

Psychological Stress and Its Relationship with Academic Achievement among Students Enrolled in Sports Psychology Courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University

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Abstract

Objectives: This study aimed to explore psychological stress and its relationship with academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at Hashemite University. Methods, the study population consisted of students registered in sports psychology course sections (1 + 2) at the Faculty of Physical Education and Sport Sciences, totaling (211) male and female students. The study sample was purposefully selected from all first-year students registered in the sports psychology course at the Faculty of Physical Education and Sport Sciences at Hashemite University, the sample was (186) male and female students. After collecting the relevant data, it was processed using appropriate descriptive statistics. Results indicated that students facing psychological stress might find it challenging to maintain focus and effective academic performance. Conclusion, Students facing psychological stress may find it challenging to maintain focus and effective academic performance. Also, Students' responses to psychological stress vary, highlighting the need to understand the individual factors that influence these pressures.

Keywords: Psychological Stress, Academic Achievement

INTRODUCTION

Psychological stress is considered a complex phenomenon that reflects multiple realities with biological, psychological, economic, and social connotations. This stress can define certain characteristics that give the phenomenon its intensity, coherence, and distinction from other phenomena. Therefore, this stress can be a source of tension and anxiety that affects an individual's mental and physical health (Hajar, 2016).

Osman (2002) referred to psychological stress as a series of external events that the individual faces because of interacting with the environment and its demands, imposing on them the need for rapid adaptation in confronting these events to avoid negative psychological and social effects and to achieve adaptation in life. Meanwhile, Abdel Aziz (2010) described psychological stress as a state of emotional tension that arises from situations where there is a disturbance in physiological functions and an inadequacy of cognitive functions for the situation.

The primary source that threatens an individual's psychological entity and exposes it to risk is psychological stress, which can thus affect life events and situations, the likelihood of crises, and therefore the emergence of poor performance and a decrease in motivation (Cohen, 2015). Previous studies and literature that addressed

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this topic have confirmed that everyone has a style and method suitable for dealing with these stresses (Kumar Bhukar, 2013).

Academic achievement holds significant importance for the student, their family, and their community, as it plays a pivotal role in shaping the lives of the individual and the family (Al-Atta, 2014). Mustafa (2010) indicates that academic achievement is a phenomenon that has occupied the minds of many educators in general and psychologists in particular, due to its importance in the lives of students, their parents, and their teachers.

Academic achievement is defined as what indicates the current state of an individual's performance, learning, or acquisition of knowledge and skills in a specific program. It relies on specific educational experiences in one of the academic or training fields (Ismaili, 2011; Sarayrah, 2024)). Hamdan (1996) views academic achievement as referring to the accomplishments and successes an individual achieves in the field of education or study. It is generally measured based on the level at which the individual reaches in acquiring knowledge and skills in a particular set of subjects or disciplines.

University students face numerous psychological pressures due to the challenges of academic and personal life. Among the most significant psychological stresses they may encounter are those related to academic performance, where students feel considerable pressure to achieve academic success, whether in exams or in completing assignments and research. There may also be a fear of failing or not achieving the high grades expected (Ay, 2019; Chaudhry et al., 2023).

Sports psychology is a field of study that focuses on understanding how psychological factors impact athletic performance and how principles of psychology can be used to enhance performance and promote sports well-being. This field involves exploring the interactions between the mind and body in the context of sports activity and athletic training. Therefore, a course in sports psychology provides a deeper understanding of the psychological factors influencing athletic performance and is beneficial for students engaged in physical education fields as well as athletes and coaches alike (Abdul Qader, 2011; JOSEPH, 2023).

Therefore, research on the relationship between psychological stress and students' academic achievement is an important and complex topic that attracts the interest of many scholars and researchers. The body of research demonstrates the impact of psychological stress on students' performance and academic achievement in various ways.

Statement of the Problem

First-year students face numerous psychological pressures upon entering university that may affect their adaptation and performance. Consequently, many experience such pressures due to the transition from high school to university life and the attempt to adapt to a new environment. Many feel the pressure of studying due to the large amount of information and academic tasks. Additionally, there may be social pressure to adapt to a new community, the university, and to build new relationships, which can be a source of stress for this group of students.

Therefore, the course on sports psychology is considered an important and required course for first-year students, which they must study in their first semester at the Faculty of Physical Education and Sport Sciences and in all universities offering a specialization in physical education. This course includes important topics in psychology, such as the psychological pressures individuals face and how to confront and overcome them. It is a subject not found in either primary or secondary school curricula. Through the researchers' experience in university teaching, the problem of the study emerged when they noticed that the psychological pressures facing students, especially first-year students in the Faculty of Physical Education and Sport Sciences, could be linked to many areas related to university life, especially for this group of students, such as its connection to academic achievement, the balance between personal and academic life, and achieving equilibrium between academic obligations and personal interests.

