement, clinical competency and overall student retention are all strongly correlated with mental health. The research findings may help academic administrators and educators identify the main stressors and difficulties that nursing students face. Based on this information, they can create focused plans and support systems that will boost academic self-esteem, foster resilience and lessen stress. The current study focuses on population that is often exposed to high academic standard and mental pressure. The current study attempts to update the foundation of productive and accommodating learning environment, which is necessary factor in making of capable and emotionally strong future healthcare practitioners.

1.8 Summary

The current study examines the relationship between academic self-efficacy and psychological distress in nursing students of public and private institutions in Peshawar, Khyber Pakhtunkhwa. In today's modern healthcare environment, nursing students face very intensive academic and clinical requirement, which may affect their self-esteem and psychological health. The term Self-

efficacy, is the ability of individual to perform confidently and reach to their goal. This term self-efficacy is one of the deceive factor behind motivation, the outcome of learning, and stress coping strategies based on the work of Bandura and Social cognitive theory (1977). The empirical data provided in the international setting highlighted the fact that the increase in self-efficacy is associated with the high level of academic achievements as well as reduced psychological distress. While a study conducted nationally explored that small amount of stress that is Eustress can also affect Self-efficacy and was positively correlated with student academic achievements. The psychological distress factors [negative stress, anxiety, depression] have been negatively influenced the student's academic performance. However, not many studies have been able to explore the impact of institutional differences on these factors in the local area of Peshawar.

LITERATURE REVIEW

2.1 Introduction

This chapter explored different studies on academic self-efficacy and its relationship with psychological distress among nursing students and the phenomena associated with it. Assessment of the current reflection of data available on academic self-efficacy among students of nursing and correlation with psychological distress from local, national and international context had done by a descriptive review method. This section initiate with a common overview of literature about academic self-efficacy and psychological distress across the world specifically.

2.2 Review Method

A descriptive method of review was adopted to analyze relevant studies published between 2021 and 2025. Research articles were selected from credible databases, focusing on cross-sectional and quantitative studies , that specifically involved nursing students of different regions globally. These studies examined factors contributing to students' academic self-efficacy and its impact on academic performance as well as psychological distress of nursing students.

2.3 Objectives of literature review

- To explore recent Global and national literature on Academic self-efficacy and Psychological distress among nursing students.
- To highlight gaps in the current literature and the importance of Academic self-efficacy in different aspects of nursing students.
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2.4 Search Strategy

Key words used in systematic search were academic self-efficacy, Psychological distress , academic performance, factors affecting self -efficacy and motivation. Latest search engines used included PubMed, Google Scholar, CINHALL and Science hub. The existing publications were selected for the study on the basis of inclusion and exclusion criteria. Articles focusing on correlation of academic self-efficacy and psychological distress were prioritized in literature review. Recent

researches from 2020 to 2025 were decided to be the part of prevailing studies to have an updated data according to the current situation.

2.5 Introduction

Nursing students come across several problems in both academic and clinical settings due to challenging nature of their profession. They often experience psychological distress, anxiety and even panic episodes during their training and clinical practice. To cope with these stressors, self-efficacy serves as a crucial mental resource that provides motivation, confidence, and flexibility. A resilient sense of self-efficacy enables nursing students to manage their workload more effectively and adapt to complex clinical situations.

Numerous studies, conducted nationally and internationally, have explored the significance of self-efficacy in enhancing performance, reducing stress, and accomplishment of total health across various educational and professional settings.

A research conducted in the United Arab Emirates to study the relationships between worldwide self-esteem, academic self-efficacy, and academic accomplishment among 255 first-year college students aged 17–21, predominantly UAE nationals. Using the Rosenberg Self-Esteem Scale and an Academic Self-Efficacy Scale, data were analyzed through confirmatory factor analysis and structural equation modeling [15]. Results explored a statistically significant positive correlation between self-esteem and academic self-efficacy ($r = 0.45$) and a strong association between academic self-efficacy and academic achievement ($r = 0.61$), however negative self-esteem showed weak, non-significant relationships.

A study on 88 first-year medical students at Vardhman Mahavir Medical College and Safdarjung Hospital in New Delhi to determine psychological distress, general self-efficacy, and psychosocial adjustment. Using the GHQ-12, the General Self-Efficacy Scale, and the Pre-adolescent Adjustment Scale, the study discovered that 39.7% of pupils experienced psychological distress, with a slightly higher rate among females (41.6%). Psychological distress had a substantial negative correlation with self-efficacy ($r = -0.384$), implying that lower self-efficacy was associated with greater discomfort. Furthermore, 19.3% of students reported maladjustment toward college and 9.1% toward teachers, emphasizing adjustment issues that first-year medical students confront [16].

A research titled "Academic success is more about self-efficacy than the frequency of using the learning management system," explored the significance of psychological factors and online behavior on academic performance among 310 first-year health psychology students [17]. The findings indicated that academic self-efficacy was a strong positive predictor of student outcomes, while a lack of motivation was negative predictor. In contrast to much of the current literature on learning analytics, objective indicators of student engagement with the Learning Management System (LMS)—including login frequency, participation in discussion boards, and resource access—did not serve as direct predictors of academic achievement. This conclusion highlighted the importance of adaptable psychological factors over the mere frequency of LMS use. It suggests that efforts to enhance students' confidence and decreasing amotivation might be more essential for improving results than merely encouraging the use of the system.

