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Psychological Hardiness and Its Relationship to Self-Esteem Among University Students
-A field study conducted at the Institute of Sciences and Technologies of Physical and
Sports Activities in Bouira -

الصلابة النفسية وعلاقتها بتقدير الذات لدى الطالب الجامعي - دراسة ميدانية على مستوى معهد علوم وتقنيات النشاطات البدنية والرباضية بالبوبرة-

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Abstract: The present research aimed to investigate the relationship between psychological hardiness and self-esteem among university students at the Institute of Science and Techniques of Physical and Sports Activities. The researchers employed a descriptive correlational approach to achieve the study's objectives and applied the psychological hardiness scale and the self-esteem scale to a purposive sample of (37) students. The results were extracted and analyzed using appropriate statistical methods (SPSS). The findings revealed that the level of psychological hardiness and self-esteem among university students was moderate. Furthermore, there were statistically significant differences between the mean scores of students in psychological hardiness and self-esteem attributable to the gender variable. Additionally, a statistically significant positive correlation was found between psychological hardiness and self-esteem. Consequently, the researchers recommended working on equipping students with various skills that help them deal effectively and positively with situations they encounter, both inside and outside the university, and conducting the study at other levels such as secondary and intermediate school students.

Keywords: Psychological Hardiness, Self-Esteem, University Student

الملخص: هدف البحث الحالي إلى معرفة العلاقة بين الصلابة النفسية وتقدير الذات لدى الطلبة الجامعيين بمعهد علوم وتقنيات النشاطات البدنية والرباضية، حيث استخدم الباحثان المنهج الوصفي الارتباطي لتحقيق أهداف الدراسة وتطبيق مقياس الصلابة النفسية ومقياس تقدير الذات على عينة قصدية قوامها (37) طالبا، حيث تم استخلاص النتائج وتحليلها بالأساليب الإحصائية المناسبة (spss) وأظهرت النتائج أن مستوى الصلابة النفسية وتقدير الذات لدى الطلبة الجامعيين كان متوسطا، كما توجد فروق معنوية (دالة إحصائيا) بين متوسطي درجات الطلبة في مستوى الصلابة النفسية وتقدير الذات تعزى لمتغير الجنس، وأيضا توجد علاقة طردية دالة إحصائيا بين الصلابة النفسية وتقدير الذات، وعليه أوصى الباحثان بالعمل على اكساب الطالب مختلف المهارات التي تساعده على التعامل الفعال والإيجابي خلال المواقف التي يتعرض لها سواء داخل الجامعة أو خارجها، واجراء الدراسة على مستوبات أخرى كتلاميذ الثانوي، والمرحلة المتوسطة.

الكلمات الدالة: الصلابة النفسية، تقدير الذات، الطالب الجامعي.

Introduction and Problematic of the Study:

The university is an advanced stage in the educational system, It is a fundamental pillar and an indispensable pivotal institution in any society, It is the transitional stage between an individual's academic and professional life, through which society is supplied with qualified labor and personnel to undertake various jobs in various fields, It aims to prepare students for their professional and academic future by providing an integrated educational and research environment.

As the university student experiences the process of interaction at the university, a number of stressful situations, academic problems and study pressures arise before him, which lead to poor academic adjustment. Psychological resilience comes into play, helping individuals adjust to the different situations they encounter in their daily lives, and helping them confront frustrations, difficulties and obstacles that stand in their way in their academic journey and overcome these crises to play their effective role at the university and outside its walls (Al-Nawayseh, 2020, p. 165).

Psychological resilience is considered one of the most important positive personality variables that plays a role in facing life's pressures, endurance, and maintaining internal and external balance. It is the individual's possession of a

set of traits that help him confront sources of pressure and adapt properly and well in times of hardship and shocks, while maintaining self-confidence and the ability to control emotions (emotional regulation), and the ability to solve problems and understand the feelings of others and empathize with them (Al-Hazza, 2020, p. 399).

We also find that self-esteem depends on the extent of an individual's acceptance of himself, including his positives and negatives, and the extent of his appreciation of his general characteristics, as this includes a comprehensive evaluation of all his personal, social, educational, and professional aspects. The higher the individual's self-esteem, the more accepting and appreciative he is of himself. The lower his self-esteem, the less accepting and appreciative he is of himself (Mahmoud, 2012, p. 169).

According to Al-Rabdi (2020, p. 125), the concept of self-esteem is considered one of the important concepts in the field of psychology. The variable of self-esteem helps the individual achieve psychological and social harmony and appropriate mental health. The individual's feeling that he is valuable and accepted by others develops his self-confidence and he has the ability to face the difficulties and pressures that he faces in his life and deal with them effectively and with good performance. Through the above, the following questions were raised:

- 1- What is the level of Psychological Hardiness and self-esteem among university students?
- 2- Are there significant differences (statistically significant) between the average scores of students on Psychological Hardiness and self-esteem attributable to gender?
- 3- Is there a statistically significant correlation between Psychological Hardiness and self-esteem among university students?

* Research Hypotheses:

- The level of Psychological Hardiness and self-esteem among university students is average.
- There are significant differences (statistically significant) between the average scores of students in Psychological Hardiness and self-esteem attributed to the gender variable.
- There is a statistically significant correlation between Psychological Hardiness and self-esteem among university students.

* Definition of Concepts and Terms:

- Psychological Hardiness:

It is one of the positive traits of an individual's personality. It is characterized by self-discipline, self-control, and self-confidence, which contributes to mitigating the negative effects of life's stressors on an individual's mental health. It is considered a pattern of personality traits that includes three dimensions: commitment, control, and challenge (Fayyad, 2022, p. 126).

