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# DOES SELF-EFFICACY AFFECTS THE QUALITY OF LIFE; A CORRELATIONAL STUDY

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# ABSTRACT

**Background:** A high-quality education gives students a broad range of talents and the chance to excel in their future achievements within society. The purpose of the study was to evaluate self-efficacy and quality of life quality among nursing students.

**Methodology:** Using a cross-sectional descriptive methodology, the study was carried out in the nursing institutes of Khyber Pukhtankhwa between August to October 2023. With a basic random sampling procedure, 471 students made up the sample size. Data were gathered using a self-efficacy and quality of life questionnaire, and analysis was done using SPSS 20.0.

**Results:** Of the 471 participants in the survey, male made up the majority (65%) as opposed to female students (35%). The vast majority of students had a high level of self-efficacy (73%), which was followed by an average level (17%), and a very small percentage (10%) had a low level. The high self-efficacy level of Male students (48.4%), and female was (24.6%). The behavior domain mean score was high ( $4.3 \pm 1.2$ ) then outcome domain ( $3.4 \pm 0.99$ ), while the overall self-efficacy score was  $3.9 \pm 1.0$ . Quality of life of the participants was good having mean score of ( $3.6 \pm 0.57$ ), while school environment mean score in domains was high ( $3.9 \pm 0.95$ ), and psychological domain was lower ( $3.2 \pm 0.52$ ).

**Conclusion:** The study concluded that Self-efficacy is strongly associated with age and college status, while not associated with gender and nursing education program. The quality of life was significantly no difference between the groups in gender, age, program and college status. Furthermore Self-efficacy is negative weakly correlated with quality of life.

Keywords: Quality of life, health competency, self-efficacy, nursing students

# INTRODUCTION

# Background

In Pakistan's Khyber Pukhtankhwa province, nursing is the profession with the highest rate of growth. People are drawn to this noble career path since it will one day play a crucial role in the healthcare system. As of right now, the single public sector medical university is associated with 92 nursing colleges and 7 constituent institutes, a move that the academic and regulatory authorities applaud [1]. Any country can benefit from education not just to meet its basic needs but also to reduce poverty [2]. Pakistan's three parallel educational systems—Urdu-medium, English-medium, and Madrassas-have caused the country's trend toward basic education to slow down [3]. Thus, when more and more institutes opened their doors, intellectuals and experienced people began to worry that the quality would be degraded or maintained despite the growing number of organizations. Consequently, each institution started to compete with other colleges to offer their students an excellent education and to position their college as an institution that offers an excellent education. A high-quality education aims to provide students with a diverse range of abilities and the chance to excel in their future endeavors within society [4]. The role of the quality enhancement cell is becoming increasingly crucial in the present and the future in order to evaluate institutions for their operation and quality. Students learn best in a healthy atmosphere, but it's also important that they have the self-sufficiency to get over small obstacles.

Self-efficacy is the conviction that one can overcome obstacles and carry out activities effectively [5]. It is regarded as an indication of improvement for people's psychological health. The degree of self-efficacy, which is widely applied in many domains, affects the choice of tasks, the pursuit of these tasks, and the choice of exercises in challenging situations [6]. People who have a high degree of self-efficacy are able to overcome obstacles and accomplish goals by working hard to acquire the skills they need. If they don't succeed, they take it as a compliment and attribute it to not trying hard enough. Consequently, compared to those with low self-efficacy, these individuals experience less stress [7]. As they work toward their learning objectives, nursing students encounter several challenges, some of which can be stressful, such as completing tasks, managing personal responsibilities, meeting deadlines, and being in unfamiliar environments [8]. In undergraduate nursing programs, senior nursing practitioners receive training with a focus on real-world application. Enhancing self-efficacy is crucial for nursing students because their final year requirements included a comprehensive quality assessment of the employment unit, which has high expectations for knowledge, skills, and emotions related to clinical nursing work [9].