The Indonesian research titled “*Relationship between Self-Efficacy and Psychological Distress with Readiness for Online Learning Among Nursing Students*” (Malaysian Periodical of Medicine and Health Science) explored the influence of psychological distress on nursing students’ self-efficacy and preparedness for online learning. By employing a quantitative cross-sectional approach, researchers gathered data from 500 students across three universities using online surveys, specifically the Kessler Psychological Distress Scale (K10) and the Online Learning Self-Efficacy Scale (OLSES)— both of which demonstrated high reliability ($\alpha = 0.89$). The results indicated that increased psychological distress was inversely correlated with self-efficacy and online learning readiness, whereas higher self-efficacy correlated with improved readiness. The research highlights the effect of COVID-19 on students’ mental well-being and emphasizes the importance of enhancing self-efficacy and providing psychological support for successful online learning. [18]

In an extensive cross-sectional study, Explaining variance in self-efficacy among adolescents: the association between mastery experiences, social support, and self-efficacy, research investigated factors associated with general self-efficacy in 9,221 Norwegian adolescents aged 13–16 years. Using sequential multivariate linear regression, the researchers found that mastery experiences—specifically “feeling in control” ($\beta = 0.25$) and “feeling useful” ($\beta = 0.16$)— were the strongest predictors, explaining the largest portion (10.7%) of the variance in self-efficacy. Although significant weaker positive association ($\beta = 0.06$) was found between social support from friends and parents respectively. The final model recorded 25% of the total variance in self-efficacy, emphasizing the importance of personal success experiences in forming adolescents’ beliefs about their abilities, as well as the more limited role of supportive social networks [19].

Furthermore, A study at the Psychology Scientific Research Institute in Azerbaijan to adapt the School Climate Questionnaire (SCQ) for Azerbaijani adolescents and investigate its relationship with psychological distress, academic self-efficacy, and mental well-being. Using a cross-sectional design with 1,204 participants aged 11–17, the adapted SCQ demonstrated strong validity and reliability. Results showed that an encouraging school climate can reduced psychological distress and able to enhance academic self-efficacy and mental health. Furthermore, psychological distress and academic self-efficacy mediated the relationship between school climate and mental well-being, indicating that raising a supportive school environment can enhance students’ mental health and educational outcomes [20].

A recent investigation conducted and published in BMC Medical Education explored the intricate connections among psychological distress, social support, mindfulness, and academic self-efficacy among 227 nursing students in China using structural equation modeling. The findings explored mental distress had a detrimental negative effect on academic self-efficacy, conversely social support and mindfulness contributed positively, accounting for 88% of the total indirect effect ($B = -0.132$). The model demonstrated excellent fit indices (RMSEA = 0.042, GFI = 0.977, TLI = 0.954). The findings underscore the critical of emotional support and mindfulness interventions in improving the academic self-efficacy of nursing students, suggesting that fostering such attributes could be beneficial in educational settings [8].

A descriptive correlational study was conducted at Assiut University in Egypt , investigators studied the relationship between academic Self-efficacy and psychological distress among 400 undergraduate students drawn from six faculties through the Kessler Psychological Distress Scale (K-10) and an Academic self-efficacy Scale (ASE). The findings showed that nearly one-third of respondent reported very high and high levels of Psychological distress (35.25% and 33.25% respectively) , whereas 72.0% of students reported moderate level of academic self-efficacy. Although the correlation between academic self-efficacy and psychological distress was non-significantly negative ($r = -0.061$) and ($p = 0.222$). The researchers interpreted that, despite the observed negative trends, psychological distress did not significantly predict lower self-efficacy and recommended implementing of psycho-educational and counseling interventions to help reduce distress and boost the academic self-efficacy of students [21].

A research conducted to explore the association between Academic self-efficacy, academic commitment, and learning outcome among 611 university students in Yemen using structural equation model. The study found that Academic commitment and learning outcome both are significantly influenced by academic self-efficacy, whereas Academic commitment directly improves Learning outcome and partially mediates the Academic self-efficacy-Learning outcome relationship. The study also figured out significant differences in Academic self-efficacy, academic commitment, and learning outcomes by age, gender, and academic level. Findings emphasize the vital role of self-efficacy and engagement in improving academic performance in a challenging academic context [22]. A recent analytical cross-sectional study conducted in Multan, Pakistan, among 308 undergraduate nursing students from both public and private colleges investigated the correlation between academic Self-efficacy and academic outcomes. Using a validated Academic self-efficacy Scale, the investigators found that most students reported relatively low levels of Self-efficacy (mean score $\approx 105.79 \pm 22.63$) and that self-efficacy tended to increase with academic year. The implication was that students with higher self-efficacy beliefs were more likely to determine superior academic performance and also reported enhanced quality of life [7].

MATERIALS & METHODOLOGY

3.1 Introduction

The 3rd chapter of this research provides detailed knowledge about materials and methodology of the study. The chapter comprised of explanation regarding research design , purpose and objectives, study population , sample size , inclusion and exclusion criteria , data collection tools , procedure of data collection, ethical consideration , data entry and data analysis procedure done to find out statistics.

3.2 Hypothesis

- Null Hypothesis: There is no significant variance between academic self efficacy & psychological distress among public and private nursing students, Peshawar KP.
- Alternate Hypothesis: There is a significant difference between academic self efficacy & psychological distress among public and private nursing students, Peshawar KP.

3.3 Materials and methods

3.3.1 Study Design

Cross-sectional comparative study design was used to conduct this study.

3.3.2 Study Setting and Population

Public & Private institutions in Peshawar, KP i.e. LRH, KTH, Global college of Nursing , Al-Shahama, and RCN is our study setting where nursing students of final year(8th semester) were the study population.

