

Motivation as a Key Determinant of Academic Achievement of Nursing Students

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Abstract

Background: Motivation empowers one to acquire knowledge and skills necessary for providing compassionate care. It inspires future nurses to overcome challenges, embrace continuous learning, and ultimately become dedicated healthcare professionals.

Design: A descriptive cross-sectional survey study was conducted at the Skills Labs of the College of Health and Sport Sciences, University of Bahrain.

Methods: A convenient sample of 126 nursing students reported their motivation towards their academic learning anonymously through electronic form.

Results: Results indicated acceptable levels of intrinsic and extrinsic goal orientation (3.38 ± 1.65 and 3.93 ± 1.58), task value (3.94 ± 1.50), control of learning beliefs (3.91 ± 1.20), self-efficacy for learning and performance (3.68 ± 1.63), and test anxiety (3.22 ± 1.41).

Conclusion: Academics can improve students' motivation, academic achievement, and self-efficacy by implementing effective teaching strategies, encouraging goal-setting and self-monitoring techniques, reflection, providing resources and support for self-directed learning fostering collaboration, cultivating a supportive learning environment and teamwork among nursing students, and providing constructive feedback.

Keywords: *Student Nurse; goal orientation; self-efficacy; Motivation*

Introduction

Nursing education plays a pivotal role in shaping competent and compassionate future professional nurses. As the demands and complexities of the healthcare industry continue to evolve, it is crucial to explore the factors that contribute to the success and satisfaction of nursing students (Poorchangizi, et al., 2019). Among these factors, motivation stands out as a key determinant of academic achievement, and professional development. Motivation, defined as the internal drive that initiates, guides, and sustains behavior, has been extensively studied in various educational contexts (Steinmayr et al., 2019). However, its significance within the realm of nursing education remains relatively unexplored. Understanding the role of motivation in nursing education is essential for educators, administrators, and policymakers to design effective educational strategies that enhance student engagement, retention, and success (Filgona et al., 2020).

Vigilant nursing educators, institutions, and students should recognize factors that sustain students' motivation for academic learning throughout their educational trajectory (Rashwan et al., 2021b). For instance, students may be motivated by their personal goals, values and aspirations to contribute to their community. The teaching methods employed by instructors and the learning environment can impact students' motivation. Engaging and interactive teaching methods, well-equipped facilities, and a supportive learning environment can enhance motivation (Munna & Kalam, 2021). Moreover, the level of support and encouragement from faculty, mentors, classmates, and family members can influence a nursing student's motivation. Positive feedback, recognition, and professional growth and development opportunities can energize and motivate students (Mikkonen et al., 2021).

Unlike other disciplines, the clinical component of nursing education provides a unique learning experience. The presence of role models and interactions with experienced and inspiring clinical preceptors and staff nurses can

influence students' motivation (Rashwan, et al., 2021b). Real-life clinical experiences can provide a practical view of the nursing profession and reinforce students' motivation. The nursing curriculum should be delivered sequentially, which maintains a smooth transition (Baron, 2017). Hence, the nursing students would perceive the relevance and practicality of the course materials. If nursing students understand the relevance and practicality of their academic coursework and clinical experiences, they are more likely to stay motivated. Undoubtedly, confidence in one's abilities and self-efficacy can drive motivation (Al-Osaimi & Fawaz, 2022). Students who believe in their skills and potential are more likely to stay motivated in the face of challenges. On the other hand, stress and burnout can negatively affect students' motivation. High workloads, time constraints, and emotional strain can decrease motivation levels (Güngör & Sari, 2022).

Higher educational institutions should keep nursing students motivated for several reasons. By keeping students motivated, they are more likely to be committed to the program requirement and complete their education which improves students' retention and reduces their dropout (Nakayoshi et al., 2020). This ultimately benefits both the students and the nursing profession as a whole. Motivated nursing students are more likely to actively engage in their learning and develop the necessary skills and knowledge needed to provide high-quality patient care. When students are motivated, they are more likely to excel academically and develop a genuine passion for nursing, which can positively impact patient outcomes (Kati et al., 2020).

