



## CORRELATION BETWEEN ACADEMIC ENGAGEMENT AND MOTIVATION AMONG NURSING STUDENTS AT PRIVATE NURSING INSTITUTE OF KARACHI PAKISTAN

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### Abstract

**Background:** Academic motivation and engagement influence student learning outcomes and experiences.

**Objectives:** This study's purpose is to explore the correlation between academic engagement and motivation among nursing students at a private nursing institute in Karachi, Pakistan.

**Methodology:** This study used a descriptive cross-sectional analytical study among nursing students. A convenient sampling strategy was used to choose 162 individuals. Participants were given two adopted questionnaires to fill out to collect data.

**Results:** The study found that the mean score of academic engagement was 70.57, and the total score was 98. Regarding motivation, the average score is about 146.32, with a total score of 198. This study also found a positive correlation between academic engagement and motivation, with a significance value 0.000. Moreover, findings revealed no significant associations between academic engagement and motivation with demographic variables such as age, academic Year, religion, cast, and gender.

**Practical Implication:** This study's practical implications lie in guiding educators to emphasize student motivation for enhanced engagement, leading to improved learning outcomes. It suggests that tailored strategies targeting motivation can benefit all students, regardless of demographics. This insight supports informed decisions on resource allocation and policy development, fostering a more effective and engaging learning environment for nursing students.

**Keywords:** Correlation, Academic Engagement, Motivation, Nursing Students

## Introduction

Academic motivation and engagement influence student learning outcomes and experiences. Learning experiences are only as good as the students who engage with them, as it is up to the students to decide how hard they want to work to learn. It is standard advice for nursing educators to make the theoretical material they teach exciting and relevant so that students may draw connections between the concepts (1). According to research, student engagement is a critical prerequisite for deep and optimum learning. Furthermore, there is a correlation between student engagement, students' drive to study, and perseverance in finishing their education. Furthermore, engaged students have superior long-term career prospects (2). Engaging students involves more general behavior, like attending class and participating in other school events (3).

On the other hand, while monitoring student participation in classes, a situational focus on the particular participation of students in a given lesson is adopted. The three general engagement categories are emotional, behavioral, and cognitive (2). Fostering student engagement is crucial, given the significance of student engagement for both present and future achievement, and daily interactions between teachers and students may have an impact. However, engaging students in class while also teaching a subject and upholding classroom order is, to put it mildly, a difficult and demanding undertaking (4, 5).

Students are deemed practically engaged when they exhibit visible behaviors directly relevant to the learning process (6). Engagement behaviors are divided into two categories: passive behavior (such as paying attention in class) and active behavior (e.g., asking questions and putting effort into tasks) (5). Numerous learning environment elements influence students' academic engagement, including peers, the teacher, the teaching style, and particular learner traits. Cognitive, metacognitive, affective, social, task-related, communicative, and foreign language-related factors can all impact academic engagement (7).

Motivation is essential in every aspect of life and at every stage of an activity. Motivation plays a crucial role in our life's success and accomplishments. It is always there, in one way or another, at the core of all human endeavors. Since all learning is motivated learning, motivation is referred to as the "heart of learning," "golden road to learning," and "potent factor in learning." Sufficient motivation encourages students to reflect, pay attention, show interest, and put forth effort, all supporting learning. Motivation is essential in every aspect of life and at every stage of an activity (8). Motivation is crucial in the clinical nursing education process (9). A study found low motivation among the participants and suggested that the Ministry of Health should improve practices and the human resource management system to increase participants' motivation (10).

There are three types of motivation in education: internal, external, and none. While external motivation comes from the teacher's support, the student's grade, and other conditional benefits considered for students who improve their performance, internal motivation evaluates students' interests and sense of learning mastery. People lack motivation when they cannot articulate why they want to complete a task (11). Intrinsic motivation is present in activities that are naturally satisfying and fulfilling (i.e., being involved in the activity itself is a reward). In contrast, extrinsic motivation is relevant to activities that are a means to an end (e.g., money and status that can be brought as a result of the activities) (12). Better performance, well-being, and satisfaction correlate with motivation (13).