3.3.3 Study Duration

The research was conducted in 5 months of duration starting from 7th July, 2025 till November 2025.

3.3.4 Sampling Technique

This study used a non-probability, convenience sampling technique to collect data from public and private undergraduate's nursing students. Convenience sampling technique was chosen due to its time limitation, easy accessibility and the willingness of participants to respond. This method was used because it allowed us to collect data from a relevant and easily accessible group of nursing students without random selection.

3.3.5 Sample Size

The calculated sample size was 288. It has been calculated by Rao soft software (Online sample size calculator) using 95% confidence error, 5% marginal error and 1076 the total population of nursing students in all nursing institutes of Peshawar kp.

3.3.6 Selection Criteria

3.3.6.1. Inclusion Criteria:

Final year students of Generic BSN (4th year) from both public and private institutions (i.e. LRH, KTH, Global college of Nursing , Al-Shahama, and RCN) were included.

3.3.6.2. Exclusion Criteria:

Students on academic leave and who were not agreeable to participate in our research were excluded from the study.

3.3.7 Data Collection Tool:

Data was collected through an online adopted questionnaire, which included:

- Demographic details
- Type of institution
- Academic Self-Efficacy related questions of Generalized Self-efficacy (GSE) scale
- Psychological distress assessment scale K10 survey

To assess the Academic self-efficacy, GSE scale generated by Jerusalem, M. & schwarzer, R. [13] (1995) had been used. The scale consists of 9 items, each rated on a 4-point Likert scale ranging from 1 (Not at all true) to 4 (exactly true). Cronbach alpha value of Generalized self-efficacy scale was between 0.76 & 0.90) and Kessler psychological distress (K-10) developed by Kessler, R.C., Andrews, G., Colpe, . Colpe et al (2002) [14]. The scale includes 10 items that assess non-specific psychological distress based on emotional states experienced over the past 30 days. Each item is rated

on a 5 point Likert scale from 1 (Never) to 5 (Always). (Cronbach's alpha 0.89) The questionnaire consists of three sections, one was informed consent and the other two was GSE and K-10 survey of academic self-efficacy and psychological distress.

3.3.8 Data Collection Procedure:

After taking written approval from college principal of mentioned colleges, an online informed consent (as attached in Annexure) was taken from the students.

After consent data were collected using online structured questionnaire that was taken from Schwarzer, R., & Jerusalem, M. (1995) and Kessler, R.C., Andrews, G., Colpe, et al (2002). GSE scale consists of 9 questions and K-10 scale is of 10 questions with 4 Likert scale points. These scales were used to determine Academic self-efficacy and Psychological distress of public and private nursing students. Confidentiality of information obtained from the students along with other ethical consideration has been ensured during the course of research.

Data were collected through online questionnaire in soft form from students.

3.3.9 Ethical Consideration:

Approval for the data was taken from the Director of RCN, while approval in LRH, KTH, Global college of nursing and Al shahama was taken from their respective principal. An informed consent was presented and administered to each participant in online questionnaire for his/her agreement, as a participant. Anonymity was guaranteed to all the participants. The whole data was confidential and only primary data collectors and supervisors' had access.

3.3.10 Data Analysis:

Data was entered and analyzed by using SPSS latest version. Mean, Standard deviation, Frequencies, and percentages of all variables were calculated. Additionally, for categorical variables frequency and percentages were calculated, and for continuous variables mean and standard deviations were calculated. Categorical variables were presented through pie chart and bar chart. For association between Academic self efficacy and psychological distress Pearson correlation was applied. And for Comparison of Variables between public and private nursing students Independent t-test was applied.

Results

4.1 Demographic variables

This chapter is about the result of the study. This contains the descriptive as well as inferential statistics analysis of the data.

4.1.1 Gender

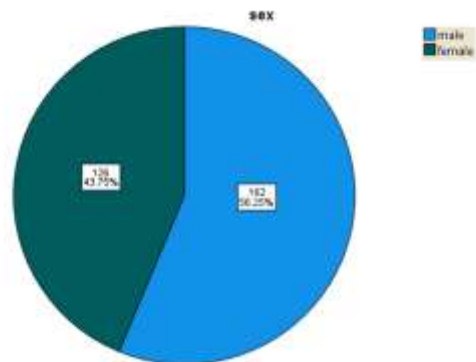


Figure 1: gender

Regarding gender 162 (56.25%) were **males** whereas 126 (43.75%) were **females** as shown in the above figure.

4.1.2 Marital Status

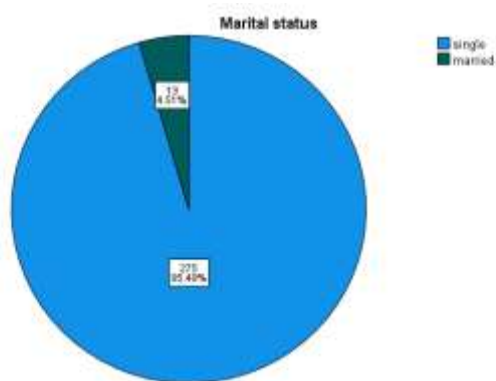


Figure 2: marital status

The pie chart shows two categories: Single and married. so the majority (about 95.49%) were single and the rest (4.51%) were married.

