

## Academic Support, Locus of Control and Achievement among Postgraduate Nursing Students

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### Abstract

**Background:** Postgraduate nursing students to complete their studies efficiently need effective academic support. Therefore, the Faculty of Nursing must provide a supportive environment to all nursing students and control their studies for better academic achievement. **Aim:** To assess the academic support, locus of control and achievement among postgraduate nursing students. **Research design:** A descriptive correlation design was used. **Setting:** The study was conducted in all departments of Faculty of Nursing at Tanta University. **Subjects:** All (N=161) postgraduate nursing students who are enrolled in a credit hours system. **Tools:** Three tools were used to collect the data, Perceived Academic Support Scale, Academic Locus of Control, and Student Achievement. **Results:** The majority of the postgraduate nursing students had high perception level of academic support and internal academic locus of control. Nearly one third of the postgraduate nursing students had very good (B). **Conclusion:** There was a highly statistically significant correlation between postgraduate nursing students' perception of academic support and their academic locus of control, while no statistically significant correlation between them and academic achievement. **Recommendations:** Conduct training sessions and workshops for faculty staff regularly to foster their role in supporting students academically. Make an orientation program for new faculty staff regarding effective characteristics and behaviors that students perceived as important.

**Keywords:** Academic Support, Achievement, Locus of Control, Postgraduate Nursing Students

### Introduction

Education play a critical role in improving the quality of life of every individual. It aids in development of human skills, knowledge, and experience. Therefore, the number of students increasing to complete their studies and enroll in postgraduate studies. <sup>(1)</sup> Nursing education in the postgraduate program has a significant role in the nursing profession as it leads to enhanced nurses'

self-esteem, further personal and professional growth, increased knowledge of nursing theories, and ensures the adequacy of nurses' competence. <sup>(2)</sup>

Postgraduate nursing students are students who have successfully completed an undergraduate degree-level course at a college or university and are undertaking further study at a more advanced level. <sup>(3)</sup>

Postgraduate studies refer to academic or

professional degrees, certificates, diplomas, or other qualifications pursued by students who have earned an undergraduate (bachelor's) degree. Completing postgraduate studies helps nursing students further their career prospects and deepen their understanding of their area of study. Nursing students to complete their studies efficiently need effective academic support.<sup>(4)</sup>

Academic support entails a variety of instructional methods, educational services, and university resources that help students accelerate skill acquisition and learning progress, meet expected academic requirements and competencies, and succeed in their education.<sup>(5)</sup> Academic support strategies should be flexible, timely, and responsive to the intensity, length, and manner of support each student needs to succeed. For faculty staff, providing academic support to students is part of their daily professional responsibilities, and each university shall create the conditions that allow their staff provide necessary academic support.<sup>(6)</sup>

Academic support has six dimensions including personality characteristics, subject matter expertise, staff relation with students, teaching style, professional competence, and classroom management style.<sup>(7)</sup> Personality characteristics that reflect patterns of thoughts, feelings, and behaviors that contribute to effective teaching.<sup>(8)</sup> Subject matter expertise is when a lecturer has extensive knowledge and skills in a particular field or topic and can provide advice and support to students working on that topic. Faculty staff relation with students is defined as a supportive

relationship between students and their faculty staff that can foster positive outcomes such as students' involvement and development.<sup>(9)</sup>

Teaching style comprises the principles and methods used by lecturers to enable student learning, to be effective should take into account the learner, the nature of the subject matter, and the type of learning it is supposed to bring about. Professional competence are skills, knowledge, and attributes required in order to work in a specialized area or profession.<sup>(10)</sup> Finally, classroom management style means well-defined ways of interacting with students, with predetermined lecturer control levels. Academic support is no longer related only to the support regarding the content of a course, as students also require support on aspects of their personality as an academic locus of control.<sup>(11)</sup>

Academic locus of control is defined as a fundamental students' difference variable that reflects students' beliefs about the degree of control they have over events in their academic lives.<sup>(12)</sup> Academic locus of control typically refers to how students perceive the causes of their academic success or failure. If they believe that they hold the keys to their fate, they are more likely to change their situation when needed. There are two types of academic locus of control, internal and external locus of control.<sup>(13)</sup>

Students with an internal locus of control generally believe that their success or failure is a result of the effort and hard work they invest when needed. A higher internal academic locus of control correlates to personality traits such as self-control and

self-efficacy. <sup>(14)</sup> Students with an external locus of control believe that they do not have autonomy over their outcomes while external forces drive their life events and change, and may blame an unfair faculty staff or test for their poor academic achievement. <sup>(15)</sup>

