Academic stress and self-control among medical students at Minia University[1]

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Abstract

Background: Medical students are subjected to various stressors throughout their training, which has a considerable impact on their physical and mental health, such stressors must be fully understood within a cultural context to tailor supportive strategies. A descriptive co-relational design was utilized to achieve the objective of the study. This study was conducted at Faculty of medicine Faculty of Medicine, Minia University. **Methods** of 150 students was selected from the previous setting chosen. Three tools were used for data collection (first tool): A structured interviewing questionnaire to assess socio-demographic characteristics of the students as age, gender, residence, and parent's education, (second tool): Medicine education stress scale (academic stress subscale), (third tool): Self-control scale. **Results:** There was a statistically significant relationship between academic stress and self-control among medical students. **Conclusion**: It was concluded that there was a highly statistically significant negative correlation between academic stress and self-control among faculty of medical students. Recommendations: Stress management techniques, behavioral therapy techniques, assertiveness training techniques, and mindfulness training should be given to the student to help them relieve their academic stress and disturbed levels of self-control.

Keywords: Academic stress; Self-control; Medicine students

Introduction

Medical students represent the most common category of academic populations with high levels of stress. Medical studies especially require students to engage in many stressful activities, and persistent stress causes

[1] تم استلام البحث في ٢٠٢٤/٩/٢٠ وتقرر صلاحيته للنشر في ٢٠٢٤/١٠/٢٩
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many adverse effects on students 'mental health. Exams school in Serbia medical at a in a study conducted students all estimated as high stressors in of (Sehlo, M.et al, 2018.P231).

Stress is frequently noted in life sciences courses, particularly in undergraduate pharmacy programs, when medical students are concerned about finishing the program's academic component due to increasing study hours, a difficult curriculum, a tremendous workload, assignments, and tests. Furthermore, Medicine students gain practical exposure in highly stressful conditions (Danya Ibrahim et al, 2023,P9) According to the World Health Organization, stress is one of the leading causes of disability worldwide, and it is anticipated to contribute significantly to the overall global disease burden by 2030 (Elham et al,2023.P121). Furthermore, medical students are typically new to medicine and caregiving, and they are learning how to interact with a variety of people and settings. They are often the most junior members of a health-care team. They are exposed to a variety of pressures during their education and training since they must learn to deal with a variety of people and situations before practicing professionally. High workloads, dissatisfaction with their clinical experience, and unpleasant clinical settings are three factors contributing to students' high levels of stress in their first clinical practice program. These demands influence learning, performance, and physical and mental health (Silvia et al, 2023).

Academic stress is defined as the emotional, physical, and psychological pressure that students endure as a result of academic demands and responsibilities. Heavy course loads, exams, assignments, time management, student contests, instructor competency, and a lack of resources all contribute to student stress (Nadya et al, 2023,P23). Academic stress encompasses the strain experienced by individuals in educational pursuits, stemming from tasks like exams, assignments, and performance expectations. It impacts mental health, cognitive functioning, and overall well-being, exacerbated by reasons like competition, workload, and fear of failure. Effective coping mechanisms and support systems are essential to mitigate adverse effects (Elham, 2023,P122).

According to Ujjawal Paudel (2024), stress occurs when internal or external demands exceed an individual's coping resources. Self-control becomes crucial for medical students to manage their workload effectively, maintain focus during clinical practice, and cope with emotional demands. Strong self-control enables students to regulate emotions, resist distractions, and make sound decisions in high-pressure situations, critical skills for nursing practice.

Stress is a demand that makes the organism adapt the organism to adapt or adjust (Nitin Joseph et al, 2020.P17). One type of stress is academic stress, caused by students' excessive workloads, competition between them, failure, financial factors, poor relationships between students and lecturers, and family problems (Amanda Wondrasek, et al, 2023). According to Nitin Joseph et al. (2020), academic stress is a subjective perception of academic situations (Nadya Ariyani, 2023,P24)

Self-control was a crucial aspect for medical students, particularly in managing stress, prioritizing tasks, and maintaining professionalism in challenging situations. Developing self-control helps students navigate the demands of their coursework, clinical rotations, and interactions with patients and colleagues effectively (Felix Busch et al, 2024). Self-control involves regulating thoughts, emotions, and behaviors to align with long-term goals or societal norms, crucial for personal development and goal attainment (Siti Nur, 2024.P5).