Academic motivation is particularly difficult for nursing students because of a number of internal and external circumstances, including challenges related to their personal, family, social, educational, and professional lives. The physical, mental, and social well-being of nursing students may be negatively impacted by these issues, as well as their quality of life [10]. Therefore, evaluating and enhancing the quality of life of nursing students may have an effect on their academic success, learning, and socializing. Moreover, QoL may be used by higher education policymakers as a gauge of the caliber of instruction [11].

# **Research Objective**

To explore the level of self-efficacy and quality of life among students.

# MATERIALS AND METHODS

# Study design, setting and participants.

Using a cross-sectional descriptive design, the study was carried out in the nursing institutes of Khyber Pukhtankhwa from July to September 2023. The study's setting was nursing institutes that are registered with Pakistan nursing council and affiliated with medical university of the province. Therefore, the entire student body at these institutions was regarded as the population. Using a basic

random sampling technique, the sample size was 471 students with a 95% confidence level, 5% margin of error, and 80% prevalence.

### The inclusion and Exclusion criteria

The inclusion criteria included students who were willing to participate and were enrolled in any nursing program approved by, the Pakistan Nursing Council, and the Medical University. Excluded from the study were students who were doing clinical duties, preparing for exams, were not promoted, or who were unwilling to participate voluntarily.

# **Data collection Procedure**

Following formal institute approval, the data gathering process was started. The data was gathered in three sections. The participants' demographic information made up part I, the students' self-efficacy level was determined by a checklist in part II, and the quality-of-life checklist was used in part III.

The information was gathered in two sections: the first section contained the age, gender, semester, institute status, and living status of the institute. While second section contains *self-efficacy and quality of life questionnaires*, and the second section.

### **Research Instrument**

# Perceived health competency / Self-efficacy

The first of the two instruments used in this study was the self-efficacy scale, for which we employed the Smith Perceived Health Competencies Scale. This scale consists of eight items divided into two domains: the behavioral domain and the outcome domain. Each domain contains four equal items with a 6-point Likert scale and a reliability of 0.82 [12].

Quality of life questionnaire

The Norwegian K-27 quality of life checklist was the second one; it has 27 items spread over 5 domains and a Likert scale ranging from 1 (never to 5 always), with a Cronbach alpha range of 0.73 to 0.83 [13].

#### Data analysis procedure

With SPSS 20.0, the frequency and percentages were computed for categorical data, while the mean and standard deviation were computed for continuous variables. Chi-square test was applied to identify the association of demographic variables with self-efficacy, ANNOVA was used to evaluate the difference between the groups of demographic variables with quality of life, while Pearson correlation was used for association of quality of life with self-efficacy.

#### **Ethical consideration**

Before beginning data collecting, each participant gave their informed consent, the institute's administration officially granted authorization, and the study was given the go-ahead by the ethical review committee.

#### RESULTS

#### **Demographic data of the participants**

While there were 471 participants, there were more male students (65%) than female students (35%). The majority of students were between the ages of 18 and 22 (52.2%), and private institutes had a higher percentage of students (86.4%) than did the government (13.6%) which reflects that in the province new nursing institutes are entering the students to the health care industry that will contribute to the shortage of nurses in near future. (See table 1).

Table 1: Demographic data of the participants			
Category		N-471	Percentage
Gender	Male	306	65%
	Female	165	35%
Age	18-22 years	246	52.2%
	23 - 27 years	159	33.8%
	28 and above years	66	14%
College	Private	407	86.4%
status	Government	64	13.6%
Programs	4 years BSN	377	80%
	2 Years Post-RN	70	14.9%
	MSN	24	5.1%

#### Self-Efficacy among the students

Among the total number of students (471), the majority of the self-efficacy level was high (73%), followed by an average level of self-efficacy (17%), while students with a poor level of self-efficacy had very little (10%). The behavior domain mean score was high ( $4.3 \pm 1.2$ ) then outcome domain ( $3.4 \pm 0.99$ ), while the overall self-efficacy score was  $3.9 \pm 1.0$ . (See table 2).

