



## THE ACADEMIC PERFORMANCE AND WELL-BEING OF UNDERGRADUATE STUDENTS; A CROSS-SECTIONAL STUDY.

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### ABSTRACT

**BACKGROUND:** Nursing students are expected to live a healthy lifestyle and have a high quality of life because they are responsible for caring for patients and resolving many of their problems. The study's goal was to assess undergraduate students' well-being and academic achievement, as well as their relationships with one another. **METHOD AND MATERIALS:** From December 2022 to February 2023, an analytical cross-sectional study with 379 students was undertaken in the ten nursing colleges in Khyber Pukhtankhwa using stratified sampling. Data was acquired using a student well-being questionnaire and student performance via GPA. Descriptive statistics for categorical variables were examined using frequency and percentage, while continuous variables were examined using 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 in the study was 387, with male participants outnumbering female participants 73%. The academic performance of the majority of the students was best 48.5%, followed by average performers 42.7%, and poor 8.7%. In the best category, students of the fourth 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

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### INTRODUCTION

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<sup>1</sup>. 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<sup>2</sup>.

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,<sup>3</sup> 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.<sup>4</sup> Well-being and life satisfaction are also developed by a satisfying existence, pleasant feelings, positive attitudes, and positive beliefs<sup>5, 6</sup>.

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<sup>7</sup>. Promoting the physical, psychological, spiritual, and social health of nursing students is one way to improve subjective and psychological well-being<sup>8</sup>. 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<sup>9</sup>.

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<sup>10</sup>. 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<sup>11</sup>. 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<sup>12</sup>. 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 analytic study was used for the study, which ran from December 2022 to February 2023. The study was conducted in ten public and private institutions of Khyber Pakhtunkhwa which were selected as "strata" using stratified random sampling method. . In

Khyber Pakhtunkhwa, approximately 92 nursing facilities are subsidiaries of Khyber Medical University, for registration and monitoring, nursing facilities have compulsorily registered with "Pakistan Nursing Council", the only body of the country.

### **Study participants**

The study participants were undergraduate nursing students who were enrolled in any institution that was selected as a stratum. The total number of students was 379 completed through Epi info using a 95% confidence level, with a 5% margin of error and 80% prevalence.

### **Inclusion and exclusion criteria**

The criteria for inclusion in the study were students who enrolled in a four-year nursing study program at a selected institute and were ready to become voluntary participants in the study. Students who were absent on the day of data collection and those who did not want to participate in the study were excluded from the study.

### **Data collection procedure**

Permission was received from the head of each institute to approach their students for data collection. The purpose and procedure of the study were then explained to each participant. Upon agreement that their data would be used exclusively for data analysis, confidentiality would be maintained, and they could withdraw from the study at any time, after which written informed consent was obtained from each participant in the presence of their respective institutional representative. 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 questionnaire survey. The data was collected in two parts; the first part includes age, gender, semester, institute status and institute living status, while the second part includes the Student Wellbeing Questionnaire SWBQ.

### **Research Instrument**

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

The questionnaire was already tested for validity and reliability, having a Chronbach alpha score of 0.70<sup>13</sup>.

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

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 well-being.

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

**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.

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 %

**Academic Performance of the study participants**

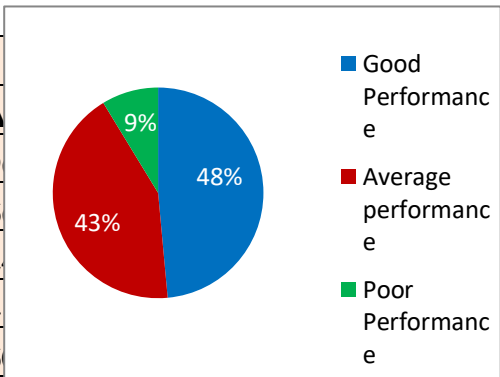
Figure 1 shows that in academic performance, the majority of the students' performance was best 48.5%, followed by average performers 42.7%, while a minor number of students performance was poor 8.7%. See figure 1. Figure 1: Academic performance of the students

**Academic performance based on gender and semester basis**

Table 2 illustrates that in the best category, the students of the 4th semester performed well compared to other semester students see Table 2.

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.