In addition to engagement, intrinsic motivation is a crucial positive psychological concept linked to mental health. Extrinsic motivation is relevant to activities that are a means to an end (e.g., money and status that can be brought as a result of the activities). In contrast, intrinsic motivation is present in activities that are naturally satisfying and fulfilling (i.e., being involved in the activity itself is a reward). Since academic engagement, or simply "engagement," is associated with several student outcomes, including motivation and mental health, it is a particularly significant positive psychological term in higher education (13). Therefore, this study aims to identify the correlation between academic engagement and motivation among nursing students.

## Methodology

This research employed a descriptive cross-sectional analytical study design among nursing students of Horizon School of Nursing and Health Sciences in Karachi. The sample size was calculated through Open Epi with a 95% confidence interval and 320 total population. The initial calculated sample size was 175, but due to incomplete questionnaire responses, the final sample included 162 participants who fully completed the questionnaire. The data collection process for this study involved using an online platform, specifically Google Forms. Participants were invited to complete a questionnaire through this digital medium.

Participants included in the study were aged 18 years above. The study encompassed nursing students from all academic years (1st, 2nd, 3rd, and 4th) of Horizon School of Nursing and Health Sciences in Karachi. Participants were chosen using a convenient sampling technique. Data collection was conducted using two adopted questionnaires administered to the participants. This study used the motivation component, which consists of 33 items answered on a seven-point Likert-type scale (1 being "not at all true for me" and seven being "very true for me") (14). This tool was also pretested on 10% of the total sample size. The calculated Cronbach alpha value is 0.83. The motivation section is a well-respected questionnaire with satisfactory psychometric properties. Its six subscales represent various parts of the students' aims and values for a given course (e.g., their beliefs about their success in a particular course). The Cronbach alpha of this tool is 0.70.

This study used an Academic engagement scale, which comprised 14 items. Vigour (VI), dedication (DE), and absorption (AB) are the three subscales that make up this scale. Every item has a score on a seven-point frequency rating system, with 1 representing never and 7 representing always (15, 16). The reliability of this tool is 0.90. This tool was also pretested on 10% of the total sample size. The calculated Cronbach alpha value is 0.95.

The research proposal underwent a review process by the relevant institution before study initiation. Ethical considerations were prioritized, and the relevant authorities approved the study. The confidentiality of participant information and the right to withdraw from the study were ensured. Informed consent was obtained from each participant. SPSS version 26 was used for the data analysis. Mean values, standard deviations, and percentages were calculated for the demographic and other variables. The Pearson correlation test was applied to assess the correlation between academic engagement and students' motivation. Independent T-test and ANOVA were applied to associate demographic variables with academic engagement and students' motivation.

## Result

The table presents demographic information of the participants, divided into categories of "Age," "Gender," "Academic Year," "Religion," and "Cast." The "Age" distribution shows that the majority of participants are between 22 and 24 years old (48.1%), followed by those aged 19 to 21 (22.8%). In terms of "Gender," there are more males (64.2%) than females (35.8%) among the participants. Regarding "Academic Year," most participants are in their 1st year (53.1%), with fewer in 2nd (31.5%), 3rd (8.0%), and 4th years (7.4%). In the category of "Religion," the majority are of the Islamic faith (93.2%), followed by Christian (3.1%), Hindu (2.5%), and Other (1.2%) affiliations. Lastly, under "Cast," the majority identify as Pashtoon (85.8%), followed by Sindhi (13.0%) and Punjabi (1.2%)

**Table 1 Demographic information of the participants n=162**

Variables	Frequency	Percent
<b>Age</b>		
19-21	37	22.8
22-24	78	48.1
25-27	19	11.7
above 27	28	17.3
<b>Gender</b>		
Male	104	64.2
Female	58	35.8
<b>Academic Year</b>		
1 <sup>st</sup> Year	86	53.1
2 <sup>nd</sup> Year	51	31.5
3 <sup>rd</sup> Year	13	8.0
4 <sup>th</sup> Year	12	7.4
<b>Religion</b>		
Islam	151	93.2
Christian	5	3.1
Hindu	4	2.5
Other	2	1.2
<b>Cast</b>		
Pashtoon	139	85.8
Sindhi	21	13.0
Punjabi	2	1.2

Table 2 displays the average values and variability for "Academic Engagement" and "Motivation." The mean score of academic engagement is 70.57, with a standard deviation of 13.75, and the total score was 98. Regarding Motivation, the average score is about 146.32, and the standard deviation is approximately 25.89, with a total score of 198.