4.1.3 AGE

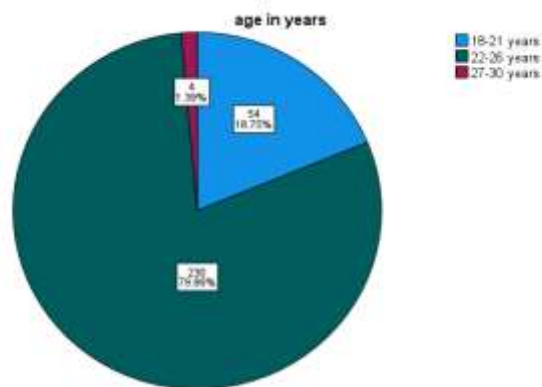


Figure 3 AGE

The pie chart indicates three sections representing different age groups. The largest section (79.86%) represents participants aged 22-26 years. The second largest section (18.75%) represents participants aged 18-21 years and the smallest section (1.39%) represent participants aged 27-30 years.

4.1.4 Academic Performance

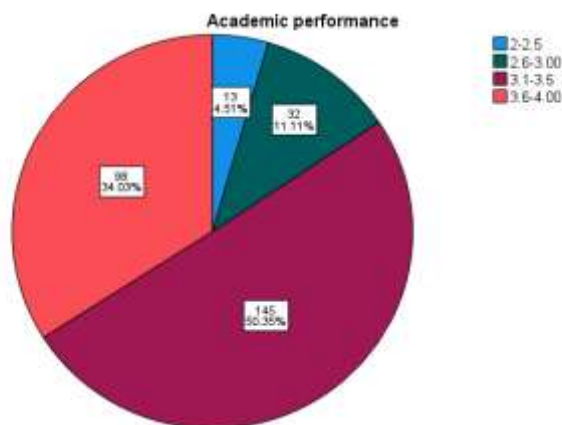


Figure 4 Academic Performance

Regarding the academic performance of nursing students, measured in terms of CGPA, the data is divided into four sections. The largest section, (50.35%) represents students with a CGPA ranging from (3.1-3.5).The second largest section, at (34.03%) falls within the (3.6-4.0) range. The third section, at (11.11%) covers the (2.6-3.00) range, and the smallest section, at (4.51%) represents students with a CGPA from (2-2.5).

4.1.5 Types of institution

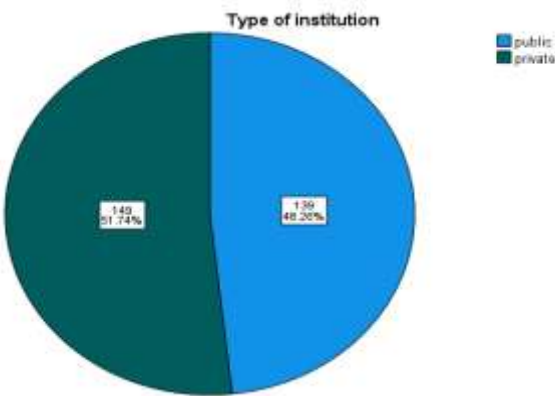


Figure 5 Types of Institution

Regarding the type of institutions the figure above shows two categories. The first category, representing **public institutions**, accounts for about (48.26%), while the second category, representing **private institutions** accounts for about (51.74%).

4.1.6 Year of Study

The participants involved in the study was fourth year (8th semester) nursing students.

4.2 Scales

4.2.1 Scale#01: Generalized Self-efficacy Scale (GSES)

Section-01	Categories	Frequency	Percentages
1. I can always manage to solve academic problem if I try hard enough.	1. Not at all true	16	5.6
	2. Hardly true	40	13.9
	3. Moderately true	91	31.6
	4. Exactly true	141	49.0
2. If someone challenges my academic opinion, I can find ways to explain or defend them.	1. Not at all true	16	5.6
	2. Hardly true	41	14.2
	3. Moderately true	103	35.8
	4. Exactly true	128	44.4
3. It is easy for me to stay focused on my academic aims and accomplished my study goals.	1. Not at all true	17	5.9
	2. Hardly true	49	17.0
	3. Moderately true	78	27.1
	4. Exactly true	144	50.0
4. I am confident that I could deal efficiently with unexpected situation in my class.	1. Not at all true	20	6.9
	2. Hardly true	49	17.0
	3. Moderately true	113	39.2
	4. Exactly true	106	36.8

5. Thanks to my resourcefulness study place, I know how to handle unforeseen situations.	1. Not at all true 2. Hardly true 3. Moderately true 4. Exactly true	28 59 124 77	9.7 20.5 43.1 26.7
6. I can solve more study problems if I invest the full necessary effort.	1. Not at all true 2. Hardly true 3. Moderately true 4. Exactly true	14 34 62 178	4.9 11.8 21.5 61.8
7. I can remain calm during exam difficulties because I can rely on my coping abilities.	1. Not at all true 2. Hardly true 3. Moderately true 4. Exactly true	30 50 98 110	10.4 17.4 34.0 38.2
8. If I am trouble, I can usually think of solution.	1. Not at all true 2. Hardly true 3. Moderately true 4. Exactly true	11 31 86 160	3.8 10.8 29.9 55.6
9. I can usually handle whatever academic challenges comes my way.	1. Not at all true 2. Hardly true 3. Moderately true 4. Exactly true	15 48 104 121	5.2 16.7 36.1 42.0