Hence, it became imperative for researchers to study psychological stress and its relationship with academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University.

Significance of the Study

The significance of this study stems from its focus on first-year students enrolled in sports psychology courses at the Faculty of Sports Education, which is considered the most crucial year for students in their specialization. It explores the relationship between psychological stress and academic achievement among students, in addition to addressing the phenomenon of psychological stress faced by students, which can affect their academic performance. Concurrently, this study can contribute to enriching the educational, psychological, social, and sports scientific content, where researchers hope that academic institutions, scientific research centers, and researchers in this field can benefit from it. This study could be used to develop future programs aimed at enhancing this group of students in all aspects.

This study aimed to explore:

The relationship between emotional psychological stress and university environment stress with the academic achievement of students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University.

Whether the relationship between psychological stress and academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University can be attributed to the gender of the evaluator (male, female)?

This study seeks to answer the general hypothesis of the study, which is:

Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the relationship between stress and its relationship with academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University?

As for the subsidiary hypotheses of the study, they are represented by:

Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the relationship between emotional stress and university environment stress with academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University?

Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the relationship between psychological stress and academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University attributed to the gender of the evaluator (male, female)?

Study Limitations

Human limitation: First-year students (first semester) enrolled in the sports psychology course at the Faculty of Physical Education and Sport Sciences at Hashemite University.

Spatial limitation: This study was conducted in the first semester of the 2023/2024 academic year.

Temporal limitation: This study was carried out during the period from November 15, 2023, to December 15, 2023.

MATERIALS AND METHODS

Study Design: The descriptive method using survey studies was employed due to its suitability for the nature and objectives of the study.

The study population consisted of students enrolled in the sports psychology course sections (1 + 2) at the Faculty of Physical Education and Sport Sciences, totaling 211 male and female students, according to the Hashemite University's Admissions and Registration statistics.

Study Sample: The study sample was purposively selected from all first-year freshmen registered in the sports psychology course at the Faculty of Physical Education and Sport Sciences at the Hashemite University, numbering 186 male and female students. The following table illustrates the distribution of the study sample members.

Table 1. Study Sample Individuals (Number=186)

Variable	Category	Number	Percentage
Social Category	Males	141	75.8
	Females	45	24.2
	Total	186	100

Study Instrument: Considering the researchers' review of the theoretical literature and previous studies focused on psychological stress and academic achievement, the researchers developed a questionnaire consisting of 20 items aimed at understanding the psychological stress and its relationship with academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University. The items were divided into two main axes, distributed over two fundamental dimensions:

The first axis: Emotional psychological stress and its relationship with academic achievement, comprising 10 items.

The second axis: University environment stress and its relationship with academic achievement, also comprising 10 items.

The response scale scores on the questionnaire ranged from (1) to (5) according to a five-point Likert scale, where the researcher determined the response scores of the study participants as follows: The researchers calculated mean scores, standard deviations, and used a five-level rating scale to describe the levels of mean scores obtained as follows:

Table 2. The five-level rating scale is used to describe the levels of the arithmetic means achieved.

Very Low Degree	1.00-1.80
Low Degree	1.81-2.60
Intermediate Degree	2.61-3.40
High Degree	3.41-4.20
Very High Degree	4.21-5.00

Validity of the Study Tool: The researchers presented the questionnaire, which measures psychological stress and its relationship with academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University, to a group of expert judges specialized in educational psychology in the faculties of Physical Education and Sport Sciences and faculties of Educational Sciences in Jordanian universities. There were (6) judges in total, and based on their feedback, some items were rephrased, and others were deleted, until the final version was achieved.

Reliability of the Study Tool

The researchers verified the reliability of the study tool selected by the judges through the method of measuring internal consistency (Cronbach's alpha), and the following table illustrates this.

Table 3. Reliability of the Axes of the Questionnaire on Measuring Psychological Stress and Its Relationship with Academic Achievement

Scale	Axis	Number of Items	Cronbach's Alpha (α) Value
Psychological Stress and Its Relationship with Academic Achievement	Axis of Emotional Psychological Stress and Its Relationship with Achievement	10	0.939
	Axis of University Environment Stress and Its Relationship with Achievement	10	0.941

The Total Score for the Axes	40	0.940
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The above table shows that the questionnaire measuring psychological stress and its relationship with academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University has high reliability values. The reliability value reached (0.939) for the axis of emotional psychological stress and its relationship with achievement, and (0.941) for the axis of university environment stress and its relationship with achievement. The reliability value for all questionnaire items was estimated at (0.940), reflecting a high level of stability.

Study Procedures

To achieve the objectives of the study, the researchers undertook the following procedures:

Reviewing the theoretical literature and previous studies related to the current study topic, focusing on psychological stress and academic achievement.