Table 2: Level of self-efficacy and domains			
Level of self-efficacy			
Low	47 (10%)		
Average	80 (17%)		
High	344 (73%)		
Domains of self-efficacy			
Outcome Mean ± SD	$3.4\pm0.99$		
Behavior Mean ± SD	$4.3 \pm 1.2$		
Overall self-efficacy Mean $\pm$ SD	$3.9\pm1.0$		

#### Association of self-efficacy with demographic data of the participants

The Chi-square test was applied to identify the association of demographic demo graphic variables with self-efficacy. Table 3 reveals that male students with a good level of self-efficacy was 48.4% compared to female students (24.6%). The majority of students with high self-efficacy were between the ages of 18 and 22 (41.4%), and the majority of students with high self-efficacy were enrolled in a four-year BSN program (59%). (See table 2). Self-efficacy is strongly associated with age (0.000) and college status (0.002), while not associated with gender (0.298) and nursing education program (0.284). (See table 3).

#### Table 3: Association of self-efficacy with demographic

variables					
Self-efficacy	Low	Average	High	P-value (Chi-square)	
Gender					
Male	32 (6.7%)	46 (9.7%)	228 (48.4%)	0.298	
Female	15 (3.1%)	34 (7.2%)	116 (24.6%)		
Age					
18-22 years	10 (2.1%)	41 (8.7%)	172 (36.5%)	0.000	
23-27 years	4 (0.8%)	35 (7.4%)	120 (25.4%)		
28 and above years	10 (2.1%)	5 (1.0%)	68 (14.4%)		
Program					

BSN years)	(4	37 (7.8%)	62 (13.1%)	278 (59%)	0.284
Post-Rn		10 (2.1%)	14 (2.9%)	46 (9.7%)	
MSN		0	4 (0.8%)	20 (4.2%)	
College st	tatus	5			
Private		46 (9.7%)	61 (12.9%)	300 (63.6%)	0.002
Public		1 (0.2%)	19 (4%)	44 (9.3%)	

#### Quality of life of the students

Overall quality of life among the students was  $(3.6 \pm 0.57)$  that was good, while among the domains of quality of life, the mean score of school environment was high  $(3.9 \pm 0.95)$ , followed by physical  $(3.8 \pm 0.82)$ , then autonomy and respect  $(3.7 \pm 0.83)$ , then social support and peer mean score  $(3.6 \pm 0.84)$ , and psychological domain mean score was minimum compared to other domains  $(3.2 \pm 0.52)$ . (See Table 4).

Table 4: Quality of life of Students			
Quality of life	Mean SD		
Physical domain	$3.8\pm0.82$		
Psychological domain	$3.2\pm0.52$		
Autonomy and respect	$3.7\pm0.83$		
Social support and Peers	$3.6\pm0.84$		
School Environment	$3.9\pm0.95$		
Overall quality of life	$3.6\pm0.57$		

#### Quality of life difference within the groups

ANNOVA was applied to identify the difference within the groups of demography with quality of life. Table 5 reveals that there is no difference between the groups in gender, age, program and college status of quality of life.