Nursing education is challenging and demanding, leading to high levels of stress and burnout (Güngör & Sari, 2022). By keeping students motivated, they are more likely to maintain a positive mindset, resilience, and overall mental well-being. This can enhance their ability to cope with the demanding aspects of nursing education and future nursing practice (Maier et al., 2021).

Besides, motivation enhances students' professional development and their long-term outlook. Motivated nursing students are more apparently to engage in extracurricular activities, such as joining professional organizations or participating in research projects. These activities can enhance their professional development, networking opportunities, and career prospects (Al-Osaimi & Fawaz, 2022). Motivated nursing students tend to show a positive attitude toward their profession, even after graduation. They may be more inclined to continue their education, pursue advanced degrees, and engage in lifelong learning. This continuous motivation and professional growth contribute to the overall advancement and improvement of the nursing profession.

Higher academic institutions should adopt several strategies to increase nursing students' engagement and motivation toward their academic learning. These strategies include, but are not limited to, creating a supportive learning environment, encouraging collaboration, using practical examples and case studies, and offering hands-on learning experiences (Nakayoshi et al., 2020). Nursing educators can also keep content up-to-date and relevant, personalize learning experiences, provide feedback and support, and foster a sense of ownership which ultimately empowers students to be proactive learners. Motivationally, the faculty may acknowledge the achievements and milestones of their students which leave good memories and inspire more accomplishments (Raza et al., 2019). Additionally, encouraging lifelong learning and professional development is one of the crucial roles of academic educators. This could be achieved by providing students with opportunities to attend conferences and workshops, obtaining more certifications, or offering research opportunities (Mlambo et al., 2021). Overall, creating a supportive and engaging learning environment, personalizing the learning experience, and emphasizing the practical relevance of nursing studies can help increase nursing students' motivation and commitment to their academic learning.

Aim

This study aimed to assess the motivation towards academic learning among nursing students.

Methods

Study Design and Settings: A descriptive cross-sectional survey study was conducted at the Skills Labs of the College of Health and Sport Sciences, University of Bahrain.

Participants

A convenient sample of 126 nursing students enrolled in the course Foundation of Nursing II (NUR228), during the second semester of the academic year 2021-2022. The Epi Info program version 10 was used to estimate the sample size using the following parameters: a population size of 140, a confidence coefficient of 95%, an expected frequency of 50%, and an acceptable error of 5%. The minimum sample size was 103 students.

Measurement Tool

The Motivated Strategies for Learning Questionnaire (MSLQ)

This tool was developed by Pintrich & De Groot (1990) to assess college students' motivational orientations. It consists of 31 items rated on a 7-point Likert scale, grading items from 1 (not at all true of me) to 7 (very true of me). The MSLQ includes five sub-scales, namely, intrinsic goal orientation (4 items); extrinsic goal orientation (4 items); task value; (6 items); control of learning beliefs (4 items); self-efficacy for learning (8 items), and performance test anxiety (5 items). The negative statements (Items 3, 8, 14, 19, & 28) were reverse-coded before an individual's score was computed. The MSLQ is considered a valid and reliable tool as the Cronbach's alpha of 0.95 (ErturanIlker et al., 2014).

Procedure and data collection

Initially, the researcher introduced herself and explained the aim of the study. The researcher developed an online form of the MSLQ and invited the students to complete the form. The researcher emphasized the anonymity of the obtained responses and asked the students to freely rate their responses.

Ethical Considerations

Approval from the Scientific Research and Publication Committee of the College of Health and Sport Sciences was obtained. An informed written consent was obtained from students who agreed to voluntarily participate in the study, assuring them of their right to withdraw from the study anytime, and maintaining their rights for confidentiality and anonymity.

Data Analysis

The SPSS version 23 was used for data analyses. Descriptive statistics numbers and percentages, mean and standard deviation were used to describe the students' demographic characteristics and skill levels.

Results

Table 1 illustrates that more than half of the students (53.17%) were at the age of 22 years, and 71.43% were females. Regarding academic data, most students (78.57%) had a Cumulative Grade Point Average (CGPA) of 3.0 to less than 3 out of 4.