**Table 2 Mean and std. Deviation of Academic Engagement and Motivation**

Variables	Mean	Std. Deviation	Total Score
<b>Academic Engagement</b>	70.5741	13.74967	98
<b>Motivation</b>	146.3210	25.88643	198

Table 3 concisely overviews the correlation between Academic Engagement and Motivation variables. The correlation coefficient is approximately 0.598, indicating a positive relationship between the variables. The significance value of 0.000 implies a high level of statistical significance.

**Table 3 Correlation between Academic Engagement and Motivation**

Variables	Correlation	Significance
Academic Engagement – Motivation	0.598**	0.000
Motivation - Academic Engagement	0.598**	0.000

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

Table 4 shows the association of academic engagement with demographic variables. No significant associations were found between Academic Engagement and the variables: Age ( $p = 0.312$ ), Academic Year ( $p = 0.396$ ), Religion ( $p = 0.900$ ), Cast ( $p = 0.155$ ), or gender ( $p = 0.186$ ).

**Table 4 Association of Demographic Variables with Academic Engagement Score**

Variables	Mean	N	Std. Deviation	p-value
<b>Age</b>				
19-21	73.3784	37	11.23079	0.312 <sup>a</sup>
22-24	70.6154	78	13.85662	
25-27	70.3158	19	13.47859	
above 27	66.9286	28	16.30480	
<b>Academic Year</b>				
1 <sup>st</sup> Year	70.6512	86	13.15497	0.396 <sup>a</sup>
2 <sup>nd</sup> Year	72.3922	51	13.45374	
3 <sup>rd</sup> Year	66.3846	13	14.29183	
4 <sup>th</sup> Year	66.8333	12	18.24497	
<b>Religion</b>				
Islam	70.4437	151	13.92869	0.900 <sup>a</sup>
Christian	70.8000	5	14.07835	
Hindu	75.7500	4	7.45542	
Other	69.5000	2	16.26346	
<b>Cast</b>				
Pashtoon	71.1799	139	13.50805	0.155 <sup>a</sup>
Sindhi	65.7143	21	14.63948	
Punjabi	79.5000	2	16.26346	
<b>Gender</b>				
Male	70.8942	104	13.23787	0.186 <sup>b</sup>
Female	70.0000	58	14.72437	

ANOVA test has been applied <sup>a</sup>

Independent T-test has been applied <sup>b</sup>

Table 5 shows the association of motivation with demographic variables. No significant associations were observed between Academic Engagement and the variables: Age (p = 0.142), Academic Year (p = 0.806), Religion (p = 0.481), Cast (p = 0.405), or gender (p = 0.241).

**Table 5 Association of Demographic Variables with Motivation Score**

Variables	Mean	N	Std. Deviation	p-value
<b>Age</b>				
19-21	147.4324	37	24.95166	0.142 <sup>a</sup>
22-24	148.1667	78	26.95904	
25-27	151.4211	19	22.09655	
Above 27	136.2500	28	25.14937	
<b>Academic Year</b>				
1 <sup>st</sup> Year	147.3837	86	26.66444	0.806 <sup>a</sup>
2 <sup>nd</sup> Year	144.3333	51	25.04130	
3 <sup>rd</sup> Year	150.3846	13	26.24417	
4 year	142.7500	12	25.52761	
<b>Religion</b>				
Islam	145.8013	151	26.19212	0.481 <sup>a</sup>
Christian	144.2000	5	22.78596	
Hindu	166.0000	4	20.33060	
Other	151.5000	2	.70711	
<b>Cast</b>				
Pashtoon	147.2158	139	26.05645	0.405 <sup>a</sup>
Sindhi	139.5714	21	25.18645	
Punjabi	155.0000	2	16.97056	
<b>Gender</b>				