Academic Performance	Best	Average	Poor
<i>Male</i>	157 41.4%	9 9.7%	6 6.5%
<i>Female</i>	27 7.1%	6 6.5%	2 2.1%
<i>2<sup>nd</sup> semester</i>	46 12.1%	2 2.1%	2 2.1%
<i>4<sup>th</sup> semester</i>	55 14.5%	4 4.4%	4 4.4%
<i>5<sup>th</sup> semester</i>	51 13.4%	6 6.5%	6 6.5%
<i>7<sup>th</sup> semester</i>	32 8.4%	37 9.7%	30.7%



### Well-being of the students

Table 3 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  $3.67 \pm$

**Table3: The overall well-being of the participants**

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

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 3 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 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 4: Relationship between students well-being and academic performance**

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

### DISCUSSION

In the current study, the total number of participants was 379, with a majority 73% of male participants compared to female participants 27%.

In this study, the maximum number of student performance was good 48.5% followed by

average performance 42.7%, while a small number of students

Performance was poor 8.7%. The findings are similar to a study showing that a higher number of students performed well 79%, followed by average 19% and poor performance 2% 14. While another study shows different findings

where the maximum number of students' academic performance was low<sup>15</sup>.

A fundamental goal of sustainable development is to improve the well-being of children and young people<sup>16</sup>. In the current study, the maximum number of students was good. The results of the study were similar to our study, showing that most of their study well-being was high<sup>14</sup>. In this study, among the dimensions of well-being, positive academic self-concept has the highest mean score  $3.71 \pm 0.84$ , followed by scores of positive attitude toward school  $3.70 \pm 0.95$  and enjoyment of school  $3.67 \pm 0.80$ . Another study reveals a difference from our findings that spiritual well-being was ranked highest, followed by psychological, physical, personal and social well-being<sup>16</sup>. In this study, social anxiety scored the lowest, which proves that the student of this study did not worry about social interaction, and therefore most of the student's academic performance was good. Students who have a limited social role limit the student in interacting with other students and teachers, which reduces the level of boldness among students and ultimately affects their student's academic performance. Another finding of the study is different which shows that the social well-being of the students was second to last. Another study reveals that social well-being has been mentioned: as including the social self, which can also be viewed as a different social role of the individual in contrasting conditions<sup>17</sup>. In addition, with a serious level of social prosperity, higher studies will have important information and skills to be able to communicate with others even more decisively, which could enhance their academic performance<sup>18,19</sup>.

In this study, some of the factors that influence well-being are students' school concerns about high grades and status and an approach to enjoying school instead of attending classes. While the study shows that harassment and clashes between students rarely occur, leading to an impact on students' well-being<sup>14</sup>. Another study shows that a high-stakes environment affects student well-being<sup>16</sup>, a finding supported by another study that reveals that in Chinese high schools, a high-stakes environment affects the well-being of these students<sup>20</sup>. In addition, other studies also reveal that because of high parental expectations, they have an effect on student achievement<sup>21</sup>.

The current study reveals that overall achievement and academic performance have a significant relationship 0.000, while positive academic self-concept PASC, social problems at school SIS, and worry at school WIS and enjoyment of school EIS show a significant association with academic performance. Similarly, a meta-analysis by Kaya and Erdem revealed that academic achievement was positively influenced by overall well-being<sup>22</sup>. Another study, which was a systematic review, reported similar findings. They found that studies examining the association between academic achievement and well-being among

students aged 10 to 14 years found a positive relationship<sup>23</sup>. Similarly, a meta-analysis suggested an association 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<sup>24</sup>. Other studies also investigate that academic performance and well-being are related and interact<sup>14</sup>.

The current study finds that most 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 above objective.

#### CONCLUSION

The goal of the study was to determine the relationship between nursing students' well-being and academic performance. It was discovered that while most nursing students had good well-being, the institute's and parents' high expectations, as well as some activities that promote enjoyment within the institute, had an impact on the students' academic activities. The association between the well-being and the students' well-being was statistically significant 0.000. Additionally, there is a substantial correlation between academic achievement and the categories of positive academic self-concept PASC, social issues in school SIS, worries in school WIS, and enjoyment in school EIS. This shows that a student's wellbeing is necessary for getting the best academic achievement.

#### LIMITATION

It would be necessary to use a random sample strategy with as many students as possible because using a stratified sampling technique could have an impact on the outcomes. The fact that the study was restricted to a single region may have an impact on its generalizability. Studies that include students from longer programmes may vary the findings since the study only includes students from 4-year nursing programmes.

**ETHICS APPROVAL:** The ERC gave ethical review approval.

**CONSENT TO PARTICIPATE:** written and verbal consent was taken from subjects and next of kin.

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