Table: 01 GSES

The above table 01 presents the results of “Generalized Self-efficacy Scale (GSES)” related to academic performance. The data is structured with a series of statements followed by the number of respondents who selected each option on a **Likert Scale** (1=Not at all true, 2=Hardly true, 3=Moderately true, 4=Exactly true). The data indicates a **high level of academic self efficacy** among the respondents, with a significant majority expressing moderate to high confidence in their abilities. Regarding statement#1 “the ability to solve academic problems with effort” , a high percentage of respondents (49.0%) agreed with “Exactly true”, while the lowest percentage (5.6%) felt it was “Not at all true”. Regarding Statement#2 “when challenged their opinion”, a significant portion of respondents (44.4%) felt they could “Exactly true” find ways to defend them. The lowest percentage (5.6%) believed this was “Not at all true”. Regarding statement#3” For staying focused on academic goals”, a majority (50.5%) found this to be “Exactly true”, while a small minority (5.9%) felt it was “Not at all true”. Concerning statement#4 “Having confidence in dealing with unexpected class situations”, the highest percentage (39.2%) responded with “Moderately true”. And the lowest percentage (6.9%0 felt it was “Not at all true”. Regarding Statement#5 “Handling unforeseen situations”, the largest group of respondents (43.1%) found it “Moderately true” that they knew how to handle them, while the smallest group (9.7%) felt it was “Not at all true”. Concerning statement#6 “When asked about solving study problems with

full effort”, a substantial majority (61.8%) said this was “Exactly true”, with the lowest percentage (4.9%) saying “Not at all true”.

Regarding statement#7 “the ability to remain calm during exam difficulties” was most often rated as “Exactly true” (38.2%), while the least common responses was “Not at all true” (10.4%). Regarding statement#8, “For thinking of solution when in trouble”, the highest percentage (35.6%) choose “Exactly true” and the lowest percentage (3.8%) selected “Not at all true”. Finally, regarding statement#9, “the ability to handle any academic challenge”, the highest percentage (42.0%) believed this to be “Exactly true”, while the lowest percentage (5.2%) selected “Hardly true”. The percentage for “Not at all true” was (5.2%) as well.

4. 2.2 Kessler (K-10) Scale

Section-2	Categories	Frequen cy	Percen tages
1. When you face academic challenges, how often do you feel tired without a clear reason?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	23 47 135 56 27	8.0 16.3 46.9 19.4 9.4
2. In stressful academic situation, how often do you feel nervous?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	22 57 110 51 48	7.6 19.8 38.2 17.7 16.7
3. When responsibilities increase, how often do you feel so nervous that nothing can calm you?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	47 75 103 46 17	16.3 26.0 35.8 16.0 5.9
4. During demanding periods of your final year, how often do you feel hopeless?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	82 69 77 40 20	28.5 24.0 26.7 13.9 6.9
5. In academic situation, how often do you feel unable to stay calm?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	51 90 93 37 17	17.7 31.3 32.3 12.8 5.9
6. In challenging tasks, how often do you feel so restless you cannot concentrate?	1. Never 2. Rarely	31 83	10.8 28.8

	3. Sometimes 4. Often 5. Always	113 42 19	39.2 14.6 6.6
7. During final-year responsibilities, how often do you feel depressed?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	51 59 108 37 33	17.7 20.5 37.5 12.8 11.5
8. When completing academic work, how often does everything feel like an effort?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	22 42 87 63 74	7.6 14.6 30.2 21.9 25.7
9. when facing setbacks, how often do you feel so sad that nothing can cheer you up?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	48 86 96 35 23	16.7 29.9 33.3 12.2 8.0
10. When dealing final-year stressors, how often do you feel worthless?	1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	73 69 84 38 24	25.3 24.0 29.2 13.2 8.3

Table: 2 SDSCALE

Based on the above table:02 , the results highlighted that a large portion of nursing students experience various form of stress and emotional challenges in academic settings. For the question about feeling tired without a clear reason during academic challenges, the highest percentage (46.9%) of respondents selected “Sometimes”, while the lowest was “Never” (8.0%). When facing stressful academic situations, the highest percentage of students (38.2%) feel nervous “Sometimes” , with the lowest percentage selecting “Never” (7.6%). Regarding feeling so nervous that nothing can calm them when responsibilities increase, the highest percentage is “Sometimes” (35.8%), and the lowest is “Always” (5.9%). In demanding periods of the final year, the highest percentage of respondents (28.5%) “Never” feel hopeless, while the lowest percentage (6.9%) “Always” feel this way.

The highest percentage for feeling unable to stay calm in academic situations is “Sometimes” (32.3%), and the lowest is “Always” (5.9%). When it comes to feeling restless and unable to concentrate on challenging tasks, the highest percentage is “Sometime” (39.2%), while the lowest being “Always” (6.6%). For feeling depressed during final year responsibilities, the highest percentage (37.5%) is sometime, and the lowest is “Never” (17.7%). When completing academic work, how often does

	N	Range	Minimum	Maximum	Std. Deviation	Variance	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
T score GSES	288	27.00	9.00	36.00	28.4931	5.12356	26.251
T score SDSCALE	288	40.00	10.00	50.00	28.1667	6.78336	46.014
Valid N (list wise)	288						

everything feel like an effort? the highest percentage of respondents (30.2%) selected “Sometimes”. While the lowest percentage (7.6%) choose “Rarely”. when facing setbacks, how often do you feel so sad that nothing can cheer you up? the highest percentage (33.3%) of respondents selected “Sometimes”, and the lowest percentage (12.2%) Choose “Often”. Lastly “when dealing final year stressors, how often do you feel worthless? the highest percentage of respondents (29.2%) selected “Sometimes”, while the lowest percentage (8.0%) choose “Always”.

4.3 Descriptive Statistics

The table number 04 below presents descriptive statistics for both variables; “T Score GSES” and “T Score SDSCALE”. N represents the number of observations of data points for each variable, which is 288 for both.

