



Original Article



Analysis of Achievement, Motivation and Self-Efficacy among Undergraduate Nursing Students

Tanveer Kausar¹, Fozia Fatima², Asma Naureen³, Shahida Yasmeen⁴, Safia Noreen¹, Rubab Tariq¹ and Fuad Ahmad Siddiqi²¹Armed Forces Post Graduate Medical Institute, Rawalpindi, Pakistan²National University of Medical Sciences, Islamabad, Pakistan³School of Nursing, Pakistan Institute of Medical Sciences, Islamabad, Pakistan⁴College of Nursing, Pakistan Institute of Medical Sciences, Islamabad, Pakistan

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*Corresponding Author:

Tanveer Kausar
Armed Forces Post Graduate Medical Institute,
Rawalpindi, Pakistan
tanvirkausar62@gmail.comReceived Date: 18th October, 2024Acceptance Date: 11th December, 2024Published Date: 31st December, 2024

ABSTRACT

Strong self-efficacy enhances motivation and performance, while strong achievement motivation boosts self-efficacy. **Objective:** To determine achievement motivation and self-efficacy levels among undergraduate nursing students. **Methods:** A cross-sectional study was conducted from September 2023 to July 2024 at three nursing institutes. A total of 222 undergraduate nursing students participated using convenience sampling. Data were collected through a self-efficacy questionnaire developed by Ralf Schwarzer. Achievement motivation was measured using McInerney's tool. Data analysis was performed using SPSS version 21.0. **Results:** Most participants were females, with 90.1% aged 20-25. The study was conducted at the College of Nursing Rawalpindi and PIMS Islamabad. Findings indicated that participants with confidence in their skills, improvement in work, and good academic performance had the highest motivation levels. External factors, such as praise or awards, were less influential. The average achievement-oriented behavior score was 4.12. Self-efficacy data revealed varied confidence levels, with most participants believing they could learn challenging content, overcome obstacles, influence personal growth, maintain relationships, and solve problems innovatively. The average self-efficacy score was also 4.12, indicating high confidence. **Conclusions:** The research highlights that highly motivated individuals achieve better outcomes, demonstrate faith in their skills, and perform well academically. Motivation is primarily driven by intrinsic factors like self-efficacy and personal growth, rather than external recognition. Enhancing self-efficacy and intrinsic motivation is crucial to improving overall performance, emphasizing persistence, diligence, and innovation as key drivers of success.

INTRODUCTION

Achievement motivation is the internal drive that encourages individuals to enhance their abilities and successfully pursue their goals in daily life and various activities. Individuals' conduct and motivation are strongly correlated, specifically, high motivation can encourage good behavior, while negative motivation can inhibit it [1]. It also means the ability to initiate, sustain, and guide goal-oriented action. Academic achievement and the learning process both depend on motivation. Motivation is not the same as motive. The incentive is characterized as a force that propels, guides, and sustains goal-oriented behavior, whereas the motivation is thought of as a common element

encompassing requests, demands, interests, and urges. In educational activities that aim to mold human behavior, motivation is a crucial component. It is also necessary for people to learn along their procedures. Numerous explanations, ideas, and hypotheses regarding motivation have been put presented. The term "intrinsic motivation" describes motivation that comes from inside the person, such as interest, curiosity, knowledge, understanding, need, sufficiency, etc. The sources of extrinsic motivation are external to the person, such the workplace. It is often administered to the motivated subject by a different person, the motivator, who uses a variety of instruments



