

# Exploring the well-being of undergraduate nursing students and its relationship with academic performance

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## ABSTRACT

**Background:** Students in nursing are expected to maintain a healthy lifestyle and have a high quality of life due to their responsibility to care for patients and resolve many of their issues. The study was conducted with the aim to evaluate the well-being and academic performance of undergraduate students and their relationship with each other.

**Method and Materials:** An analytical cross sectional study was conducted in the ten nursing colleges of Khyber pukhtankhwa selecting as strata through stratified sampling, having 379 students from December 2022 to February 2023. Data was collected through student well-being questionnaire of well-being and students' performance through GPA. Descriptive statistic of categorical variable was analyze through frequency and percentage, while continuous variable through mean and standard deviation. Chi-square test was applied to identify relationship between well-being and academic performance through SPSS 23.0.

**Results:** The total number of participants of the study was 387, where male participants were in majority (73%) compare to female participants (27%). The academic performance of the majority of the students was best (48.5%), followed by average performers (42.7%), and poor (8.7%). In best category, the students of the 4th semester performed well (14.5%) compared to other semester students. The overall well-being of the students was best. In the well-being category the positive academic self-concept has the maximum mean score ( $3.71 \pm 0.84$ ), followed by the positive attitude towards the school ( $3.70 \pm 0.95$ ), and enjoyment in the school ( $3.67 \pm 0.80$ ). The study reveals that well-being is significant relationship (0.000) with academic performance.

**Conclusion:** That study concluded that for achieving the best academic performance the student's well-being is required to be good, but factors like high expectation of

parents and school or fear of students in failing to achieve good grades affect their well-being.

**KEYWORDS:** well-being, academic performance, nursing students, clinical practice, nursing

## INTRODUCTION

### Background

Well-being means that positive outlook on life and feeling well. There is no single word or definition in the world that measures well-being; therefore, we assess the factors that contribute to well-being i.e. quality of life, satisfaction from life, minimum negative emotions while maximum positive emotions [1]. Well-being consists of two essential components that are subjective well-being and psychological well-being. Training nursing students, promoting patient care, and resilience improve subjective well-being. So for the management of stress and improvement in psychological well-being while training the student in coping strategies and resilience [2].

In the twenty-first century, several healthcare workers have physical, psychological, spiritual, and social health issues that are linked to a wide range of illnesses, such as cancer, heart disease, stroke, mental health issues, stress, and depression, [3], and others. Positive attitudes, however, can result in the efficient management of health issues and a life that is generally healthy. A feeling of purpose in life may also encourage wholesome attitudes and raise standards of living for better health promotion.[4] Well-being and life satisfaction are also developed by a satisfying existence, pleasant feelings, positive attitudes, and positive beliefs [5, 6].

Nursing students ought to have sound perspectives, good convictions, and the abilities to ideally deal with patients. All nursing teachers need to urge nursing students to have a good way of life, good ways of behaving, and good convictions so they can be of the most extreme help in their work. A sound working environment is likewise firmly connected with nursing students' physical, mental,

profound, and social well-being [7]. Promoting the physical, psychological, spiritual, and social health of nursing students is one way to improve subjective and psychological well-being [8]. Students in nursing are expected to maintain a healthy lifestyle and have a high quality of life due to their responsibility to care for patients and resolve many of their issues. Nursing students can make a significant contribution to alleviating patients' problems by using their skills in physical, psychological, spiritual, and social health promotion. Additionally, nursing students frequently deal with issues that can affect a patient's life or death. In addition, nursing students ought to have the specific professional skills they need to care for a wide range of patient types [9].

Nursing students should give attention to their well-being that will support them to sustain their good health before handing other patients health because they are the future of the nursing profession [10]. During clinical placement, students lose time for leisure due to study requirements and difficult assignments, which harms their physical and mental health as well as their ability to think critically and solve problems [11]. Unhealthy behaviors not only affect nurses but also affect nursing students which leads to the risk of diseases and early death, as we already face a shortage of nurses [12]. Well-being plays a vital role in the decision-making process of nurses and nursing students to stay in the nursing profession, and it is revealed by several published studies.

### Research Question

1. What are the level of well-being and academic performance of nursing students?
2. What is the relationship between well-being and academic performance?