Ranger is the differences between the maximum and minimum values for each variables ; for the “T Score GSES” it is 27.00 and for “T Score SDSCALE” it is 40.00. Minimum is the lowest value recorded for each variable, (9.00) for “T Score GSES” and (10.00) for “T Score SDSCALE”. Maximum is the highest value, (36.00) for “T Score GSES” and (50.00) for “T Score SDSCALE”. Mean is the average value of each variable, with “T Score GSES” having a mean of (28.4931) and “T Score SDSCALE” a mean of (28.1667). Std. Deviation (standard deviation) measure the amount of variation or dispersion of values around the mean (5.12356) for “T Score GSES” and (6.78336) for “T Score SDSCALE”. Variance is the square of the standard deviation, representing the spread of data (26.251) for “T Score GSES” and (46.014) for “T Score SDSCALE”. Valid N indicates the

number of participants used in the analysis when considering all variables to together, which is also 288 meaning all observations were valid for both variables.

Table 4 Group Statistics

4.4 Inferential Statistics

4.4.1 Pearson’s Correlation

The below table#05 shows correlation between total score of GSES and total score SDSCALE, Karl Pearson correlation Coefficient (r) = 0.017 and P-value is 0.769. These findings showed an extremely weak positive relationship between total score of GSES and total score SDSCALE.

		T score GSES	T score SDSCALE
T score GSES	Pearson Correlation	1	.017
	Sig. (2-tailed)		.769
	N	288	288
T score SDSCALE	Pearson Correlation	.017	1
	Sig. (2-tailed)	.769	
	N	288	288

Table 5 Pearson's Correlation

4.4.2 Group Statistics:

The analysis presents a comparison of the variables “T Score GSES” and “T Score SDSCALE” between the public and private institutions using an independent Sample t-test. In the Group statistics: N: represents the number of participants in each institutions group (139 public and 149 private). Mean: indicates the average T Score GSES for public (28.9568) and private (28.0604). This suggests that the public institution group, on average has a slightly higher level of self-efficacy compared to the private institution group. The standard deviation for public institutions is 4.46057, and the standard error mean is 0.37834 and for private institutions the Standard deviation is 5.65354 and standard error mean is 0.46316. The standard error of the mean is smaller for public group, indicating that the sample mean is a more precise estimate of the population mean for this group.

Similarly the average T Score SDSCALE for public is (29.1295) and for private (27.2685). This suggests that the public institution group, on average has a higher level of psychological distress compared to the private institution group. The standard deviation for public institutions is 6.90708, and the standard error mean is 0.58585 and for private institutions the standard deviation is 6.56221 and standard error mean is 0.53760. The standard error of the mean is slightly larger for public group, indicating that the sample mean is a slightly less precise estimate of the population mean compared to the private group.

	Type institution	of N	Mean	Std. Deviation	Std. Error Mean
TscoreGSES	Public	139	28.9568	4.46057	.37834
	Private	149	28.0604	5.65354	.46316
TscoreSDSCALE	Public	139	29.1295	6.90708	.58585
	Private	149	27.2685	6.56221	.53760

Table 5 Group statistics

4. 4.3 Independent Sample T-test:

Sig, from Leven’s test for equality of variances shows significant value of (sig =0.001), which is less than 0.05. This means that the assumption of equal variances not met, so the results from the Equal variances not assumed row should be used. From this row, the t-value is 1.499, with 278.448 degrees of freedom, and the p-value (sig.2-tailed) is 0.135, which is greater than 0.05. This indicates that there is no statistically difference in the GSES T- scores between the two groups being compared. Although there is a slight difference in the mean scores between the two groups, this difference is not large enough to be statistically significant. Therefore the two groups do not differ significantly in their GSES T-scores.

For SDSCALE significant (2-tailed) values is (0.020), which is less then (0.05). This indicates that there is a statistically significant difference between the means of the two groups for SDSCALE t-score.

		Levene’s Test for Equality of Variances		T	Df	Sig (2- tailed)	95% Confidence Interval of the Difference	
		F	Sig				Lower	Upper
T Score GSES		10.760	0.001	1.487	286	0.138	-0.29027	2.08314
	Equal Variances assumed			1.499	278.44 8	0.135	-0.28083	2.07369
	Equal variances not assumed							
T Score SDSCA LE	Equal Variances assumed	0.010	0.921	2.345	286	0.020	0.29878	3.42330
	Equal variances not assumed			2.341	281.88 8	0.020	0.29589	3.42619

Table 3 Independent Sample T-test

4.5 Demographic Variables

4.5.1 Gender

	Sex	N	Mean	Std. Deviation	Std. Error Mean
TscoreGSES	Male	162	28.1235	5.80722	.45626
			28.9683	4.05352	.36112
T scoreFemale SDSCALE		126	27.2716	6.88957	.54130
			29.3175	6.49141	.57830

Table 4 Group Statistics

4.5.1.1 Group Statistics:

Regarding gender the table#07 presents a comparison of GSES and SDSCALE between male and female participants using an independent sample t-test. For GSES the sample size consisted of 162 male & 126 female, the mean GSES score for male was 28.1235 with a Std. deviation of 5.80722 and a Std. Error 0.45626 whereas female had slightly higher mean score 28.9683, with a std. deviation 0.36112 and a standard error mean 4.05352.

While in terms of SDSCALE male had a mean score was 27.2716 with a Std. deviation of 6.88957 and a Std. Error 0.54130 whereas female had slightly higher mean score 29.3175, with a std. deviation 6.49141 and a standard error mean 0.57830.