Table 1. Demographic and Academic Characteristics of Nursing Students

Characteristics			No. (%)
Age/ years	▪	21-	15(11.90)
	▪	22-	67(53.17)
	▪	23-	39(30.95)
	▪	24& more	5(3.97)
	Mean \pm SD		22.20 \pm 0.70
Gender	▪	Male	36(28.57)
	▪	Female	90(71.43)
GPA	▪	2.50 - 2.99	21(16.67)
	▪	3.00 - 3.49	99(78.57)
	▪	3.5-4	6(4.76)

Table 2 illustrates the Intrinsic and Extrinsic Goal orientation of Nursing Students. Nursing students prefer course material that challenges them so they can learn new things (3.62 ± 0.92) and the most satisfying goal for them is trying to understand the content as thoroughly as possible (3.69 ± 1.21). However, students prefer to choose course assignments that they can learn from them, even if they don't guarantee to score a good grade (2.26 ± 1.12).

Regarding the extrinsic goal orientation, most of the students reported that getting a good grade is the most satisfying goal (3.51 ± 0.93) and the most important goal for them is improving their overall grade point average to show their ability to their family (3.64 ± 1.78), friends, employer, or others (4.93 ± 1.66).

Table 2: Intrinsic and Extrinsic Goal Orientation of Nursing Students

Items	Mean \pm SD
Intrinsic Goal orientation	
1- In a class like this, I prefer course material that really challenges me so I can learn new things.	3.62 ± 0.92
16- In a class like this, I prefer course material that arouses my curiosity, even if it is difficult to learn.	3.93 ± 0.70
22- The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible.	3.69 ± 1.21
24- When I have the opportunity in this class, I choose course assignments that I can learn from, even if they don't guarantee a good grade.	2.26 ± 1.12
Extrinsic Goal orientation	
7- Getting a good grade in this class is the most satisfying thing for me right now.	3.51 ± 0.93
11- The most important thing for me right now is improving my overall grade point average, so my main concern in this class is getting a good grade.	3.64 ± 1.78
13- If I can, I want to get better grades in this class than most of the other students.	3.63 ± 1.14
30- I want to do well in this class because it is important to show my ability to my family, friends, employer, or others.	4.93 ± 1.66

Table 3 demonstrates that nursing students value the content materials as they reported that the course material in this class is useful for them to learn (4.53 ± 1.53) and understanding the subject matter of this course is very important to them (4.53 ± 1.57). Students also reported their control of learning beliefs and if they study in appropriate ways and try hard enough, then they will be able to learn the material in this course (4.02 ± 1.81 and 3.64 ± 1.68).

Table 3: Task Value and Control of Learning Beliefs of Nursing Students

Items	Mean \pm SD
Task Value	
4- I think I will be able to use what I learn in this course in other courses.	3.73 ± 1.71
10- It is important for me to learn the course material in this class	4.14 ± 1.14
17- I am very interested in the content area of this course.	3.44 ± 1.67
23- I think the course material in this class is useful for me to learn.	4.53 ± 1.57
26- I like the subject matter of this course.	3.27 ± 1.04
27- Understanding the subject matter of this course is very important to me.	4.53 ± 1.53

Control of Learning Beliefs	
2- If I study in appropriate ways, then I will be able to learn the material in this course.	4.02±1.81
9- It is my own fault if I don't learn the material in this course	4.17±1.69
18- If I try hard enough, then I will understand the course material.	3.64±1.68
25- If I don't understand the course material, it is because I didn't try hard enough.	3.82±1.33

Table 4 shows that most of the students believed that they would receive an excellent grade in the class (4.26±1.59). students were confident that they could understand the basic concepts taught in the course (4.73±1.71) and the difficult material presented in the readings for the course (4.28±1.67).