### Research Objective

1. To determine the level of well-being and academic performance of the students and their association with each other.

## MATERIALS AND METHODS

### Study design and setting

A cross-sectional analytical study design was used for the study that was conducted from December 2022 to February 2023. The study was carried out in the ten public and private institutions of Khyber Pakhtunkhwa that were selected as "strata" through a stratified random sampling method. In Khyber Pakhtunkhwa around 92 nursing

establishments are subsidiaries of Khyber medical university, for registration and monitoring the nursing institutes have required to register with the "Pakistan nursing council" the sole body of the country.

### Study participants

The participant of the study was undergraduate nursing students that were enrolled in any institute that was selected as strata. The total number of students was 379 that were finalized through Epi info using a 95% confidence level, having a 5% margin of error and 80% prevalence.

### The inclusion and Exclusion criteria

The inclusion criteria for the study were students who enrolled in the four-year nursing program at the selected institute and were prepared to be voluntary participants of the study. Students who were absent on data collection day and those who are not willing to participant in the study was excluded from the study.

### Data collection Procedure

Permission was taken from the head of each institute to approach their students for data collection. Then the purpose and procedure of the study were explained to each participant. Upon the agreement that their data will be used solely for data analysis, confidentiality will be maintained and they can leave the study anytime then written informed consent was obtained from each participant in the presence of their respective representative of the institute. A face-to-face interview was conducted using a study questionnaire to collect data from students to facilitate a smooth process. Data from 250 students were collected using a survey questionnaire.

The data was a collection in two portions, the first part contain the age, gender, semester, institute status, and living status of the institute while the second portion contain the student *well-being questionnaire* (SWBQ).

### Research Instrument

#### *Student's well-being questionnaire*

The (Hascher T 2007) *student well-being questionnaire* (SWBQ) was used for data collection. The questionnaire contains six dimensions and 34 items on a 6-point Likert scale from never to very frequently. The six dimensions are divided into positive and negative dimensions. The score of 3 or below in each dimension is considered low well-being, while the score between 3 and 3.5 is considered average well-being. Scores of 3.5 and above are considered high wellbeing.

The first three dimensions are positive, while the remaining three are negative.

1. Positive attitude toward the school (PAS) (8 items)
2. Physical complain in School (PIC) (6 items)
3. Positive academic self-concept (P-ASC) (5 items)
4. Social problems in school (SPS) (5 items)
5. Worries in School (WIS) (5 items)
6. Enjoyment in school (EIS) (5 items)

The questionnaire was already tested for validity and reliability, having a Chronbach alpha score of 0.70 [13].

### **Academic Performance**

The academic performance of the students was divided into three categories based on GPA.

- Best performance: 3.41 GPA and above
- Average performance: 2.81 to 3.40
- Poor performance: 2.80 and below

### **Data analysis procedure**

The entire set of data used in this study was analyzed using SPSS 22.0 statistical software. Standard deviations (SDs), frequencies, averages, and percentages were all included in the data analysis to describe the study sample as descriptive statistics. A chi-square test was applied to identify the association between (two categorical variables) academic performance and students' well-being.

### **Ethical Consideration**

The individuals were voluntarily involved in this project and confidentiality was maintained in all the responses. The introduction to the questionnaire includes a statement outlining the goals, plans, and uses for the data. The study was approved by the ethical review board, while permission was taken from each institute for data collection.

## **RESULTS**

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

In this study, the total number of participants was 379, where the majority of the participants were male (73%) compared to female participants (27%), and the mean age was  $21.74 \pm 1.8$ . The number of students in semester 5<sup>th</sup> was in the majority (30.1%), followed by the students in semester 2<sup>nd</sup> (25.6%), the students in semester 4<sup>th</sup> (25.3%), and the 7<sup>th</sup> semester students (19%) (See table 1).

**Table 1: Demographic data of the participants**

Characteristics	Categories	Frequency (379)	Percentages
Gender	Male	278	73 %
	Female	101	27 %
Age		$21.74 \pm 1.8$	
Status	Private	357	94 %
	Government	22	6 %
Semester	2 <sup>nd</sup> semester	97	25.6 %
	4 <sup>th</sup> semester	96	25.3 %
	5 <sup>th</sup> semester	114	30.1 %
	7 <sup>th</sup> semester	72	19 %
Living in	Village	250	66 %
	City	129	34 %

### **Well-being of the students**

Table 2 illustrates that the positive academic self-concept has the maximum mean score ( $3.71 \pm 0.84$ ), followed by the positive attitude towards the school ( $3.70 \pm 0.95$ ), and enjoyment in the school ( $3.67 \pm 0.80$ ).