Academic achievement refers to the level of knowledge, skills, and abilities that the student acquires during the teaching-learning process, the evaluation of this is done through assessment of the learning of students enrolled in a course, and also refers to the percentage of students in their academic studies. <sup>(16)</sup> Measuring academic achievement provides key information about students' mastery of standards. A grade-point average serves as the most common measure of academic achievement, and it is a number representing the average value of the accumulated final grades earned in courses over time. <sup>(17)</sup>

#### **Significance of study:**

The Faculty of Nursing at Tanta University applied the credit hours system since two years on postgraduate nursing students, Most postgraduate nursing students are coming from different faculties and having emotional disturbance about new academic life. When postgraduate nursing students encounter academic support, they respond positively in their search for stability and success in their academic achievement. Therefore, this study aims to assess academic support, locus of control, and achievement among postgraduate nursing students. <sup>(18)</sup>

#### **Aim of the study**

Assess the academic support, locus of control and achievement among postgraduate nursing students.

#### **Research Questions:**

1. What are the postgraduate nursing students' perception related to academic support?
2. What is the most common type of academic locus of control among postgraduate nursing students?
3. What are the levels of postgraduate nursing students' academic achievement?
4. What is the relation between the academic support, locus of control and achievement among postgraduate nursing students?

#### **Subjects and Method**

##### **Research design:**

A descriptive correlation study design was used in present study.

##### **Setting:**

The present study was conducted in all departments of Faculty of Nursing at Tanta University (Nursing Administration, Community Health Nursing, Medical-Surgical Nursing, Critical Care and Emergency Nursing, Maternal and Newborn Health Nursing, Psychiatric and Mental Health Nursing, and Pediatric Nursing).

##### **Subjects:**

The study subjects were consisted of all (N=161) postgraduate nursing students who are enrolled in a credit hours system in the two academic years (2020-2021 / 2021-2022) and be available at time of data collection according to the records of postgraduates' department of Faculty of Nursing at Tanta University in all postgraduates' programs (diploma, master and doctorate).

**Tools:** Three following tools were utilized: -

**Tool I: Perceived Academic Support Scale.**

This tool was modified by the investigator, guided by **Calaguas and Glenn (2012)**.<sup>(19)</sup>

It was used to assess postgraduate nursing students' perceptions regarding academic support. It consisted of two parts as follow:

**Part 1: Personal data of the postgraduate nursing students:** It included age, gender, department, semester, numbers of courses registered, total numbers of credit hours, GPA (grade point average), and CGPA (cumulative grade point average).

**Part 2: Academic Support Scale:** It consisted of 49 items categorized into six subscales:

- 1- Personality characteristics:** included 11 items.
- 2- Subject matter Expertise:** included 5 items.
- 3- Educational staff relation with students:** included 9 items.
- 4- Teaching style:** included 12 items.
- 5- Professional competence:** included 5 items.
- 6- Classroom management style:** included 7 items.

**Scoring system:**

Postgraduate nursing students' responses were measured on a three points Likert Scales, ranging from (1) disagree to (3) agree. The total scores calculated by cut of points and summing scores of all categories. The total scores represent varying levels as follows:

- High- level of academic support >75%.
- Moderate- level of academic support 60 - 75%.
- Low- level of academic support < 60%.

**Tool II: Academic Locus of Control:**

This tool was modified by the investigator, guided by **Curtis and Trice (2013)**.<sup>(20)</sup> It was used to assess academic locus of control of postgraduate nursing students. It divided into internal and external academic locus of control. It included 28 items.

**Scoring system:**

Postgraduate nursing students' responses were measured on Yes/No Scale ranging from (0) no to (1) yes. The total scores calculated by cut of points and summing scores of all categories. The total scores represent varying levels. According to a jury, the negative items turned to positive items so the scores changed as follows:

- Internal academic locus of control  $\geq 50\%$ .
- External academic locus of control < 50%

**Tool III: Student Achievement:**

It was used to assess postgraduate nursing students' final scores. The form contains postgraduate nursing student name and grade. Postgraduate nursing students' scores ranging from exceptional to fail.

**Scoring system**

- Exceptional (A+): 95% -100%
- Excellent (A): 90% - < 95%
- Superior (B+): 85% - < 90%
- Very good (B): 80% - < 85%
- Above Average (C+): 75% - < 80%
- Good (C): 70% - < 75%
- High Pass (D+): 65% - < 70%
- Pass (D): 60% - < 65%
- Fail (F): (2 out of 5) <60%

**Methods**

1. An official permission was obtained from the Dean of Faculty of Nursing and the authoritative personal that was submitted to the seven head of departments and permission from postgraduate control.