Table 4: Self-Efficacy for learning and performance of Nursing Students

Items	Mean±SD
Self-Efficacy for learning and performance	
5- I believe I will receive an excellent grade in this class	4.26±1.59
6- I'm certain I can understand the most difficult material presented in the readings for this course.	4.28±1.67
12- I'm confident I can understand the basic concepts taught in this course.	4.73±1.71
15- I'm confident I can understand the most complex material presented by the instructor in this course.	3.28±9.57
20- I'm confident I can do an excellent job on the assignments and tests in this course.	2.95±0.92
21- I expect to do well in this class.	3.02±1.81
29- I'm certain I can master the skills being taught in this class.	3.15±0.95
31- I'm Considering the difficulty of this course, the teacher, and my skills, I think I will do well in this class.	3.73±1.26

The student's test anxiety is illustrated in Table 5. Students believed that when they take a test, they thought about how poorly they are doing compared with other students (3.45±0.92), and when they take a test, they think about items on other parts of the test that they could not answer (3.31±1.64)

Table 5: Nursing Students' Test Anxiety

Items	Mean±SD
Test Anxiety	
*3- When I take a test, I think about how poorly I am doing compared with other students.	3.45±0.92
*8- When I take a test, I think about items on other parts of the test I can't answer.	3.31±1.64
*14- When I take tests, I think of the consequences of failing.	3.15±0.95
*19- I have an uneasy, upset feeling when I take an exam.	2.95±0.92
*28- I feel my heart beating fast when I take an exam.	2.75±1.15

Table 6 demonstrates nursing students' motivational orientations' subscales including the intrinsic and extrinsic goal orientation (3.38 ± 1.65 and 3.93 ± 1.58) task value (3.94 ± 1.50), control of learning beliefs (3.91 ± 1.20), self-efficacy for learning and performance (3.68 ± 1.63), and test anxiety (3.22 ± 1.41).

Table 6: Mean Scores of Nursing Students' Motivational Orientations' Subscales.

Subcategories	Mean \pm SD
Intrinsic Goal orientation	3.38 ± 1.65
Extrinsic Goal orientation	3.93 ± 1.58
Task Value	3.94 ± 1.50
Control of Learning Beliefs	3.91 ± 1.20
Self-Efficacy for learning and performance	3.68 ± 1.63
Test Anxiety	3.22 ± 1.41

Discussion

Motivation is a complex psychological concept and is considered a key determinant of intents, and efforts and plays a crucial role in shaping human thinking and behaviors (Woolfolk et al. 2013). This study aimed to delve into the multifaceted aspects of motivation in nursing education by examining the various theories and models of motivation. So, the current study examined the motivation among nursing students that impacted their academic performance, clinical competence, and professional development.

Generally, the results of the present study showed that junior nursing students who were enrolled in the foundation courses had acceptable motivation. This could be justified by the fact that the nursing program's courses adopt student-centered teaching approaches. These strategies incorporate cooperative, collaborative, team-based learning and case studies. Such motivating teaching strategies provoke students' team enthusiasm, intrinsic and extrinsic motivations, and proactive information sharing (Sapeni and Said, 2020). In this regard, Raza et al., (2019) examined the impact of case-based learning on Pakistani university students' learning motivation and learning performance. Case-centered learning enhances students' critical thinking along with the retention of concepts to develop a significant increase in their domain knowledge and usefulness of the given clinical scenarios, which results in learning motivation (Gholami et al., 2021). The motivation in students' academic learning can be explained in the light of the Self-Determination Theory (SDT). This psychological theory focuses primarily on the intrinsic motivation of individuals and their need for autonomy, competence, and relatedness. In the context of nursing education, when students are intrinsically motivated to grow, they are more likely to engage in their learning, strive for excellence, and experience satisfaction (Ryan & Deci, 2000). Autonomy is one of the key components of SDT. When students feel autonomous, they tend to feel more motivated and engaged in their work, leading to better patient outcomes. Thus, students of the present study reported their control of learning beliefs and if they studied in appropriate ways and tried hard enough, then they will be able to learn the material of the course. This could be attributed to allowing the students to conduct students-led presentations, peer tutoring, and reflection assignments (Bugaj et al., 2019). Such educational activities enable nursing students to feel ownership of their learning. Moreover, the nursing program of the current study is a competency-based program where students should acquire all the basic nursing skills and competencies to reach the proficiency level. When the students feel competent in their skills and abilities, they are more likely to be motivated to provide high-quality care (Lewis et al., 2022). This sense of competence can be fostered through ongoing education, training, and support from colleagues and educators. From another perspective, effective teamwork, collaboration, and supportive relationships with colleagues and patients. When student nurses feel a sense of relatedness, social connection, and belongingness they are at greater likelihood to be motivated and satisfied in their work (Yang et al., 2022). In this regard, the students in the present study value the content materials as they reported that the

course material in this class is useful for them to learn and understanding the subject matter of this course is very important to them (van Dyk et al., 2021). From another perspective, the study and examination policy of the University of the current study emphasizes the importance of providing students with regular and timely manner constructive feedback for the students, which consequently boosts students' self-determination and serves as an intrinsic motive and a great source of encouragement.