Preparing the study instrument in the form of a questionnaire, which includes axes on emotional psychological stress and university environment stress and their relationship with academic achievement.

Verifying the construct validity through correlation coefficients, and the reliability of the study instrument using the Cronbach Alpha (Cronbach Alpha) method for internal consistency. The questionnaire was applied to a pilot sample from the study population and outside it, totaling (26) male and female students.

Selecting the study sample purposively from the study population, where data were collected and then statistically analyzed using the appropriate statistical software to answer the study questions and reach conclusions and recommendations.

THE RESULTS

Results Related to the General Hypothesis of the Study

Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the relationship between psychological stress and academic achievement among students enrolled in sports psychology courses at the Faculty of Physical Education and Sport Sciences at the Hashemite University?

Table 4. Arithmetic Means and Standard Deviations for the Study Participants' Estimates of the Degree of Psychological Stress and Its Relationship with Academic Achievement,

No.	Rank	Axes	Arithmetic Mean	Standard Deviations	Degree
2.	2	Axis of Emotional Stress and its Relationship with Achievement	4.14	0.78	High
1	1	Axis of University Environment Stress and its Relationship with Achievement	4.57	0.55	High
The Total Score for the Axes			4.35	0.66	High

The Results Related to The First Sub-Hypothesis of The Study

Are there statistically significant differences at a significant level ($\alpha \leq 0.05$) in the relationship between emotional-psychological stress and the university environment with academic achievement?

Table 5. The Arithmetic Means of and Standard Deviations of the Level of Psychological Stress and its Relationship to Academic Achievement

No.	Rank	Paragraphs	Arithmetic Mean	Standard Deviation	Level
6	1	I feel psychological stress due to academic requirements.	4.29	0.90	Very high
3	2	Daily stress affects my concentration during studying.	4.26	0.90	Very high
2	3	Anxiety about academic performance affects my level of success.	4.23	0.87	Very high
8	4	Difficult social relationships in the university environment affect my academic achievement.	4.22	0.77	Very high
5	5	Difficulties in adapting to university life affect my academic performance.	4.18	0.89	High

10	6	Anxiety about the future career affects my concentration in studying.	4.18	0.90	High
7	7	Financial challenges add extra pressure on my academic performance.	4.13	1.03	High
4	8	Personal anxiety affects my ability to dedicate myself to studying.	4.07	1.07	High
9	9	Good social support helps me overcome psychological pressures.	4.03	1.03	High
1	10	Good rest and balance between personal and academic life positively affect my academic achievement.	3.85	1.13	High
The total score representing the axis of emotional-psychological stress.			4.14	0.94	High

Table 6. The Arithmetic Means and Standard Deviations of the Level of Psychological stress and its Relationship to Academic Achievement

No.	Rank	Paragraphs	Arithmetic Mean	Standard Deviation	Level
6	1	I feel pressure due to the quantity of coursework and academic requirements.	4.40	0.65	Very High
9	2	Social pressures in university life affect my concentration in studying.	4.30	0.78	Very High
10	3	Financial difficulties add extra pressure on my academic performance.	4.26	0.86	Very High
3	4	Deadlines and submission pressures affect my academic achievement.	4.22	0.80	Very High
7	5	The university environment affects my self-confidence and academic achievement.	4.22	0.73	Very High
8	6	The impact of social and political events on my focusing on study.	4.21	0.77	High
1	7	Difficulties in adapting to changes in the university environment affect my academic performance.	4.17	0.85	High
2	8	The extent to which sports and cultural activities affect my academic achievement.	4.16	0.79	High
4	9	Technological challenges in using electronic tools may be a source of stress.	4.08	0.90	High
5	10	Commute between lectures and academic activities affects my time management and organization.	3.85	0.97	High
The total score representing the axis of university environment stress			4.18	0.81	High

Results Related to The Second Sub-Hypothesis Of The Study

Are there statistically significant differences at a significant level ($\alpha \leq 0.05$) in the relationship between psychological stress and academic achievement among students attributed to gender?

Table 7. Arithmetic Means, Standard Deviations, and T-Test of the Relationship between Psychological Stress and Academic Achievement according to Gender Variable (Male, Female)

Axes	Gender	Number	Arithmetic Mean	Standard Deviation	T-Value	Significance Level
Axis Emotional-Psychological Stress	Male	141	4.62	0.59	2.22	*0.028
	Female	45	4.41	0.40		
Axis University Environment Stress	Male	141	4.23	0.79	2.89	*0.004
	Female	45	3.86	0.67		
The Total Score for the Axes	Male	141	4.42	0.69	2.55	*0.223
	Female	45	4.13	0.54		

*Indicates that the difference between the means of the two samples is statistically significant at a level of 0.05 or less.