		Levene's Test for Equality of Variances		T	Df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
		F	Sig				Lower	Upper
T Score GSES		17.997	<.001	-1.390	286	0.165	-2.04074	0.35114
	Equal Variances assumed							
	Equal variances not assumed			-1.452	282.902	0.148	-1.99015	0.30055
T Score SDSC ALE	Equal Variances assumed	0.908	0.342	-2.564	286	0.011	-3.61662	-0.47509
	Equal			-2.583	275.68	-	-3.60520	-0.48651

	variances not assumed				4	2.04586		
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Table 5 Independent Sample T-test

4.5.1.2 Independent Sample T-test

The table#08 shows the non-significant results with (p vlue_0.148) in terms of GSES between male & female. And for SDSCALE the p- value is (0.011), which is less then (0.05). This indicates that there is a statistically significant difference between the means of two groups.

4.5.2 Marital Status

	Marital status	N	Mean	Std. Deviation	Std. Error Mean
TscoreGSES	Single	275	28.5709	5.12592	.30910
			26.8462	4.98073	1.38141
T scoreSDSCALE	Married	13	28.1709	6.80301	.41024
			28.0769	6.61389	1.83436

Table 6 Group statistics

4.5.2.1 Group Statistics

Regarding marital status the table #09 presents the comparison of GSES and SDSCALE between single and married participants using an independent sample t-test. For GSES single participants (N= 275) had mean score of 28.5709 with a Std. deviation of 5.12592 and a Std. Error mean of 0.30910. In comparison, married participants (N=13) had slightly lower mean score 26.8462, with a std. deviation 4.98073 and a standard error mean 1.38141.

In terms of SDSCALE, single also showed a slightly higher mean score 28.1709 with a Std. deviation of 6.80301 and a Std. Error 0.41024 compared to married had slightly higher mean score 28.0769, with a std. deviation 6.61389 and a standard error mean 1.83436.

		Levene's Test for Equality of Variances					95% Confidence Interval of the Difference	
T Score		F	Sig	T	Df	Sig (2-tailed)	Lower	Upper
GSES	Equal Variances	0.066	0.798	1.187	286	0.236	-1.13554	4.58505

	assumed							
	Equal variances not assumed			1.218	13.230	0.244	-1.32799	4.77750
T Score SDSC ALE	Equal Variances assumed	0.340	0.560	0.049	286	0.961	-3.70221	3.89018
	Equal variances not assumed			0.050	13.229	0.961	-3.95968	4.14765

Table 7 Independent Sample T-test

4.5.2.2 Independent Sample T-test

Regarding Table#10 there is Non-significant differences between single and married in terms of GSES & SDSCALE with P-value > 0.05.

DISCUSSION

5.1 Introduction

The 2nd last chapter contains the study’s findings relative to questions of the research. It also contains the reflection of these findings within the context of previous literature that have been done about same study phenomena. A comparative cross-sectional study was conducted on a sample of 288 nursing students in public and private institutes in Peshawar using convenient sampling technique. An adapted online questionnaire (GSE scale & K-10) was used for collection of research data and the data were analyzed using SPSS version 27. The results have been discussed as well as supported by previous relevant literature in this chapter .The summary concludes the whole discussion of the study findings. Strengths, recommendations, implications, and limitations of the study have been stated, as well as the future direction for further researches on the area where gaps were identified within the context of this study.

5.2 Academic Self Efficacy and psychological distress among public & private nursing students

Psychological distress is a common issue among nursing students as they face numerous challenges such as heavy workload, clinical experiences, Institutional resources, and examinations stress. These factors may influence a student’s Self-efficacy. Various demographic factors including gender, age, marital status, academic performance and especially the type of institutions can impact both academic Self efficacy and Psychological distress. Significantly, the Psychological distress is modifiable, suggesting that it can be managed and reduced through targeted strategies and interventions.

Self-efficacy and psychological Eustress has significant association related to nursing students and their academic performance. As the current study revealed a very weak positive correlation (r= 0.017) between psychological Eustress and academic self-efficacy among nursing students in both public

and private institutes. This possibly suggests that self-efficacy increases with stress called Eustress – a form of positive motivating stress that can enhance performance and focus. This shows that students with higher self-efficacy may perceive academic pressure not as a threat but a challenge, leading to better performance and goal setting. In support of this interpretation, it was observed that more than half (50.35%) of students experiencing positive stress achieved a CGPA ranging from 3-3.5, reflecting a potential link between productive stress and improved academic performance.

Our study finding was supported by a study conducted in (2024) reported the significant positive effects of stress on self efficacy through regression analysis. The study found that when students managed stress well they can act more confidently in their study skills as well as feel they are positive and learn more effectively[23]. Another study also demonstrated that stress is not a mere negative aspect; it is necessary for learning, becoming a positive aspect when it is under control [24].

However, our findings are contradicted with study that reported in (2023) who showed that there is negative and non-significant correlation between the two variables. This means that increase in self-efficacy leads to decrease in psychological distress. This finding could be due to students' high self-efficacy which enables them to reduce stress level with better academic performance than students with low self-efficacy [9].

Another study in (2025) also shows that academic self-efficacy and psychological distress both variables were negatively correlated ($p < 0.0010$). This finding reported that Self efficacy was demonstrated to mediate the relationship between psychological stress and academic performance, indicating that psychological stress lowers college student's self-efficacy, which subsequently affects academic performance [25].