(reward, punishment, compulsion, demands, etc.). When people are unable to make a link between their acts and the results of their actions, they lack motivation, which is known as negative motivation [2]. The majority of individuals describe motivation as desire to achieve goals and the means that maintain that desire. Motivation is the capacity to persuade oneself and others to engage in a certain action or set of behaviors, it also permits people to perform remarkable feats [3]. Individual's acts are sometimes assessed by contrasting with those of others or with benchmark. Motivation has been linked to cognitive, biological, and social factors, influencing human behavior in various ways. This multifaceted phenomenon has diverse explanations. Motivation acts like energy, directing one's behavior toward a specific goal. In essence, motivation, as described by is an internal drive that gives activities focused on reaching a goal direction, stimulus, and support [4, 2]. Human goal-directed conduct is known as motivated behavior, and it is characterized by three key elements: it is persistent, goal-directed, and it results from a perceived need [5]. Self-efficacy is the foundation for motivation, well-being, and personal achievement in all spheres of life, it is crucial for the individual [6]. Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior and social environment. One of the main tenets of Bandura's social and cognitive theory is self-efficacy, which is predicated on the notion that one can visualize things in order to reach their intended state of appropriate conduct [7]. Stated differently, self-efficacy is associated with one's attitudes and convictions on achieving one's objectives [8]. Stress brought on by a lack of drive lowers self-efficacy, and instead of obtaining adequate motivation and social support, the feeling of self-efficacy rises in individuals [9]. A high level of self-efficacy among the group's leader can disseminate to its members and effect the intended the group's performance. Members of the group's high self-esteem and self-efficacy impact and strengthen the drive. Self-efficacy is influence by encouragement and discouragement pertaining to an individual's performance or ability to perform [10]. Nursing students who had positive beliefs about their capabilities would have best academic performance in contrast of those students who had less motivation and ability in academic activities [11, 12]. Limited research on achievement motivation and self-efficacy among Pakistani undergraduate nursing students is crucial for understanding their performance, professional growth, and clinical readiness, enabling educators and policymakers to design effective interventions. [13].

Therefore, the objective of this study was to investigate the level of achievement motivation and self-efficacy among undergraduate nursing students."

METHODS

A Quantitative cross-sectional analysis was conducted in three institute Pakistan Institute of Medical Sciences (PIMS) School and College in Islamabad and the Rawalpindi AFGMI College of Nursing. Third year and fourth-year undergraduate nursing students made up the target group. Written consent forms were signed before the data collection. The study's aims, pertinent data, and accepted medical literature and procedures served as a basis for choosing the target population and any subgroups that could exist. The study involved 500 students from the College of Nursing Rawalpindi and PIMS Islamabad as population. Convenience sampling method was used. This method was quick and cost-effective, but may lead to biased results as the sample may not represent the larger population. Yamane formula was used to calculate sample size [14]:

$$\text{Yamane formula } n = n / 1 + n(e)^2$$

Where n = sample size, N = total population = 500, e = margin of error = 0.05

$$N = 500 / 1 + 500(0.05)^2 = 222$$

The calculated sample size was 222 of undergraduate nursing students. All enrolled undergraduate nursing students who have agreed to take part in the research were included and all those nursing students who were on leave on medical ground and any other purpose at that particular time were excluded. Participants may be disqualified if their data answers were insufficient. Two questionnaires had been employed in this research. One tool in order to scale self-efficacy that was created by Ralf Schwarzer (2008) and second used to assess achievement motivation, by McInerney (2006), Permission from the author was obtained before the data was collected [3, 6]. Five questions were related to demographic data 15 questions were about achievement motivation and 10 questions were to assess self-efficacy. 5-point Likert scale was used, Scoring Key: 1) NT= Never True 2) RT= Rarely True, 3) ST= Sometimes True, 4) OT= Often True, 5) AT= Always True. The study duration was, from March 2024 to July 2024. The ethical committee approval (Re: 464-AAA-ERC-AFGMI) was obtained. Permission from the Dean of the institutes was gained. Thirty minutes' conversation was carried out with participants, clear description provided regarding questionnaire. The statistical package for the social sciences (SPSS), version 21.0 for data entry and analysis were used. Descriptive statistical test was employed. Frequency and percentage were calculated for demographic data. Level of achievement motivation and self-efficacy was assessed by mean and standard deviation.

RESULTS

The study sample was 222 in which included 70.7% females and 29.3% males, with 90.1% aged 20-25. The age range was mostly 20-25, with a low frequency of 26-30 and above 40. The distribution of respondents by gender shown in the table 1. There were two genders indicated in this table. Female 157 out of the total respondents who make up 70.7% of all respondents. Male count 65 out of all respondents they make up 29.3% of the entire sample, also shown in figure 1.