## 2. Ethical considerations:

- a. An approval was obtained from the Ethical Committee before conducting the study, code no. (31/2/2022).
  - b. Nature of the study was not cause harm to the entire sample.
  - c. Informed consent was obtained from postgraduate nursing students after explanation of the study's aim.
  - d. Confidentiality and anonymity were maintained regarding data collection and the participants have right to withdrawal.
3. The study tools were translated into Arabic and presented to a jury of five experts in the area of specialty to check their content validity. The experts were; two assistant professor of Nursing Administration, one professor and one assistant professor of Psychiatric and Mental Health Nursing, one assistant professor of Critical Care and Emergency Nursing from Faculty of Nursing, Tanta University.
4. The experts' responses were represented in four points rating scale ranging from (4-1); 4= strongly relevant, 3= relevant, 2= little relevant, and 1= not relevant. Necessary modifications were done including; clarification, omission of certain items and adding others and paraphrasing of some words.
- The face validity value of academic support scale was **99.29%**, academic locus of control was **99.46 %**
5. A pilot study was carried out on a sample (10%) of the subject (n=17). A pilot study was carried out after the experts' opinion and before starting the actual data collection. The pilot study was done to test clarity, sequence of items,

applicability, relevance of the questions and to determine the needed time to complete the questionnaire. No modifications were done. The estimated time needed to complete the questionnaire items from postgraduate nursing students was 15-20 minutes.

6. Reliability of tools was tested using Cronbach's Alpha Coefficient test. Reliability of academic support scale =**0.969** and reliability of academic locus of control =**0.877**
7. Academic support scale and academic locus of control were used to collect data from identified subjects.
8. **Data collection phase:** the data were collected from postgraduate nursing students by online questionnaire. The researcher sends the online questionnaire to respondents' students and the subjects recorded the answer and send again to the investigator. The data was collected over period of six months started from 1/5/2022 until 1/11/2022. Tool of student achievement was collected by investigator from postgraduate control.

## Results

**Table (1):** Illustrates frequency distribution of the postgraduate nursing students according to their personal data. It shows that, the age of postgraduate nursing students ranged from 25-47 years old with mean age  $29.55 \pm 3.71$ . The majority (92.5%) of postgraduate nursing students were females. More than three quarters (77.6%) of them in master degree. More than one quarter (30.4%) of them were in Nursing Administration Department. Nearly two third (65.2%) of them in academic year

2021/2022. More than half (52.8%) of them in second semester.

**Table (2):** Demonstrates frequency distribution of the postgraduate nursing students according to total levels of academic support. It shows that the majority (87.6%) of the postgraduate nursing students had high perception level of academic support. The majority (93.2%, 88.2%, 83.9%, 83.2%, 81.4%, 80.1%) of the postgraduate nursing students had a high perception level about subject matter expertise, professional competence, teaching style, personal characteristics, classroom management style, and educational staff relation with students, respectively.

**Figure (1):** Demonstrates distribution of the postgraduate nursing students according to overall academic locus of control. It reveals that the majority (98.1%) of the postgraduate nursing students had internal academic locus of control. While, the

minority (1.9%) of them had external academic locus of control.

**Table (3):** Reveals frequency distribution of the postgraduate nursing students according to their academic achievement. It illustrates that nearly one third (30.7%) of the postgraduate nursing students had very good (B), and 1.3% of them had high pass (D+).

**Table (4):** Clarifies correlation between the postgraduate nursing students' perception of academic support, academic locus of control and academic achievement. As noticed from this table that academic support had a high positive statistically significant correlation with academic locus of control, where  $r = 0.417^*$ ,  $p\text{-value} = <0.001^*$ . while, no statistically significant correlation with academic support and achievement, where  $r = -0.032$ ,  $p\text{-value} = 0.695$ , and no statistically significant correlation with academic locus of control and achievement, where  $r = -0.028$ ,  $p\text{-value} = 0.735$ .