In Accordance to the difference between the academic-self-efficacy among public and private nursing institutions, the present study reported that there were no statistically significant difference in academic self-efficacy of both institutions. Although there is slightly difference in mean self-efficacy of GSES of public (28.9568) and private (28.0604) showing that public students exhibited higher self-efficacy than private students. Although this difference was not statistically strong, it may reveal understated relative factors such as exposure to more challenging clinical settings and greater institutional pressure, which may positively influence self-belief in public sector students. However, the lack of a significant gap overall suggests that both groups possesses comparably strong academic self-efficacy, likely due to uniform academic structure, availability of academic resources, and same support system.

This result aligns with study in (2024), who reported no significant association of both sectors' self-efficacy at univariate level ($p=0.13$). The study suggested that significant scarcity of association was due to similar curricular content between private and public sector education [7]. Although direct comparison nursing students of public and private sector is scarce in literature, evidence from other educational settings indicates that institutional type is associated with student self-efficacy. In accordance with this, a large Chinese study (2023) found student at elite (often private) institutions had a higher general self-efficacy than their public counterparts [26].

For SDSCALE significant (2-tailed) values is (0.020), which is less than (0.05). This indicates that there is a statistically significant difference between the means of the public (29.1295) and private

(27.2685) sector nursing students for SDSCALE t-score. This is because that public nursing student's face high challenging environment in their classroom as well as in clinical rotation. Therefore they feel overwhelmed about theory and practice as compared to private nursing students.

This finding aligns with an alternate study which was conducted in King Saud University found higher level of depression, anxiety, and stress among students of private medical colleges than public medical students. They explored that private medical students have high psychological distress because of greater expectations from institute, heavy financial burden, continues student's evaluation and high academic pressure [27].

While a study in Brazil contrary to our findings explored that there is no significant difference in psychological distress of healthcare professionals of both public and private during COVID-19. This was due to similar risks, same fear of infection, emotional exhaustion, and over work during pandemic across both sectors [28].

Current study also identified the significant difference of psychological distress among male (mean score = 27.2716) and female (mean score = 29.3175). It reveals that female faces slightly higher level of stress and anxiety during academic activities and clinical practices. There is a stereotypical belief that female are more negative emotional respondents toward unpleasant experiences as compared to male.

This finding is also supported in a study conducted in 2024 that 40.7% of female and 10.3% of male students were screened positive for anxiety and depression during COVID-19. It was claimed that odd variance of psychological distress is due to minimal prefrontal action in stressful conditions enables greater efficiency in regulating negative emotions in males [29].

Similarly, a study conducted in China analyzed anxiety, depression, and stress with different results. On average, female students had significantly higher anxiety level than males in the first two years of college ($p < 0.01$), while mean scores ranging from 3.34-3.86 for females and 3.35-3.60 for males. Although there was no significant gender difference in students' average depression and stress level. In addition, given that female students may be more sensitive under stressful conditions, pressure from academic may increase their worries [30].

5.3 Summary:

This chapter highlighted that majority of students have high self-efficacy and moderate level of positive distress among both public and private institutions. This study also highlighted that the need for a strategy to ameliorate negative stress in female nursing students in order to increase their self-efficacy and academic performance more efficiently. The students with low self-efficacy indicated the need for academic support and training regarding psychological distress which affects their academic performance especially female students. Our findings also indicate mental well-being of students should be strengthened in nursing field and promote their self-beliefs in every challenge of life also.

CONCLUSION

In this study, the public nursing students reported high academic stress than private students and the self-efficacy were same in both institutions respectively. A significant weak positive correlation was found between academic self-efficacy and psychological stress (Eustress) among nursing students. Our study indicated the strategy to improves self-efficacy and reduce stress level are required for batter academic performance. Appropriate skill based training should be conducted before exposing them to hospital practices for upgrading their confidence and clinical pressure stimulation. Stress management sessions and relaxation techniques should be provided to help students cope with their real life challenges and learning difficulties. This study highlighted the need of strengthening the mental health care services at institutional level to reduce the negative stress among undergraduates nursing students.

6.1 Recommendations

- Since public sector students showed slightly higher stress level there for administrator should assess workload class environment and academic support system and make improvement where needed.
- Stress management programs should be launched in nursing institutions especially for females to improve overall well-being.
- Future research can explore the academic pressure and self-efficacy in underserved areas nursing students.
- Future researchers can simple random sampling techniques and a larger sample size to enhance the generalizability of findings.

6.2 Strengths of Study

- One of the main strength was that our study was analytical and we compared Academic self-efficacy and psychological stress among the two groups of nursing institutions (public & private).
- Another strength of our study was the sample size of 288 participants that was calculated through Roasoft calculator.
- The use of online survey also allowed students to respond freely and in comfortable environment that enhanced their feasibility.

6.3 Study Limitations

- The study was conducted through convenient sampling technique that could lead to biasness in results.
- It would be better to compare both variables (Academic Self-efficacy & Psychological distress) among all academic year nursing students.
- The study was limited to only Peshawar region and ignored the self-efficacy of nursing students in rural areas.

6.4 Implications

Following are the educational and clinical implications based on our study findings;

- Since a small amount of positive stress (Eustress) was found in nursing students , therefore nursing programs should include sessions which help students recognize and convert stress into productive motivation.
- Due to lack of resilience in some students modules on coping strategies, mindfulness, and emotional intelligence could be integrated into nursing curriculum to build resilience.
- For students with low self-efficacy, Faculty should promote academic self-efficacy by encouraging autonomy, mastery experiences, and positive feedback.
- Instead of aiming to eliminate all stress, nursing colleges should maintain balance workloads and fair evaluation system that keep students challenged but not overwhelmed.
- Since clinical practice is inherently stressful, nursing educators should encourage students with simulation base learning to stimulate clinical pressure and help students develop confidence.

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