Table 5: Quality of life association with demographic variables						
Quality of life	Physical	Psychologic al	A&R	SSP	SE	P-value
Gender						
Male	$3.8\pm0.82$	$3.2\pm0.52$	$3.7\pm0.83$	$3.6\pm0.82$	$3.8\pm0.97$	0.870
Female	$3.7\pm0.84$	$3.2\pm0.52$	$3.6\pm0.82$	$3.7\pm0.87$	$4.0\pm0.90$	
Age						
18-22 years	$3.8\pm0.83$	$3.2\pm0.51$	$3.7\pm0.81$	$3.6\pm0.82$	$3.9\pm0.93$	
23-27 years	$3.6\pm0.77$	$3.2 \pm 0.58$	$3.6\pm0.86$	$3.6 \pm 0.81$	$3.9\pm0.95$	0.533
28 and above years	$3.8\pm0.88$	$3.2\pm0.39$	$3.7 \pm 0.81$	$3.7\pm0.99$	$4.0 \pm 1.0$	
Program						
BSN (4 years)	$3.8\pm0.82$	$3.2\pm0.54$	$3.7\pm0.82$	$3.6\pm0.80$	$3.9\pm0.94$	
Post-Rn	$3.7\pm0.76$	$3.2\pm0.46$	$3.6\pm0.90$	$3.6\pm0.93$	$4.0\pm0.89$	0.361
MSN	$3.9 \pm 1.0$	$3.3\pm0.27$	$4.1\pm0.66$	$3.8 \pm 1.1$	$3.9 \pm 1.2$	
College status						
Private	$3.8\pm0.82$	$3.2\pm0.53$	$3.7\pm0.81$	$3.6\pm0.80$	$3.9\pm0.95$	0.678
Public	$3.7\pm0.84$	$3.1\pm0.40$	$3.6\pm0.90$	$3.7\pm1.0$	$4.0\pm0.96$	

#### Correlation of self-efficacy with quality of life

Table 6 reveals that Self-efficacy is negative weakly correlated with quality of life.

#### Table 6: Correlation of QOL and self-efficacy

	Self-efficacy
Quality of life	-0.082

# Discussion

While QoL is a broader concept that looks at people's physical, psychological, and social aspects, self-efficacy among nursing students is very important because it defines how they will handle problems and attempt to achieve their objective of becoming a competent health care provider in the future. There were 471 total participants in the current study. The majority of the participants (65%) were male students. A study carried out in Iraq revealed in line ratio, with most of participants were (60.9%) being men [14]. Other research that shows that female participants were greater in number (79%), 100%, and (82.7%) than male responses opposed the selection [15, 16, 17].

In the current study, the majority of students had good high levels of self-efficacy (73%), followed by average levels (17%), and minimum number (10%) was students with low levels of self-efficacy. According to a study done in the United Arab Emirates, many BSN program students had high levels of self-efficacy (56.07), followed by moderate levels (35.5%), and poor levels (8.41%) of self-efficacy [17]. Similar to our findings that the majority of students had strong self-efficacy, Body's-Cupak et al.'s study from 2021 also found that the most of students had high self-efficacy [18]. The study by Naeem et al. report contrast to our study's findings, which showed that the majority of students had moderate self-efficacy (55.2%), high level self-efficacy (43.7%), and low level self-efficacy (1.1%) [14]. Similar findings from another study show that most participants had moderate levels of self-efficacy [19]. College students are more likely to experience mental health problems, suffer with academic pressure, and display high levels of stress as they make the journey from childhood to adulthood. This has negative effects on academic performance, social interaction, and quality of life [20, 21].

The current study found that students' overall quality of life was (3.6  $\pm$  0.57), which was good. Among the quality of life domains, the school environment had the highest mean score  $(3.9 \pm 0.95)$ , followed by the physical (3.8  $\pm$  0.82), autonomy and respect (3.7  $\pm$  0.83), social support, and peer  $(3.6 \pm 0.84)$ , and the psychological domain had the lowest mean score  $(3.2 \pm 0.52)$  in comparison to the other domains. The findings support Heng et al.'s (2021) study, which discovered that South Asian students have a higher QOL [22]. According to a Swedish study (Berman et al. 2016) [23], our results show that study participants who used the K-27 QOL questionnaire had a higher degree of QOL. The Brazilian study confirms our results that 56.8% of study participants had an excellent quality of life. Additionally, the environmental domain had the lowest mean score [24], while the social and physical domains had the highest means. Additional research also showed that 75% of nursing students in one study and 85.4% of students in another study thought their quality of life was good [25, 26]. According to Labrague et al.'s (2018) study, the participant's quality of life is average  $(3.00 \pm 0.57)$  [27]. The social domain has the highest mean score  $(2.57 \pm 1.11)$  among the domains, whereas the physical domain has the lowest mean score [27]. According to other research (Ali et al. 2015), which reports a moderate QOL among the participants, the participants' QoL was likewise average [28]. Another study (Kyranou & Nicolaou 2021) [29] found that the study participants had a low QOL.