Self-control is the ability to override or change one's internal impulses and stop undesired behavioral tendencies, such as impulsive behaviors. Self-control refers to the individual's ability to consciously govern their behaviors while rejecting impulses, habits, or automatic responses. Widespread research has consistently shown that self-control predicts positive adjustment, optimal performance, and academic achievement (Omotejohwo Emily et al, 2024)

The relationship between academic stress and self-control is often reciprocal. Academic stress can challenge an individual's self-control by creating situations that demand resilience, time management, and emotional regulation. Conversely, having strong self-control skills can help students cope with academic stress more effectively by enabling them to stay focused, organize their priorities, and maintain healthy habits to manage stress (Bamuhair, S, S, et al 2015,P221)

Objectives

The present study aimed to clarify the relationship between self-control and academic stress among medical students.

Significance of the study

The estimated prevalence of stress among medical students varied across universities. Furthermore, there are conflicting studies about whether males or females are more stressed and which stressor domain has a stronger correlation with medical stress. Stress may also persist in the post-graduation era and practical life. Appropriate therapies can assist medical students to manage stress and improve their personal and professional life. (Fawzy, M.;

▪ **Academic stress and self – control among medical students at Minia University**.

Hamed, S.A.2017)

A study conducted at King Khalid University examined 168 participant responses and discovered that the majority of medical students were moderately anxious (58.34%). The results to the academic stress scale revealed that exams were the most common source of stress among students. Furthermore, overall academic stress was significantly positively associated with acne and physical complaints (Aziz and Khan, 2022.P29). Atwa, H.S.et al (2019) found that female interns and undergraduate students in the clinical years of study at King Khalid University's College of Medicine had greater

Second study aimed to assess the prevalence of academic stress among medical students in Saudi Arabia and to identify its associated factors. This cross-sectional study was conducted at the College of Medicine at King Khalid University, Abha. The Medical Student Stressor Questionnaire (MSSQ) was used to evaluate the stress caused by different factors. A total of 422 medical students participated in this study. Among the participants, 115 were male and 307 were female. The highest percentage of students were perceiving moderate to severe stress due to academic-related stressors, followed by teaching- and learning-related stressors) and group activities-related stressors . The lowest domain in which students perceived moderate to severe stress was drive and desire-related stress. The mean percentage of students who perceived moderate to-severe stress in all domains of stress. We can conclude that medical students have a high degree of stress, and we emphasize the importance of implementing stress management programs to teach students how to handle stress in order to avoid negative effects on their health and academic performance (Maram M. Al-Shahrani, 2023).

In an Arab study conducted with the aim of knowing the prevalence of psychological stress among medical students, Hossein Bayat et al. 2024 A cross-sectional study was conducted in the faculty of medicine of five Syrian universities. The Medical Student Stressor Questionnaire (MSSQ) was used to evaluate the stress caused by the possible sources of stress. And Social Support Questionnaire – short version (SSQ – short version) was used to assess the social support that medical students received from family, friends, and their fellow medical students using six questions. A total of 1472 medical students participated in the study. Among the total participants, 671 (45.6%) were males, and 801 (54.4%) were females. The majority of the participators had mild (50.6%; n=745) and moderate (37.0%; n=545) stress levels. Academic-related stressors were the most important cause of stress among undergraduate medical students. Social support was provided equally to both genders, and genders reported the same degree of satisfaction.

Therefore, this study aims to assess academic stress and self-control among medical students Based on the background of the problem above, the researcher would like to be interested in further examining the relationship between Academic stress and its relationship to self-control among medical students. Students were the pillars of the nation that should be able to stand strong, healthy, controlled and optimistic to face all the challenges ahead. That way, researcher wanted to connect the expectations and hopes of the nation to the importance of the students' future. In particular, self-esteem and self-control are still rarely studied by most researchers. Therefore, the researchers wanted to test: the what is the role of Academic stress and self-control with medical students at Minia University

Research Questions

- What is the level of academic stress among the medical students in Minia University?
- What is the level of self-control among medical students in Minia University?
- What is the relationship between academic stress and self-control among medical students in Minia University?

Theoretical and Operational Definitions

Stress is defined as any form of change leading to physical, emotional, or psychological disturbances. Academic stress is the mental and physical response of the body when academic-related demands are greater than the adaptive abilities of students, especially in the of absence of social support. Academic stress is specifically related to the learning environment (Maram Shahrani et al., 2023). Academic stress was operationally defined as the score representing stress level by using the **Medicine Education Stress Scale**, which was developed by Rhead (1995) to assess education stress among Medicine students generally (Rasouli R, &Razmizade H. 2013).