Male	145.3558	104	24.61664	0.241 <sup>b</sup>
Female	148.0517	58	28.16021	

ANOVA test has been applied <sup>a</sup>

Independent T-test has been applied <sup>b</sup>

## Discussion

Numerous traditional success indicators, including higher retention, strong impact, and curriculum relevance for lifetime learning, have been connected to student engagement (17). Moreover, one of the most essential factors in learning is when pupils are motivated to learn, they may overcome obstacles with ease, get comfortable with the subject matter, and acquire a good command of the language they're learning (18). Therefore, this study aims to explore the correlation between academic engagement and motivation.

The present findings show that males were 64.2% and females 35.8% among the participants. In contrast, another study found that males were 29.7 and females 70.3% (19). The research may have been carried out in various areas or with various populations with varied gender ratios.

Moreover, this study found that most participants are in their 1st year (53.1%), with fewer in 2nd (31.5%), 3rd (8.0%), and 4th years (7.4%). At the same time, another study found 26.0% from 1st year, 30.6% from second years, 18.5 from 3rd year, and 24.9% from 4<sup>th</sup> year (19).

The present study found that gender and academic years were not associated with motivation. Another study result is aligned and found no association between age and academic year with motivation (19). Moreover, the present study also found that academic years were not associated with academic engagement. In contrast, another study found that when students mature, they become more engaged in academics (20). Current findings also show that age was not associated with students' engagement. In comparison, another study found that age is associated with academic engagement with a p-value of 0.047 (21). Diverse outcomes may arise from study procedure variations, measurement instruments, and data collection strategies.

Furthermore, this study found that academic engagement was positively correlated with motivation. Similarly, another study found the same result and showed that student engagement was significantly correlated with motivation ( $r = 0.60$ ,  $p < 0.01$ ) (19). At the same time, another study found a statistically significant correlation ( $p < 0.05$  and  $r < 0.462$ ) between students' perceptions of their learning environment and their motivation to learn (22). In addition, another study highlighted the strong correlation between motivation and student engagement (1). Students who are highly engaged and driven in their studies are more likely to succeed academically. When considered collectively, it is essential to highlight that students' achievement was impacted by the interaction between motivation and engagement (1). Motivation and academic engagement are positively correlated, suggesting that these two variables are correlated. Motivated students are more likely to actively participate in their academic endeavors, while engaged students are more likely to be motivated. Because of this synergy, motivation and engagement are fueled by one another, which may improve learning results.

The present study found that the mean score of academic engagement is 70.5741. Similarly, another study found the mean score is 55.69 (23). Additionally, another study's findings indicate that students' levels of engagement are modest (21). It is commonly believed that greater involvement leads to more knowledge and comprehension, which equip graduates to deliver a higher caliber of care (24). Since motivation fosters a personal commitment that is, in our judgment, enduring, it has a favorable effect on the effectiveness of learning (25). Another study found that while their engagement in the classroom and during clinical experiences is boosted by the variety and quality of learning options, their workload has the opposite effect (26). It is emphasized that engaging design and thorough resource curation are necessary since academic engagement is related to students' participation in course-specific learning activities and wider academic opportunities (27). A Pakistani study suggested that case-based instruction should be added to the higher education curriculum to enhance learning and engagement (28).

The present study found that motivation has an average score of about 146.32, totaling 198. In this regard, another study found slightly different results that students' motivation was high (29). The studies might have used different measurement instruments or scales to assess motivation.

### Conclusion

The data indicates a positive correlation between academic engagement and motivation. Participants with higher motivation scores tend to display increased levels of academic engagement. The variability in Motivation scores appears to influence the range of academic engagement observed among the participants. These findings emphasize the interconnected nature of motivation and academic engagement in the study context. Based on the findings, it is recommended that efforts be directed toward enhancing students' motivation, as this seems to impact their academic engagement positively. Strategies to foster and maintain high motivation levels could lead to increased participation and commitment to academic activities.

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