In the category of PAS, the majority of the students well-being was good (58.9%), in PIC, the majority of the students well-being was low (44.7%); in PASC, the maximum number of students well-being was good (75%); in the first negative domain (SIS), the majority of the students were in the low category (47.9%); in WIS, a higher number of students were in the average category (37.6%); and in EIS, a higher number of students were in the good category (69.7%).

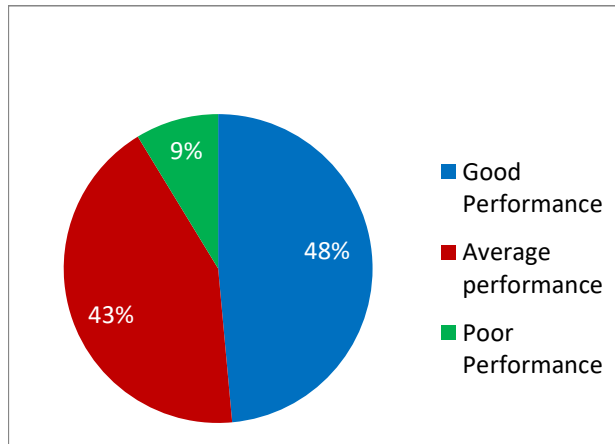
Table 2 reveals that in the first three positive domains, student's well-being was good except in the category of PIC, while in the three negative domains, student's well-being was good and average except in SPS average except in SPS. (See table 2).

### **Academic Performance of the study participants**

Figure 1 shows that in academic performance, the majority of the students' performance was best (48.5%), followed by average performers (42.7%), while a minor number of students performance was poor (8.7%). (See figure 1).

**Table2: The overall well-being of the participants**

Students Well-being	Low	Average	Good	Mean ± SD
Positive attitude toward the school (PAS)	9 (2.4%)	148 (38.9%)	222 (58.9%)	3.70 ± 0.95
Physical complain in School (PIC)	170 (44.7%)	162 (42.6%)	47 (12.4%)	2.96 ± 0.79
Positive academic self-concept (PASC)	16 (4.2%)	78 (20.5%)	285 (75%)	3.71 ± 0.84
Social problems in school (SPS)	182 (47.9%)	150 (39.5%)	47 (12.4%)	2.93 ± 0.74
Worries in School (WIS)	106 (27.9%)	143 (37.6%)	130 (34.2%)	3.24 ± 0.97
Enjoyment in school (EIS)	13 (3.4%)	101 (26.6%)	265 (69.7%)	3.67 ± 0.80



**Figure 1: Academic performance of the students Academic performance based on gender and semester basis**

In the category of best performance, the number of male students was high (41.4%) than female students (7.1%). In the average category, the male students were in majority (25.3%) compare to female participants (17.4%). Furthermore, in poor performance, the female students were in minimum number (2.1%) compare to male participants (6.5%). That shows that males outclassed females as were the best and average performance while females perform well in the poor category compared to male students.

Table 3 illustrates that in the best category, the students of the 4th semester performed well compared to other semester students (see Table 3).

**Relationship between well-being and academic performance**

Table 4 reveals that the overall student’s well-being was positively significant to academic performance, while in categories the PASC, SPS, WIS AND EIS were significant with the academic performance of students.

**Table 3: Academic performance of the participants**

Academic Performance	Best	Average	Poor
Male	157 (41.4%)	96 (25.3%)	25 (6.5%)
Female	27 (7.1%)	66 (17.4%)	8 (2.1%)
2 <sup>nd</sup> semester	46 (12.1%)	24 (6.3%)	27 (7.1%)
4 <sup>th</sup> semester	55 (14.5%)	41 (10.8%)	0 (0 %)
5 <sup>th</sup> semester	51 (13.4%)	60 (15.8%)	3 (0.7%)
7 <sup>th</sup> semester	32 (8.4%)	37 (9.7%)	3(0.7%)

**DISCUSSION**

In the current study, the number of total participants was 379, where the number of male participants were in majority (73%) compared to female participants (27%).