Long-term academic stress will cause various mental and physiological health disorders. Among the negative impacts are mental health disorders (anxiety, emotional fatigue, and depression), as well as physical disorders (decreased immune system, digestive disorders, and as well as insomnia). Depression becomes part of a severe health problem. (Hamidulloh Ibda et al, 2023).

Self-control is the capacity to withstand external temptation and internal urges in pursuit of a goal (Mujidin Mujidin, et al 2024). Self-control was operationally defined as the score representing students' self-control levels, assessed using a self-control scale developed by (Sima, et al, 2024).

Self-control it can also be defined as a strategic behavioral mechanism involved in the adequate management of emotions and thoughts. This aids in adopting new behaviors or ceasing inappropriate ones. (W. C. Khotimah, and Kardinah, 2020)

Medical students are those students enrolled in the medical program at the Faculty of Medicine, Minia University during the academic year 2023-2024.

Research Design

A descriptive correlational design was employed to achieve the aim of the study.

Research Setting

This study was carried out at Faculty of Medicine, Minia University.

Sample

The sample size was calculated at a power of 80%, confidence level of 95%, and margin of error of 5%, accordingly the calculated sample size was 150 students by using the Stephen Thompson equation:

$$n = \frac{N \times p(1-p)}{\left[\left[N-1\times\left(d^2 \div z^2\right)\right]+ p(1-p)\right]}$$

Subjects:

A convenient sample of 150 students was selected from the chosen setting who had the following inclusion and exclusion criteria Inclusion criteria: Medical students, Exclusion criteria: students who have any history of chronic physical illness e.g. diabetes mellitus or others and any history of psychiatric illness e.g. depression because these illnesses may lead to stress and will interfere with the results. The current research focused on students from the fourth to the sixth year, as they are the students most exposed to stress.

Tools of Data Collection

The following tools were used to achieve the aim of the study.

Tools of Data Collection:

The following tools were used to achieve the aim of the study.

Tool one: A structured Interviewing Questionnaire

It was designed by the researcher based on pertinent literature to assess the socio-demographic characteristics of the students including students' age,

gender, residence, and parent's education.

Tool Two: Academic stress Scale (ASS)

It was developed by Hamidulloh Ibda (2023) to assess education stress among medical students generally. It was tested for its validity by a panel of experts. It was an English scale containing 32 items; the medicine education stress scale uses two subscales 16 items for each, the first one to academic stress and the second one to measure clinical training stress among medical students in general. It was translated to Arabic and was translated back to English and modifications were done to be fit for nursing students, Responses are rated on a 4-point Likert scale ranging from 1-4, "Scarcely, sometimes, much, and too much". The academic stress subscale was used by the researcher

Scoring System

score less than 24 no academic stress, score range from 24-32 mild academic stress, score range from 33-40 moderate academic stress, and score range from 41-48 refers to severe academic stress.

Tool Three: Self-Control Scale (SCS)

The Self-Control Scale (Mujidin Mujidin, et al, 2024). This scale has 13 items ($\alpha = 0.90$) measured from 1 (Not at all) to 5 (Very much). Items were summed and higher scores on this measure are indicative of greater levels of self-control. The academic stress subscale was used by the researcher

Scoring System

A score below 39 refers to no self-control, a score ranging from 39-65 refers to low self-control, a score ranging from 66-91 refers to moderate self-control and a score ranging from 92-104 refers to high or extreme self-control

Ethical Consideration

Informed consent was obtained from every participant who agreed to participate in the study after a complete description of the aim, nature, and confidentiality of the study.

A Pilot Study

A pilot study was conducted to test the reliability and validity of the questionnaire items and the clarity of questions. A total of 10% of the sample were recruited for the pilot study. All subjects included in the pilot study met the inclusion criteria. The pilot study revealed minimal modifications in the questionnaires. Subjects in the pilot study were excluded from the main study

sample

Data Collection

Google form was used to collect the data from students. The data was collected from February 2024 to May 2024.

Statistical Analysis

A *p*-value of <0.05 indicated statistical significance. All data were analyzed with SPSS (Statistical Package for Social Sciences), Version 21.0 (Hu, W. 2018).

Limitations of the study

There were some limitations in the application and the time of the sample itself.

Results:

Table (1): Socio-demographic characteristics of the studied students (N =150):

Table (1): Socio-demographic characteristics of the studied students (N =150): This table shows that more than three quarters 79.3.9% are female, and almost half 57.3% have a private house. 71% of their daily expenses are enough, 80% are living with both parents, 48.7% of their father's education is from university or higher education, 44% of their fathers have a government job, 50% age of their mothers are between 40 to 50-years old, one third 38% their mother education is university or high education, 57.0% their mothers are not working, almost all 86.7% their parents' relationship is understanding and respectful.