The quality of life is weakly negative correlated with self-efficacy in the current study. Higher self-efficacy was linked to a lower quality of life, according to study results [30], which allowed researchers to investigate the impact of self-efficacy while adjusting for diseases.

# Conclusion

According to the study's findings, self-efficacy and quality of life are significant variables that are linked to social contact, physical exercise, psychological well-being, academic success, and highquality healthcare. The majority of students in the current study had high levels of self-efficacy and a decent quality of life. The study also found that self-efficacy had a weakly negative correlation with quality of life.

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### References

- 1. Bibi A, Ahmed F, Iqbal N, Sultan A. Factors That Affect the Performance of Undergraduate Nursing Students of Khyber Pukhtankhwa, Pakistan: Performance of Undergraduate Nursing Students. Pakistan Journal of Health Sciences. 2022 Aug 31:33-7.
- 2. Sivakumar, M., & Sarvalingam, A. (2010). *Human deprivation index: A measure of multidimensional poverty*. [Google Scholar]
- 3. Khan S, Ahmed F, Khan I, Sultan A. Perception of nursing students towards educational quality in Khyber Pukhtankhwa Pakistan: Perception of Nursing Students towards Educational Quality. Pakistan Journal of Health Sciences. 2022 Sep 30:188-92.
- 4. Igbinakhase I and Naidoo V. Higher Education Quality Improvement Strategies Through Enriched Teaching and Learning. InQuality Management Principles and Policies in Higher Education 2020 (pp. 246-262). IGI Global.
- 5. Abun D. Employees' self-efficacy and work performance of employees as mediated by work environment. Available at SSRN 3958247. 2021 Nov 7.
- 6. Bandura A. Self-efficacy toward a unifying theory of behavioral change. Psycholo Rev. 1977, 84 (3) :191-215.
- 7. Shorey S, Lopez V. Self-Efficacy in a nursing context. Health promotion in health care–Vital theories and research. 2021:145-58.
- 8. Aljohani W, Banakhar M, Sharif L, Alsaggaf F, Felemban O, Wright R. Sources of stress among Saudi Arabian nursing students: A cross-sectional study. International journal of environmental research and public health. 2021 Nov 14;18(22):11958.
- 9. Schwarzer R, Aristi B. Optimistic self belief s: Assessment of general perceived self efficacy in Thirteen cultures.Word Psychology. 1997,3 (1):177
- 10. Aboshaiqah AE, Cruz JP. Quality of life and its predictors among nursing students in Saudi Arabia. *J Holist Nurs.* 2019;37:200–8.
- 11. Mahdi R. Quality of university students' life (Case study: Tehran State Universities) Iran Higher Educ. 2016;7:1–26.
- 12. Xie X, Du J, He J, Liu Y, Li Z. Perceived health competence and health education experience predict health promotion behaviors among rural older adults: A cross-sectional study. BMC Public Health. 2022 Sep 5;22(1):1679.
- 13. Andersen JR, Natvig GK, Haraldstad K, Skrede T, Aadland E, Resaland GK. Psychometric properties of the Norwegian version of the Kidscreen-27 questionnaire. Health and Quality of Life Outcomes. 2016 Dec;14(1):1-6.
- 14. Naeem FS, Jasim AH. Self-efficacy for Critical Care Nurses in Al-Muthanna Governorate. Pakistan Journal of Medical & Health Sciences. 2022 Jul 2;16(05):812-.
- 15. Mei XX, Wang HY, Wu XN, Wu JY, Lu YZ, Ye ZJ. Self-efficacy and professional identity among freshmen nursing students: a latent profile and moderated mediation analysis. Frontiers in Psychology. 2022 Mar 3;13:779986.
- 16. Dadipoor S, Alavi A, Ghaffari M, Safari-Moradabadi A. Association between self-efficacy and general health: a cross-sectional study of the nursing population. BMC nursing. 2021 Dec;20(1):1-6.
- 17. Pitre S, Hanson VF, Kumardhas V. Self-efficacy among Nursing students at RAK Medical and Health Sciences University, United Arab Emirates [Internet]. Journal of Positive School Psychology; 2022 July (7) 1983-1988.
- 18. Iwona Bodys-Cupak, Anna Majda, Anna Kurowska, Ewa Ziarko and Joanna Zalewska-Puchała(2021) Psycho-social components determining the strategies of coping with stress in undergraduate Polish nursing students Bodys-BMC Nursing (2021) 20:129.
- 19. Soudagar, S., Rambod, M., & Beheshtipour, N. (2015). Factors associated with nurses' selfefficacy in clinical setting in Iran, 2013. Iranian journal of nursing and midwifery research, 20(2), 226.