**Table (1): Frequency distribution of the postgraduate nursing students according to their personal data (n =161)**

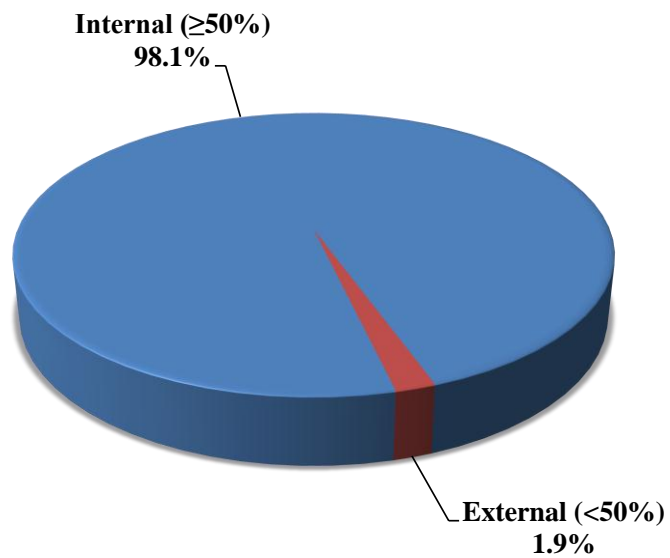
Personal data of the student	No.	%
<b>Age</b>		
25-<30	99	61.5
30-<35	43	26.7
35-<40	17	10.6
≥40	2	1.2
Min. – Max.	25.0 – 47.0	
Mean ± SD.	29.55 ± 3.71	
Median	28.0	
<b>Gender</b>		
Male	12	7.5
Female	149	92.5
<b>Degree</b>		
Diploma	6	3.7

Master	125	77.6
Decorate	30	18.6
<b>Department</b>		
Nursing Administration	49	30.4
Community Health Nursing	21	13.0
Medical-Surgical Nursing	19	11.8
Critical Care and Emergency Nursing	26	16.1
Maternal and Newborn Health Nursing	13	8.1
Psychiatric and Mental Health Nursing	7	4.3
Pediatric Nursing	26	16.1
<b>Academic year</b>		
2020/2021	56	34.8
2021/2022	105	65.2
<b>Semester</b>		
First	6	3.7
Second	85	52.8
Third	14	8.7
Thesis	56	34.8
<b>No. of courses</b>	<b>(n= 124)</b>	
Min. – Max.	0.0 – 11.0	
Mean ± SD.	6.66 ± 1.79	
Median	6.0	

**Table (2):Frequency distribution of the postgraduate nursing students according to level of academic support. (n=161)**

Academic support dimensions	Low		Moderate		High	
	No.	%	No.	%	No.	%
Personal characteristics	12	7.5	15	9.3	134	83.2
Subject matter expertise	7	4.3	4	2.5	150	93.2
Educational staff relation with students	17	10.6	15	9.3	129	80.1

<b>Teaching style</b>	10	6.2	16	9.9	135	83.9
<b>Professional competence</b>	9	5.6	10	6.2	142	88.2
<b>Classroom management style</b>	12	7.5	18	11.2	131	81.4
<b>Overall academic support</b>	7	4.3	13	8.1	141	87.6



**Figure (1):** Distribution of the postgraduate nursing students according to overall academic locus of control



**Table (3): Frequency distribution of the postgraduate nursing students according to their academic achievement (n = 150)**

Student Achievement	No.	%
Exceptional (A+): 95% -100%	0	0.0
Excellent (A): 90% - < 95%	26	17.3
Superior (B+): 85% - < 90%	36	24.0
Very good (B): 80% - < 85%	46	30.7
Above Average (C+): 75% - < 80%	23	15.3
Good (C): 70% - < 75%	11	7.3
High Pass (D+): 65% - < 70%	2	1.3
Pass (D): 60% - < 65%	0	0.0
Fail (F): (2 out of 5) <60%	6	4.0

**Table (4): Correlation between the academic support, locus of control and achievement among postgraduate nursing students**

		Overall Academic support	Overall Academic locus of control	Tool III: Student Achievement
Overall Academic support	r		0.417*	-0.032
	p		<0.001*	0.695
Overall Academic locus of control	r			-0.028
	p			0.735
Tool III: Student Achievement	r			
	p			

### Discussion

The present study results revealed that the majority of the postgraduate nursing students had high level of academic support. This is due to the majority of them

had a high level of perception regarding subject matter expertise, professional competence, teaching style, personal characteristics, classroom management

style, and educational staff relation with students.

This result is supported by **Mpewe and Kalima (2023)** <sup>(21)</sup> who found that teacher support was very good. As well as, **El-Naby et al., (2019)** <sup>(7)</sup> and **El-Hosany and Sleem (2017)** <sup>(22)</sup> reported that the majority of students had high academic support.

On the other line, this result contradictory with **Jiang et al., (2023)** <sup>(23)</sup> and **Brooks (2021)** <sup>(24)</sup> who showed that most students had low perception of academic support.

The present study results revealed that the majority of the postgraduate nursing students had internal academic locus of control. This result is due to postgraduate nursing students attempt to master most of the material they learn at college, work toward improving their deficiencies, determine own career goals, know what want to do in their life, read more around the topics to be as knowledgeable as possible, have a plan for their future life, do the best in their field of study, consider themselves highly motivated to achieve success in life, plan well and stick to plans, and determine what want to learn according to their academic requirements.