Table (2) Differences between socio-demographic characteristics and academic stress levels of the studied Students (N=150)

المتغيرات	الفئات	No N =14		Mild N =44		Moderate N =74		Severe N =18		X2	P value
		NO.	%	NO.	%	NO.	%	NO.	%		
Gender	Female	13	92.9%	35	79.5%	55	74.3%	16	88.9%	3.698	0.296
	Male	1	7.1%	9	20.5%	19	25.7%	2	11.1%		
Age	Less than 20 years	7	50.0%	14	31.8%	15	20.3%	6	33.3%	11.639	0.234
	From 20 to 25 years	5	35.7%	21	47.7%	45	60.8%	10	55.6%		
	From 26 to 35 years	1	7.1%	9	20.5%	10	13.5%	2	11.1%		
	More than 35 years	1	7.1%	0	0.00	4	5.4%	0	0.0%		
Home	Owner	8	57.1%	24	54.5%	47	63.5%	7	38.9%	3.799	0.284
	Rent	6	42.9%	20	45.5%	27	36.5%	11	61.1%		
Daily expense	Enough	11	78.6%	38	86.4%	49	66.2%	9	50.0%	10.173	0.017 (S)
	Not enough	3	21.4%	6	13.6%	25	33.8%	9	50.0%		
Living with	Both parents	14	100.0 %	38	86.4%	57	77.0%	11	61.1%	15.507	0.078
	Relatives	0	0.00	1	2.3%	8	10.8%	1	5.6%		

المتغيرات	الفئات	N0 N =14		Mild N =44		Moderate N =74		Severe N =18		X2	P value
		NO.	%	NO.	%	NO.	%	NO.	%		
	Friends	0	0.00	0		3	4.1%	1	5.6%		
	Uther	0	0.00	5	11.4%	6	8.1%	5	27.8%		
Father age	Less than 40 years old	0	0.00	1	2.3%	1	1.4%	0	0.0%	5.111	0.825
	From 40 to 50 years	9	64.3%	18	40.9%	29	39.2%	7	38.9%		
	From 51 to 60 years	4	28.6%	13	29.5%	27	36.5%	7	38.9%		
	61 years and over	1	7.1%	12	27.3%	17	23.0%	4	22.2%		
Father education	Illiterate	2	14.3%	1	2.3%	4	5.4%	3	16.7%	11.754	0.068
	Primary Preparatory Secondary	3	21.4%	23	52.3%	37	50.0%	4	22.2%		
	University or higher	9	64.3%	20	45.5%	33	44.6%	11	61.1%		
Father job	Governmental	7	50.0%	18	40.9%	30	40.5%	11	61.1%	7.011	0.320
	Nongovernmental	5	35.7%	11	25.0%	28	37.8%	3	16.7%		
	Not work	2	14.3%	15	34.1%	16	21.6%	4	22.2%		

المتغيرات	الفئات	N0 N =14		Mild N =44		Moderate N =74		Severe N =18		X2	P value
		NO.	%	NO.	%	NO.	%	NO.	%		
Mother age	Less than 40 years old	2	14.3%	6	13.6%	9	12.2%	3	16.7%	10.096	0.343
	From 40 to 50 years	10	71.4%	21	47.7%	35	47.3%	9	50.0%		
	From 51 to 60 years	2	14.3%	16	36.4%	25	33.8%	3	16.7%		
	61 years and over	0	0.00	1	2.3%	5	6.8%	3	16.7%		
Mother education	Illiterate	2	14.3%	8	18.2%	14	18.9%	5	27.8%	6.343	0.386
	Primary Preparatory Secondary	4	28.6%	24	54.5%	29	39.2%	7	38.9%		
	University or higher	8	57.1%	12	27.3%	31	41.9%	6	33.3%		
Mother job	Governmental	4	28.6%	10	22.7%	22	29.7%	7	38.9%	13.827	0.032
	Nongovernmental	4	28.6%	2	4.5%	15	20.3%	0	0.0%		(S)
	Housewife	6	42.9%	32	72.7%	37	50.0%	11	61.1%		
Parents relationship	Understanding and respectful	13	92.9%	40	90.9%	64	86.5%	13	72.2%	4.402	0.221
	Non respectful	1	7.1%	4	9.1%	10	13.5%	5	27.8%		

This table reveals no statistically significant relation between socio-demographic characteristics and academic stress levels of the studied students, except for daily expenses and their father's job. The high percentage of academic stress levels was among students of mothers not working.