- 20. Dawson AF, Brown WW, Anderson J, Datta B, Donald JN, Hong K, et al. Mindfulness-based interventions for university students: a systematic review and meta-analysis of randomised controlled trials. AP:HWB. 2020;12(2):384–410. <u>https://doi.org/10.1111/aphw.12188</u>.
- 21. Irie T, Yokomitsu K, Sakano Y. Relationship between cognitive behavioral variables and mental health status among university students: a meta-analysis. PLoS ONE. 2019;14(9):e0223310. <u>https://doi.org/10.1371/journal.pone.0223310</u>.
- 22. Heng P. H. Hutabarat F. & Lathiifah S. (2021 August). Relationship Between Spiritual Well-Being and Quality of Life Among Students in Southeast-Asia Countries. In International Conference on Economics Business Social and Humanities (ICEBSH 2021) (pp. 1097-1102). Atlantis Press. https://doi.org/10.2991/assehr.k.210805.172.
- 23. Berman A. H. Liu B. Ullman S. Jadbäck I. & Engström K. (2016). Children's quality of life based on the KIDSCREEN-27: child self-report parent ratings and child-parent agreement in a Swedish random population sample. PloS one 11(3) e0150545. https://doi.org/10.1371/journal.pone.0150545.
- 24. Moura IH, Nobre RD, Cortez RM, Campelo V, Macêdo SF, Silva AR. Quality of life of undergraduate nursing students. Revista gaucha de enfermagem. 2016 May 31;37.
- 25. Bampi LNS, Baraldi S, Guilhem D, Pompeu RB, Campos ACO. Percepção sobre qualidade de vida de estudantes de graduação em enfermagem. Rev Gaúcha Enferm. 2013; 4(1):125-32.
- 26. Sousa TF, Fonseca SA, Mororó José HP, Nanas MV. Validade e reprodutibilidade do questionário Indicadores de Saúde e Qualidade de Vida de Acadêmicos (Isaq-A). Arq Ciênc Esporte. 2013;1(1):21-30.
- 27. Labrague LJ, McEnroe-Petitte DM, Papathanasiou IV, Edet OB, Tsaras K, Christos KF, Fradelos EC, Rosales RA, Cruz JP, Leocadio M, Lucas KV. A cross-country comparative study on stress and quality of life in nursing students. Perspectives in psychiatric care. 2018 Oct;54(4):469-76.
- 28. Ali J. Marhemat F. Sara J. & Hamid H. (2015). The relationship between spiritual well-being and quality of life among elderly people. Holistic nursing practice 29(3) 128-135. DOI: 10.1097/HNP.00000000000081.
- 29. Kyranou M, Nicolaou M. Associations between the spiritual well-being (EORTC QLQ-SWB32) and quality of life (EORTC QLQ-C30) of patients receiving palliative care for cancer in Cyprus. BMC palliative care. 2021 Dec;20(1):1-1.
- Peters, M., Potter, C.M., Kelly, L. *et al.* Self-efficacy and health-related quality of life: a cross-sectional study of primary care patients with multi-morbidity. *Health Qual Life Outcomes* 17, 37 (2019). https://doi.org/10.1186/s12955-019-1103-3