Nursing educational institutions should value the importance of fostering motivation and creating a supportive work environment in nursing education and practice. This is evident in the results of the current study findings where nursing students prefer course material that challenges them (Poorchangizi et al., 2019).

Undoubtedly, course grades play a key role in motivating students toward learning. As an essential measure of academic performance, grades provide students with valuable feedback on their progress and achievements. They serve as a yardstick for assessing their knowledge, skills, and understanding of various subjects. The importance of grades lies not only in their ability to reflect a student's academic abilities but also in their power to drive motivation and determination towards learning (Poorchangizi et al., 2019). In this context, the results of the current study revealed that students were less likely to prefer to choose course formative assignments that they can learn from, even if they don't guarantee a good grade. Besides, the current study findings reflect that "improving my overall grade point average and showing the abilities to the family and colleagues" were the most valuable extrinsic motives among nursing students.

Test anxiety is a common phenomenon that can significantly impact academic performance and overall well-being. It is a psychological condition characterized by excessive worry, fear, and physiological symptoms experienced before, during, or after an examination (Torbjørnsen et al., 2021). In the context of nursing education, test anxiety can be particularly detrimental, as it may hinder a student's ability to effectively demonstrate their knowledge and skills in high-stakes exams (Maier et al., 2021). The results of our study indicated that students had an average level of test anxiety as they reported their thoughts of how poorly doing compared with other students and some of them agreed to have a heart beating fast, uneasy, upset feeling when they take an exam. This could be attributed to their academic level as they are still junior students and enrolled in foundation courses with less exposure and experience in college education.

The field of nursing education and practice requires individuals with a high level of motivation and academic achievement to provide quality care to patients. Self-efficacy is essential in motivating nursing students and promoting their academic achievement. It refers to an individual's belief in their ability to accomplish specific tasks and achieve desired goals. By fostering a sense of self-belief, students can develop the confidence and motivation necessary to excel academically, ultimately leading to improved patient care and outcomes in their future nursing practice. So, it is illustrated in the results of the present study that students confidently understand and master the basic concepts as well as difficult material taught to them. Undeniably, the curriculum, teaching methods, and assessment practices play a significant role in shaping self-efficacy (Maier et al., 2021). So, nursing faculty can enhance students' motivation and their belief in their success by fostering positive self-beliefs through self-reflection and self-assessment. Integrating experiential learning opportunities may be one of the main factors increasing motivation among nursing students and building their confidence. The use of clinical nurse preceptors who directly supervise the clinical performance of the nursing students affords role models and mentors to inspire and guide them (Saeedi et al., 2019).

Limitations of the study

Although the current study results revealed acceptable students' motivation toward their academic learning, the study design had limitations regarding the small sample size. The study also had limitations related to randomization, as the registration office had already distributed the students in the courses section in an academic semester, which affected the random assignment of the students' sections. Moreover, the researcher faced the challenge of the low response rate and dropout among students.

Conclusion

Nursing students are motivated and reported acceptable intrinsic and extrinsic goal orientation, task value, self-efficacy for learning and performance, and test anxiety control of learning beliefs. Hence, academics can improve

students' motivation, academic achievement, and self-efficacy by implementing effective teaching strategies, encouraging goal-setting and self-monitoring techniques, reflection, providing resources and support for self-directed learning fostering collaboration, cultivating a supportive learning environment and teamwork among nursing students and providing constructive feedback.

Acknowledgments

The author is grateful to all the foundation nursing students who participated in this study and thanks all the foundation nursing teaching team for their cooperation.

Declaration of competing interest

The author declares no conflict of interest.

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