Figure (1) Academic stress levels among medical students (N=150)

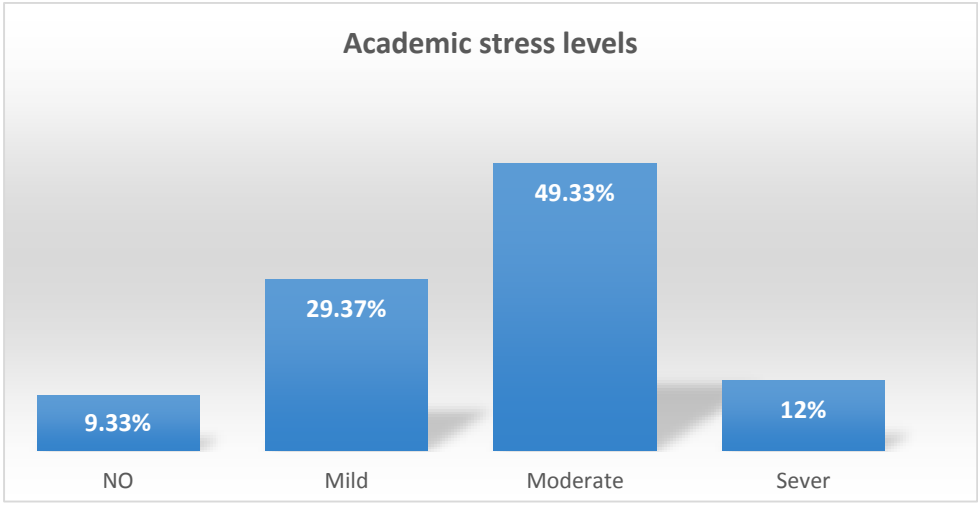


Figure 1: Academic stress levels among the studied students: This figure shows that there was mild and moderate academic stress among the studied students (29.37%, 49.33%) respectively

Table (3) Differences between socio-demographic characteristics and self-control levels among the studied students (N=150)

Sociodemographic characteristics		High N =2		Mild N =78		Moderate N =60		No N =10		X^2	P value
		NO.	%	NO.	%	NO.	%	NO.	%		
Gender	Male	1	50.0%	64	82.1%	49	81.7%	5	50.0%	6.848	0.077
	Female	1	50.0%	14	17.9%	11	18.3%	5	50.0%		
Age / years	Less than 20 years	1	50.0%	25	32.1%	16	26.7%	0	0.0%	20.544	0.015
	From 20 to 25 years	1	50.0%	37	47.4%	36	60.0%	7	70.0%		(S)
	From 26 to 35 years	0	0.0%	16	20.5%	5	8.3%	1	10.0%		
	More than 35 years	0	0.0%	0	0.0%	3	5.0%	2	20.0%		
The home	owned	2	100.0%	45	57.7%	36	60.0%	3	30.0%	4.721	0.193
	rented	0	0.0%	33	42.3%	24	40.0%	7	70.0%		
Daily expense	Enough	1	50.0%	56	71.8%	43	71.7%	7	70.0%	0.465	0.926
	Not enough	1	50.0%	22	28.2%	17	28.3%	3	30.0%		
Living with	Both parents	2	100.0%	65	83.3%	48	80.0%	5	50.0%	18.177	0.033
	Relatives	0	0.0%	5	6.4%	3	5.0%	2	20.0%		(S)
	Friends	0	0.0%	0	0.0%	2	3.3%	2	20.0%		
	Another	0	0.0%	8	10.3%	7	11.7%	1	10.0%		