DISCUSSION

According to table (4) The researchers attribute the result to the significant role to the university environment plays in shaping students' experiences and their ability to achieve academic success, where the increased difficulty of academic materials and growing academic challenges may pose a stress source on students and affect their ability to achieve their academic goals. Additionally, relationships with peers and social interactions can impact the level of concentration and dedication to studies. Social pressures can be a source of distraction and influence student behavior. This result aligns with the findings of Ay (2019) and Al-Atta (2014) and does

not differ from any existing study. Meanwhile, the axis of emotional stress and its relationship with achievement achieved the lowest degree of psychological stress and its relationship with academic achievement, ranking second among the arithmetic means with an arithmetic mean of (2.14), which corresponds to a high level. The researchers attribute this result to the close connection between academic performance and the emotional state of the student. When a student faces emotional pressures, such as anxiety or psychological stress, it may be difficult for them to concentrate on studies and effectively perform academic tasks, potentially leading to a decrease in academic achievement levels. Additionally, emotional stress affects mental performance, meaning that an individual may find it challenging to comprehend information and think clearly during periods of psychological pressure. Consequently, the emotional impact leads to changes in learning strategies, where stress and anxiety may result from the individual turning to ineffective learning strategies. The following tables illustrate the degree of each study axis separately, and this result agrees with the findings of both Ay (2019) and Al-Atta (2014).

Regarding table (5) the researchers attribute this result to reflecting the reality of the students who responded to this item, indicating that they feel tension or psychological pressure due to the academic needs and requirements they face. This stress may be a result of various factors such as the amount of coursework, projects, and exams, which can add to psychological pressure. The desire to achieve high academic success and maintain a good level of performance can also cause stress, in addition to the need to balance social and academic life and interact with peers and social relationships. This personal awareness can be the first step towards understanding pressures and dealing with them effectively.

As for the lowest value of the arithmetic mean, it was achieved through item number (1), the researchers attribute this result to this item being the lowest among the elevated items in the axis, as it indicates the importance of rest and achieving balance between personal and academic life in its positive effect on academic achievement. Rest and balance play a role in maintaining mental health, as they contribute to reducing levels of stress and anxiety, thus improving focus and academic performance. The remaining values of the arithmetic means mentioned varied, where this result was consistent with the study (Ayi, 2019).

. Researchers attribute the result of table (6) to the student's perception of the pressures and challenges they face due to the quantity of coursework and academic requirements. If an individual finds themselves tasked with many courses, they may feel pressure due to the need to effectively manage their time to keep up with and understand all the information. Additionally, neglecting time to complete academic tasks can lead to increased pressure and student stress. The student may also have additional personal responsibilities outside of their studies, such as work or family commitments, which further increase challenges and pressures.

As for the lowest value of the arithmetic mean, it was achieved through item number (5), the researchers attribute this result to the lecture system for this course being remote, but responses may be elevated because students may be accustomed to face-to-face learning in their school stage. Therefore, this item was high and caused some psychological pressures for students in terms of how to access the accredited online platform, the timing of access, and the required electronic assignments. All these reasons can cause some psychological pressures for new students enrolled in university, and the remaining value of the arithmetic means for the other items of the axis varied between the highest and lowest values mentioned, consistent with the study of Al-Atta (2014).

Regarding to table (7) the researchers attribute this result to the relationship between psychological stress and academic achievement not being consistently associated between males and females. Instead, it depends on several factors. Both males and females may be affected by psychological stress in different ways. This is because of the closeness of the result in the arithmetic means and because the number of males is higher in this course, this result may have been influenced in favor of males.

However, in general, in some cases, the impact of psychological stress may appear to be greater on males in certain academic fields or specific situations. For example, male students may face challenges in traditional gender-specific fields that impose specific expectations on academic performance. Social expectations about the "strength" of men and the necessity of excellence in some academic fields can be a source of psychological pressure. Psychological stress may be associated with the persistence of achieving success and adhering to the

stereotypical image of males. On the other hand, social expectations associated with females, such as balancing family and academic life, may affect the experiences of female university students. These additional challenges may be a source of psychological pressure that affects academic achievement. In general, the impact of psychological stress on academic achievement depends on cultural, social, and individual contexts and cannot be universally generalized to a specific category of students.

CONCLUSIONS

Students facing psychological stress may find it challenging to maintain focus and effective academic performance.

Students' responses to psychological stress vary, highlighting the need to understand the individual factors that influence these pressures.

The impact of psychological stress may extend to the long term, potentially affecting academic track choices and academic achievement in the future.

RECOMMENDATIONS

Providing psychological support and offering mechanisms to increase awareness about dealing with psychological stress can contribute to enhancing academic achievement.

Teaching strategies for stress control and time management can help reduce the negative impact of psychological stress on academic achievement.

Emphasizing the importance of directing efforts towards developing psychological support and stress management strategies for students.

Conducting further studies that include other related variables and studying another comparative group from different courses and advanced academic stages.

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