This result is supported by **Fabella and Aler (2023)** <sup>(25)</sup> and **Fares (2020)** <sup>(26)</sup> who revealed that the most of the students had an internal locus of control. In addition, **Polzin (2018)** <sup>(27)</sup> found that more than two third of the participants had an internal locus of control.

On the other line, this result contradictory with **Mulike (2020)** <sup>(28)</sup> and **Bharathi and Joseph (2017)** <sup>(29)</sup> who found that respondents with an external locus of

control had a higher percentage compared to the respondents with an internal locus of control.

The present study results revealed that the majority of the postgraduate nursing students had very good grade. This result may be due to the lack of time in the credit hours system, which causes pressure on postgraduate nursing students to complete their required courses and obtain high grades.

Along with this present finding, **El-Naby et al., (2019)** <sup>(7)</sup> who reported that more than half of nursing students had very good grade, while one third of them had excellent grade and minority of them had pass grade and fail grade.

The present study results revealed that there is a positive statistically significant correlation between academic support and academic locus of control. This result may be due to faculty staff thinking about the students' activities regarding their studies likewise their concentration in studies and their best performance in which subjects, and provide appropriate academic support strategies for them and take into account students' personality characteristics as an academic locus of control.

In the same scene, **Sari and Fakhruddiana (2019)** <sup>(30)</sup> and **Arslan et al. (2013)** <sup>(31)</sup> reported that there is a very significant correlation between internal locus of control and support of the students.

On contrary, **El-Hosany and Sleem (2017)** <sup>(22)</sup> study is inconsistent with the present study result and found that there was no significant correlation between locus of control whether internal or external and perceived academic support total score.

The present study results revealed that no statistically significant correlation between overall academic support and student achievement. This result may be due to the majority of postgraduate nursing students are females who may have children, more responsibility, sleep disturbance, the economic conditions they find themselves in, their health conditions, their relationships within the family, harsh control parenting, and job during studying. Along with the present finding, **Koçak et al (2021)** <sup>(32)</sup> revealed that the number of variables affecting students' academic achievement are evaluated in the categories of psychological, socio-economic, socio-demographic and individual characteristics, and family was bigger than other categories.

On the other line, this result contradictory with **Kim (2021)** <sup>(33)</sup> and **El-Naby et al., (2019)** <sup>(7)</sup> who reported that there was a statistically significant positive correlation between faculty support and student achievement of all nursing students.

The present study results revealed that there is no statistically significant correlation between overall academic locus of control and student achievement. This result may be due to differences in their intelligence and personality, unhealth lifestyle, loss of interest for some subjects, socio-economic status for their parents, family problems and instability.

This result is supported by **El-Hosany and Sleem (2017)** <sup>(22)</sup> and **Ogunmakin and Akomolafe (2013)** <sup>(34)</sup> who revealed that there was no significant correlation between locus of control (internal or external) and learning performance.

On the other line, this result contradictory with **Akunne and Anyanmene (2021)** <sup>(35)</sup> and **Bahçekapili and Karaman (2020)** <sup>(36)</sup> who reported that the relationship between locus of control and academic achievement of students is statistically significant.

### **Conclusion**

**Based on the findings of the present study it was concluded that:**

The majority of the postgraduate nursing students at Tanta University had high perception level of academic support and internal academic locus of control. Nearly one third of the postgraduate nursing students had very good (B). There was a highly statistically significant correlation between postgraduate nursing students' perception of academic support and their academic locus of control, while no statistically significant correlation between them and academic achievement.

### **Recommendations**

**In the light of the finding obtained from the present study, the following recommendations were suggested:**

#### **Faculty administration**

- Conduct training sessions and workshops for faculty staff regularly to foster their role in supporting students academically.
- Make an orientation program for new faculty staff regarding effective characteristics and behaviors that students perceived as important.
- Review and modify the nursing curriculum to provide more opportunities for nursing students to intellectual development.

- Ensure and organize a comfortable learning environment that facilitates student support and needs.

#### **Postgraduate nursing students**

- Counseling practices, workshops or interviews can be planned in order to increase the awareness of the students in line with their own goals, expectations and desires and to provide them with skills to reach them.
- Enhancing students' habits in their academic studies by running courses in learning strategy.
- Orientation sessions that include the variables that affect the academic locus of control.

#### **Further research**

- Replication of the study on various academic settings to investigate factors affected students' academic performance and their achievements to detect the facilities that enhance the quality of learning.
- Study factors that advance academic achievement as motivation, self-esteem and time management or hinder it as stress and anxiety.

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