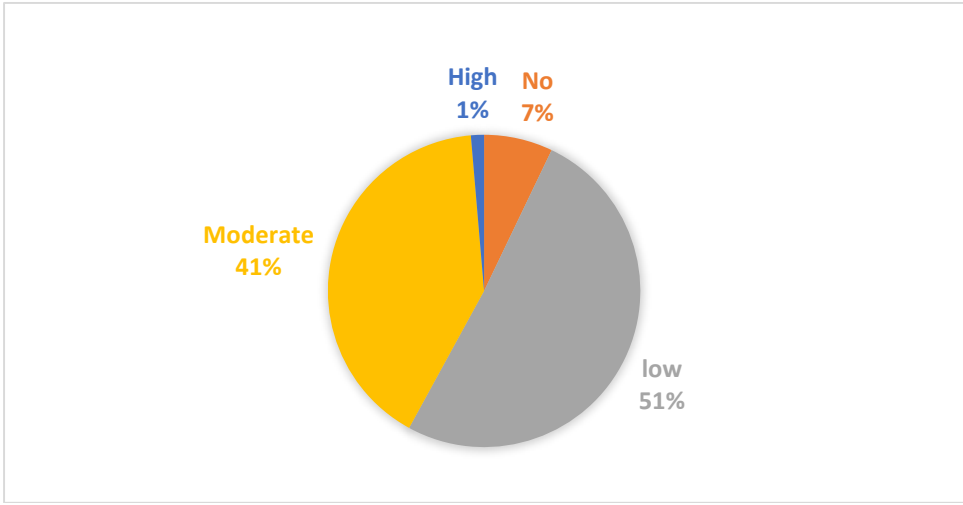
Sociodemographic characteristics		High N =2		Mild N =78		Moderate N =60		No N =10		X^2	P value
		NO.	%	NO.	%	NO.	%	NO.	%		
Father age	Less than 40 years old	1	50.0%	0	0.0%	1	1.7%	0	0.0%	41.797	0.000
	From 40 to 50 years	0	0.0%	32	41.0%	25	41.7%	6	60.0%		(S)
	From 51 to 60 years	0	0.0%	30	38.5%	18	30.0%	3	30.0%		
	61 years and over	1	50.0%	16	20.5%	16	26.7%	1	10.0%		
Father education	Illiterate	1	50.0%	2	2.6%	5	8.3%	2	20.0%	13.521	0.035
	Preparatory or Secondary	0	0.0%	39	50.0%	23	38.3%	5	50.0%		(S)
	University or higher	1	50.0%	37	47.4%	32	53.3%	3	30.0%		
Father job	Governmental employee	1	50.0%	33	42.3%	29	48.3%	3	30.0%	10.458	0.107
	Nongovernmental employee	0	0.0%	29	37.2%	12	20.0%	6	60.0%		
	Not work										
	Governmental employee	1	50.0%	16	20.5%	19	31.7%	1	10.0%		

Sociodemographic characteristics		High N =2		Mild N =78		Moderate N =60		No N =10		X^2	P value
		NO.	%	NO.	%	NO.	%	NO.	%		
Mother age	Less than 40 years old	1	50.0%	8	10.3%	8	13.3%	3	30.0%	7.825	0.552
	From 40 to 50 years	0	0.0%	41	52.6%	29	48.3%	5	50.0%		
	From 51 to 60 years	1	50.0%	25	32.1%	18	30.0%	2	20.0%		
	61 years and over	0	0.0%	4	5.1%	5	8.3%	0	0.0%		
Mother education	Illiterate	1	50.0%	11	14.1%	15	25.0%	2	20.0%	4.876	0.560
	Preparatory or Secondary	0	0.0%	36	46.2%	23	38.3%	5	50.0%		
	University or higher	1	50.0%	31	39.7%	22	36.7%	3	30.0%		
Mother job	Governmental employee	1	50.0%	22	28.2%	18	30.0%	2	20.0%	7.395	0.286
	Nongovernmental employee do Not work	0	0.0%	8	10.3%	9	15.0%	4	40.0%		
	Governmental employee	1	50.0%	48	61.5%	33	55.0%	4	40.0%		

Sociodemographic characteristics		High N =2		Mild N =78		Moderate N =60		No N =10		X^2	P value
		NO.	%	NO.	%	NO.	%	NO.	%		
Parents relationship	Understanding and respectful										
	non-understanding and non-respectful	1	50.0%	66	84.6%	54	90.0%	9	90.0%	3.284	0.350
	Understanding and respectful non-understanding and non-respectful	1	50.0%	12	15.4%	6	10.0%	1	10.0%		

This table reveals that there is no statistically significant relation between socio-demographic characteristics and self-control levels of the studied students except for student age, living with parents, father's age, and education.

Figure 2: self-control levels among the studied students



Self-control levels

Figure 2: Self-control levels among the studied students: This figure shows that more than half of the studied students (52%) have mild self-control

Table (4) Relation between academic stress and self-control among the studied students (N =150)

variable	Levels	Self-control levels								X^2	P value
		No N=2		Low N=78		Moderate N=60		High N=10			
		NO.	%	NO.	%	NO.	%	NO.	%		
academic stress levels	high	1	50.0%	8	10.3%	5	8.3%	0	0.0%	20.482	0.005
	Moderate	1	50.0%	24	30.8%	17	28.3%	2	20.0%		
	Low	0	0.0%	42	53.8%	24	40.0%	8	80.0%		
	No	0	0.0%	4	5.1%	14	23.3%	0	0.0%		

This table reveals that there is a highly statistically significant relation

between academic stress and self-control among the studied students at a p-value (0.005).