In this study the maximum number of students' performance was good (48.5%), followed by average performers (42.7%), while a small number of students' Performance was poor (8.7%). The findings are alike to a study that shows that the higher number of students was good (79%), then average (19%), and poor performance (2%) [14]. While another study shows different findings where the maximum number of student's academic performance was low [15].

A crucial objective of sustainable development is to improve the well-being of children and young people [16]. In the current study, the maximum number of students' well-being was good. A study's results were alike to our study which shows that the majority of their study well-being was high [14]. In the present study among the dimension of well-being positive academic self-concept has the maximum mean score (3.71 ± 0.84), followed by the score of positive attitude towards the school (3.70 ± 0.95), and enjoyment in the school (3.67 ± 0.80). Another study reveals different from our findings that Spiritual

**Table 4: Relationship between students well-being and academic performance**

Students Well-being		Academic Performance			Sig
		<i>Best</i>	<i>Average</i>	<i>Poor</i>	
(PAS)	<i>Low</i>	6	3	0	0.48
	<i>Average</i>	65	68	15	
	<i>Good</i>	113	91	18	
(PIC)	<i>Low</i>	83	73	14	0.071
	<i>Average</i>	87	61	14	
	<i>Good</i>	14	28	5	
(PASC)	<i>Low</i>	16	0	0	0.000
	<i>Average</i>	19	50	9	
	<i>Good</i>	149	112	24	
(SPS)	<i>Low</i>	82	92	8	0.000
	<i>Average</i>	79	46	25	
	<i>Good</i>	23	24	0	
(WIS)	<i>Low</i>	62	32	12	0.000
	<i>Average</i>	70	52	21	
	<i>Good</i>	52	78	0	
(EIS)	<i>Low</i>	4	9	0	0.020
	<i>Average</i>	57	41	3	
	<i>Good</i>	123	112	30	
<i>Overall well-being</i>					0.000

well-being ranked the highest, followed by psychological, physical, self, and social well-being [16]. In this study social worry scored the lowest, which demonstrates that the student of this study was not worried about social interaction therefore the majority of the student's academic performance was good. Students, who have limited social role, restrict the student from interacting with other students and teachers which decrease the level of boldness among the students and at last affect their academic performance of the student. Another study finding is different which shows that student social well-being was second last. Another study reveals that social well-being was mentioned: as encompassing social self, which, in contrasting conditions, can likewise be viewed as a distinctive individual's social role [17]. Furthermore having a serious level of social prosperity, higher studies will have the important information and abilities to have the option to communicate with others all the more decidedly which could, fortify their academic performance [18, 19]

In this study, there some factors which affect the well-being are worries in the school of students regarding high grades and position, and an approach towards enjoyment in

relationship (0.000), while in categories the positive academic self-concept (*PASC*), social problems in school (*SIS*), worries in school (*WIS*) and enjoyment in school (*EIS*) shows a significant relationship with academic performance. Similarly, a meta-analysis conducted by Kaya and Erdem revealed that academic achievement was positively influenced by general well-being [22]. Another study that was a systematic review yielded similar findings. They discovered that studies examining the connection between academic achievement and well-being among students aged 10 to 14 found a positive relationship [23]. Similarly, a meta-analysis suggested a connection between higher academic achievement and positive well-being ( $r = 0.16$ ); however, due to the weak relationship, they were unable to draw firm conclusions from it [24]. Further studies also explore that academic performance and well-being have a relationship and they affect each other [14].

The current study explores that the majority of the student's well-being was high, and therefore the academic performance of the maximum number of students was high. The result is reliable with the aim stated earlier.



## CONCLUSION

The study was conducted to identify the well-being and academic performance of nursing and their relationship with each other.

The study found that the overall academic performance of nursing students was best, while the majority of the student's well-being was good, while the high expectation of the institute and parents, certain activities that lead to enjoyment within the institute affect the academic activities of the students. The well-being was a significant relationship (0.000) with the well-being of the students. Furthermore, the categories of positive academic self-concept (*PASC*), social problems in school (*SIS*), worries in school (*WIS*) and enjoyment in school (*EIS*) show a significant relationship with academic performance. That reveals that for achieving the best academic performance the student's well-being is required to be good.

## LIMITATION

Using a stratified sampling technique may affect the results; therefore random sampling technique with a maximum number of students would be required. The study was conducted in one province which could affect the generalizability of the study. The study only addresses 4 years nursing program students so studies that include the students of further programs may change findings.

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