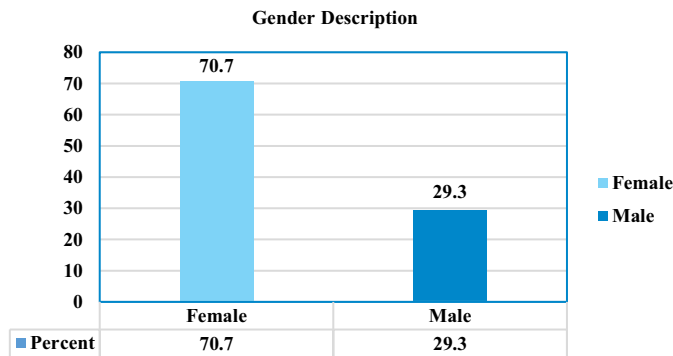


Figure 1: Gender Distribution of Study Participants

The percentages of participants' answers were listed in the table 2. The participants who see an improvement in their work (50.5% "Always True"), feel confidence in their skills (45.5% "Always True"), and obtain good marks (67.1% "Always True") exhibit the highest levels of motivation. Though at a slightly lower degree, motivations linked to external acknowledgment, like praise or awards, also exhibit high levels of agreement. Overall, the evidence points to the superiority of internal factors, such as problem-solving and personal development, over external ones, such as authority or recognition. The average score for achievement-oriented behavior was 4.12 overall, which suggests that individuals were typically highly motivated percentage responses of participant about achievement motivation (Table 1).

Table 1: Percentages of Participants about Achievement Motivation

S. No.	Items	NT	RT	ST	OT	AT	Mean ± SD
1	I am motivated when I work with others	5.4	5.9	13.1	41.0	34.7	3.93 ± 1.09
2	I am motivated when I work in group	3.2	5.4	18.5	31.1	41.9	4.03 ± 0.05
3	I am motivated when I am helping others	1.4	2.7	9.5	31.5	54.5	4.44 ± 1.52
4	I am motivated when I am showing concern for others	3.2	5.4	20.3	34.2	36.9	3.96 ± 1.03
5	I am motivated when I am notice by others	12.2	10.8	28.8	25.7	21.6	3.34 ± 1.27
6	I am motivated when I see my work improve	2.3	4.1	10.8	32.4	50.5	4.24 ± 0.95
7	I am motivated when I am good at something	1.8	3.6	7.2	23.9	63.1	4.44 ± 0.91

8	I am motivated when I solve a problem	1.4	2.7	9.5	31.5	55.0	4.36 ± 0.86
9	I am motivated when I am becoming better at my work	1.8	4.5	6.8	20.7	66.2	4.4 ± 0.93
10	I am motivated when I am confident that I can do my college work	1.8	5.0	9.5	38.3	45.5	4.20 ± 0.93
11	I am motivated when I get a reward	3.6	5.0	10.8	19.4	61.3	4.29 ± 1.07
12	I am motivated when I get good marks	1.8	5.0	9.0	16.7	67.1	4.50 ± 1.52
13	I am motivated when I am in-charge of a group	4.5	9.9	27.5	23.9	34.2	3.73 ± 1.16
14	I am motivated when I am praised	2.3	6.3	16.2	34.2	41.0	4.05 ± 1.01
15	I am motivated when I am doing better than others	3.2	8.6	21.2	22.5	44.1	3.96 ± 1.13
Achievement Oriented Behavior							M=4.12

*NT= Never True, RT=Rarely True, ST= Sometimes True, OT= Often True, AT= Always True

The participant's self-efficacy data reveals differing levels of confidence in various scenarios in table 2. Most people think they can learn difficult course content (55.4% ranked 4 or 5). There was a significant belief that obstacles may be overcome with effort; 77% strongly agree (mean: 4.10). With sufficient effort, participants believe they can influence both their academic and personal improvement (83.3% scored 4 or 5, mean: 4.24). Maintaining relationships and believing in innovative problem-solving techniques received excellent marks as well. The average self-efficacy score of 4.12 indicates that individuals generally have a high level of confidence (Table 2).