Table (5) Correlation between academic stress and self-control (N =150*)*

Studied variable	*Academic stress*	
	r	***P value***
Self-control	*-0.181*	*0.005*(S)

This table shows a statistically significant negative correlation between academic stress and self-control levels at a p-value (0.005). It means when academic stress levels increase self-control levels decrease.

Discussion

The academic environment often imposes substantial demands on self-control, leading to significant psychological strain. Academic tasks typically require high levels of self-control due to the complexity of lectures, fixed schedules, and increasingly complex academic projects (Silvia Tafoya et al, 2023). This study aimed to examine the relationship between academic stress and self-control among medical students in one of the Egyptian universities (Minya University). This research is crucial as it helps in understanding how stress impacts students' ability to regulate their behavior and manage their academic responsibilities, which can inform interventions to improve their well-being and academic performance.

The findings revealed that the mean age of the studied students was 21.3±0.58 years, with over two-thirds (79%) being female. This may be due to the traditionally higher enrollment of females in medicine programs, which are often with female tendencies and desires for superiority and social prestige. This demographic profile aligns with previous studies conducted by Hasan Al Houri et al (2023), who found that 67% of medical students were aged between 21-23 years, and 80% were female. Similarly, Sehlo, M et al (2018) reported that the majority of their participants were 21 years old and predominantly female.

More than half of the studied students (71.3%) reported that their daily expenses were only sufficient, reflecting the challenging economic conditions and high cost of living. This may be due to the fact that many students rely on limited financial support from their families or part-time jobs, which may not adequately cover their expenses in an increasingly expensive living environment. This finding is consistent with Nadya Ariyani et al (2023), who found that 85% of medical students' family incomes were adequate.

Additionally, most students (80%) lived with both parents, and a significant portion of their fathers (48.7%) and mothers (38%) had university or higher education. This cultural norm of living with both parents and the parental encouragement for higher education likely influenced these results. In contrast, Danya Ibrahim, et al (2023) found that ٣٥% of their participants lived separately, and their parents had secondary education levels.

Regarding academic stress, the study revealed that 49.33% of the students have moderate levels, likely due to the demanding nature of medical courses, heavy assignment loads, and stressful clinical placements. Garg Agarwal &, Dalal. (2017) similarly found that medical students experienced significant academic stress and anxiety, with 70% reporting high stress levels. Salam A et al. (2013) also noted moderate academic stress among medical students in Ireland. The moderate levels of academic stress reported by students are indicative of the rigorous nature of medicine programs, which require extensive theoretical and practical knowledge. The current researcher also confirms that the number of years of study in medical colleges, which is approximately 7 years of study, may be a factor in stress and psychological and material pressure on the student himself and his family as well.

The study found a statistically significant relationship between students' fathers' occupations and academic stress, with students whose fathers had non-governmental jobs experiencing higher levels of stress. This could be attributed to the additional stressors and responsibilities faced by fathers in non-governmental jobs, which may transfer to their children. This finding contrasts with Danya Ibrahim et al (2023) and Silva et al. (2020), who found no significant relationship between fathers' occupations and academic stress. The increased stress among students whose fathers hold non-governmental jobs might be due to less job stability and financial insecurity often associated with these roles. In this regard, the current researcher believes that studying medicine requires large financial resources, especially at the present time, as students need many tools and references that some government universities may not be able to provide.

Furthermore, the study showed a significant relationship between fathers' education levels and academic stress, with higher stress levels observed among students whose fathers had university or higher education. This may be due to the increased pressure from more educated parents to excel academically. Maram M. et al., (2023) similarly found a significant association between academic stress and fathers' education levels, whereas Amanda Wondrasek et al, (2023) and Ujjawal Paudel et al (2024) reported no such relationship. The higher academic expectations from educated parents can result in additional pressure on students, contributing to their stress. The

current researcher sees the logic of the previous result as highly educated parents prefer Their sons to be at the same educational level as them or even higher, and consider medical colleges to be the appropriate option for them, so we find some families insisting on their children to join these colleges.

The study also revealed that more than two-thirds of the students (approximately 67%) had low self-control, potentially due to the high levels of stress they were experiencing. Ujjawal Paudel, et al (2024) found similar results, with most medical students exhibiting low to moderate self-control. A significant relationship was found between students' daily expenses and self-control, with lower self-control observed among those with sufficient and savings. This finding contradicts Nadya Ariyani et al (2023) and M. Haikalis et al. (2022), who found no significant relationship between financial status and self-control. The correlation between daily expenses and self-control suggests that financial stress may hinder students' ability to manage their impulses and maintain self-discipline.

Moreover, a significant relationship was found between fathers' education levels and self-control, with lower self-control observed among students whose fathers had university or higher education. This may be due to the busy schedules of highly educated fathers, limiting their ability to teach self-control values. Omotejohwo, et al (2024) found no significant relationship between parents' education levels and self-control, further highlighting the variability in these findings. The demands on the time of highly educated fathers may reduce the opportunities for them to engage with their sons in ways that foster self-control.

The study also demonstrated a significant negative correlation between academic stress and self-control levels. This may be because high-stress levels can overwhelm students' cognitive resources, making it harder for them to exercise self-control. This aligns with Felix Busch et al. (2024), who found that high-stress levels negatively affect executive functioning, including self-regulation. Mujidin Mujidin et al. (2024) and Omotejohwo et al. (2024) also reported a negative relationship between academic stress and self-regulation, reinforcing the importance of stress management in maintaining self-control.

Overall, the findings underscore the need for health education and support for medical students to manage academic stress and develop self-control. This includes teaching students about the causes and symptoms of academic stress, encouraging proactive stress management, and utilizing available support systems (Hamidulloh Ibda, et al 2023). By addressing these issues, educational institutions can help students navigate the demands of their coursework and clinical placements more effectively, ultimately

improving their academic performance and well-being. The current researcher also encourages the presence of periodic workshops on refining the personality capable of withstanding stress, self-reliance, and working under pressure, which greatly helps medical students in not falling victim to stress and anxiety. In the end, we need a doctor with good mental and psychological health.

Conclusion:

Based on the results of this study and research questions, it was concluded that there was a highly statistically significant relation and negative correlation between academic stress and self-control among faculty of Medicine students. So, the current study managed to answer the aim of the study and research question.

Stress level among the medical students is high and mainly in relation to academia. Inadequate guidance from teachers contributed significantly. Stressed students were likely to use maladaptive coping strategies. Strategies to enhance teacher-student communication and adaptive coping measures should be implemented. Further studies should be done to evaluate the effects of stress on the academic outcomes of students (Ujjawal Paudel et al, 2024).

Recommendations:

The present study's prior findings have led to the suggestion of the following recommendations: Create training courses in communication skills for medical educators so they can work with students effectively. Health administrators should create ongoing education programs for doctors on how to deal with students and teach students cognitive behavioral programs to change their way of thinking. Create an educational program about stress management techniques.

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Academic stress and self – control among medical students at Minia University.

الضغوط الأكاديمية وضبط الذات لدى طلاب كلية الطب بجامعة المنيا

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الملخص:

يعاني العديد من طلاب كليات الطب من مستوى كبير من التوتر أثناء الدراسة. وبالرغم من أن التوتر بين طلاب الطب يعتبر ظاهرة شائعة، إلا أنه يجب فهم مثل هذه الضغوطات بشكل كامل في سياق ثقافي لتصميم استراتيجيات داعمة. تم استخدام دراسة وصفية ارتباطية لتحقيق هدف الدراسة. أجريت هذه الدراسة في كلية الطب، جامعة المنيا. تم اختيار عينة مكونة من ١٥٠ طالبًا. تم استخدام ثلاث أدوات لجمع البيانات الأداة الأولى: استبيان البيانات الأولية للوقوف علي الخصائص الاجتماعية والديموغرافية للطلاب مثل العمر والجنس والإقامة وتعليم الوالدين، الأداة الثانية: مقياس الضغوط الأكاديمية لطلاب الطب، الأداة الثالثة: مقياس ضبط النفس. النتائج: كانت هناك علاقة ذات دلالة إحصائية بين التوتر الأكاديمي وضبط النفس بين طلاب كلية الطب. النتائج: تم التوصل إلى نتيجة مفاده أن هناك ارتباطًا سلبيًا ذا دلالة إحصائية بين الضغوط الأكاديمية وضبط النفس بين طلاب كلية الطب. أهم التوصيات: توصى الدراسة الراهنة بضرورة تدريب الطلاب علي تكنيكات تساعدهم على إدارة التوتر والتقليل منه، أيضاً تدريبهم على تقنيات العلاج السلوكي، وتقنيات التدريب التوكيدى، وتدريبات اليقظة الذهنية لمساعدتهم على تخفيف الضغوط الأكاديمية ورفع مستويات ضبط النفس.

الكلمات المفتاحية: التوتر (الإجهاد) الأكاديمي؛ ضبط النفس؛ طلاب الطب