Table 2: Percentages of Participants about Self-Efficacy

S. No.	Items	NT	RT	ST	OT	AT	Mean ± SD
1	I firmly believe that I can master the necessary material for even the most challenging courses	4.5	12.2	27.5	27.9	27.5	3.61 ± 1.14
2	I can do even the hardest things when I put in a lot of effort subjects	0.9	5.9	15.8	36.5	40.5	4.10 ± 0.93
3	I believe I can still help myself well, even if I'm not feeling great on a particular day when I was preparing a test	2.7	11.3	30.2	33.8	21.6	3.60 ± 1.03
4	If I put in enough effort, I believe I can positively impact both my personal and academic growth	0.5	3.6	12.2	37.8	45.5	4.24 ± 0.84
5	I'm confident I can come up with creative solutions to tackle problems like budget cuts and administrative issues, all while continuing to grow	2.7	5.4	27.0	30.6	33.8	3.87 ± 1.03
6	I'm certain that I can keep a good connection with my parents. Even in the face of conflict	1.8	6.3	12.2	36.0	43.2	4.13 ± 0.97
7	I have no doubt that as time passes, my capacity to assist in meeting the requirements of my classmates will only grow	0.5	7.7	21.6	33.3	36.5	3.98 ± 0.96

8	I'm aware that I can take part in innovative projects	3.2	6.3	25.2	35.6	29.3	3.81 ± 1.02
9	Even if interruptions occur during my learning process, I'm confident I can remain composed and carry on. to learn effectively	2.3	8.1	24.3	39.2	25.2	4.00 ± 3.58
10	I believe I can successfully do creative projects even if some people doubt or disagree with me	0.9	7.2	20.7	37.8	32.9	3.95 ± 0.95
Self-Efficacy of Respondent							4.12

*NT= Never True, RT=Rarely True, ST= Sometimes True, OT= Often True, AT= Always True

DISCUSSION

The study reveals that nursing students' motivation was influenced by job prospects, recognition, and rewards, but often undervalued in educational institutions. Low motivation can hinder academic performance, clinical competence, and long-term commitment to the profession. The results also indicate that a variety of internal and external factors might impact undergraduate nursing students' desire for achievement. This study confirmed that internal variables like self-improvement and personal interest were important motivators by showing a strong correlation between improved academic performance and the preparation of nursing students for licensing examinations and their intrinsic motivation [15]. Further supporting the premise that internal motivators have a more significant effect than external acknowledgment [16]. According to research in educational psychology, students who have a strong desire to learn and self-assurance in their abilities, qualities that were frequently fostered through problem-solving exercises accomplish better academically and exhibit higher levels of motivation. For instance, studies on math problem-posing show that children who complete these mentally taxing activities have higher levels of self-efficacy, which increases intrinsic drive [17]. Higher levels of self-efficacy were correlated with better resilience and academic success, according to [18]. Investigation of the ways in which undergraduate students' self-efficacy affects their capacity to manage academic pressure, uphold relationships, and solve issues creatively. Several studies that support this result that self-efficacy significantly aids individuals in overcoming challenges, as it helps manage stress and maintain motivation. High self-efficacy students exhibit greater resilience, enabling them to tackle academic challenges confidently [19]. Self-efficacy significantly influences academic performance and persistence, with students who believe in effort-based improvement achieving higher success rates and exhibiting achievement-oriented behavior. The same findings were also found by Abdolrezapour *et al.*, as mentioned above [20].

CONCLUSIONS

The study concluded that motivation is primarily driven by internal factors like self-efficacy and personal growth. Individuals who observe progress, have confidence in their abilities, and achieve good grades exhibit higher motivation and success. While external rewards play a role, their impact is less significant. A high self-efficacy score of 4.12 highlights perseverance, hard work, and creativity as key contributors to achievement, emphasizing the importance of intrinsic motivation and self-assurance in driving success.

Authors Contribution

Conceptualization: TK

Methodology: AN, SY, SN, RT, FAS

Formal analysis: FF

Writing, review and editing: TK, AN, SY, SN, RT, FAS, FF

All authors have read and agreed to the published version of the manuscript

Conflicts of Interest

All the authors declare no conflict of interest.

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