And Kobasa (1979) introduced the concept of Psychological Hardiness and its components according to what existential psychologists had said, and in application of Kobasa's theory, the individual who requires a high degree of pressure without being exposed to illness has a personality structure that differs from the individual who practices usual diseases only because of it, and this personality consists of three components:

- A- Control: The individual's ability to control his behavior, actions, and emotions, and the belief in his own ability to monitor events with environmental cameras.
- B- Commitment: It includes the ability to feel deeply involved and committed to their life activities and social responsibilities.

C- Challenge: It is the expectation that the current situation will change for the better in the future, despite all the obstacles and difficulties that they are living with at the present time, but their outlook and future expectations remain optimistic (Al-Defai, 2012).

The operational definition of Psychological Hardiness in the current study is the total score obtained by students through their responses to the items of the Psychological Hardiness Scale adopted in this study.

- Self-Esteem:

It is a personal judgment that encompasses an individual's positive or negative attitudes towards themselves and the extent to which they believe they possess ability and are a person of significance. In other words, it is the appreciation and acceptance of oneself, satisfaction with it, an individual's respect for their achievements, pride in their opinions, and the individual's conviction that they possess the ability that makes others respect and value them (Mahmoud, 2012, p. 168)

The operational definition of self-esteem in the current study is the total score obtained by students through their responses to the items of the self-esteem scale used in this study.

- University student:

Any person who is academically affiliated with a university, college, or institute in order to obtain knowledge and obtain a recognized degree from that institution, enabling them to pursue their professional life based on the degree they have obtained (Nasrawi, Mahjar, 2017, p. 587).

The researchers define it as someone who has obtained a baccalaureate degree and then proceeded to university to receive training in a specialty of their choice, one that suits their interests and desires, so that they are fully prepared for their future careers in service to their community.

* Methodological procedures of the study

* Exploratory Study:

The exploratory study is the first step a researcher undertakes before beginning their field study. It helps them gain an overview of the field study aspects of their research. We conducted a series of exploratory steps at the STAPS Institute at the University of Bouira to explore and identify the hidden aspects of the current study and the potential difficulties researchers may encounter when applying research tools, with the aim of avoiding these difficulties.

The most important exploratory steps were: the first: at the level of the Institute of Sciences and Technologies of Physical and Sports Activities at the University of Bouira, the place where this research was conducted, with the aim of controlling the community and the sample on which the study would be conducted, then the second step with the aim of determining and controlling the appropriate time to apply the two scales with the students who were members of the study sample, and the third exploratory step which was to distribute and apply the two scales (Psychological Hardiness and self-esteem).

* Basic study:

- Scientific Method:

The descriptive correlational approach was used, as it is appropriate for the purpose of the current study and contributes significantly to accurately examining the relationship between variables.

- Research Population:

The research population was defined as all first-year students at the Institute of Sciences and Techniques of Physical and Sports Activities.

- study sample:

The sample size for this study was 37 students, selected purposively, 20 female students and 17 male students.

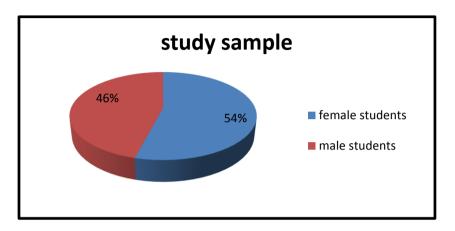


Figure (01): Shows the graphic representation of the sample number of this study.

Study Variables:

They were defined as follows:

Psychological Hardiness	Independent variable
self-esteem	Dependent variable

Research Areas:

- Human Domain: Our human domain of study was among first-year students at the Institute of Sciences and Techniques of Physical and Sports Activities at the University of Bouira.
- Spatial Domain: Our study was conducted at the Institute of Sciences and Techniques of Physical and Sports Activities at Akli Mohand Oulhadj University in Bouira.
- Temporal Domain: It took place during the 2024/2025 academic year.

Study Tools:

Psychological Hardiness Scale:

The Psychological Hardiness scale, applied in the Algerian context by Sharqi Huriyyah (2019/2020), was adopted in her study entitled "Self-Esteem and Its Relationship to Psychological Hardiness and Psychological Control among Secondary School Learners (Students About to Take the Baccalaureate Examination)." The scale consists of (37) statements distributed across three dimensions (the commitment dimension (12 statements), the control dimension (12 statements), and the challenge dimension (13 statements). The scale includes four alternatives (no, a little, moderately, a lot), which are assigned the following scores (0, 1, 2, 3) in order. Thus, the total score for the scale ranges between (0) and (111). The researchers relied on the following criteria:

Table (01): Shows the levels of Psychological Hardiness scale scores.

high	average	low	
111-75	74-38	37-0	Psychological Hardiness

Self-esteem scale:

The self-esteem scale applied in the Algerian environment by Mohdeb Razika (2014/2015) was adopted in her study "Emotional Intelligence and its Relationship to Self-Esteem and Level of Ambition among Algerian University Students (19-26) Years Old" - where the scale in its final form consisted of 36 phrases distributed as follows: the first dimension, the physical self and general appearance, 5 phrases; the second dimension, the mental and academic self, 6 phrases; the third dimension, the social and recreational self, 12 phrases; the fourth dimension, the family self, 5 phrases; the fifth dimension, the personal self

and self-confidence, 8 phrases; and the scale includes three alternatives (applies, somewhat, does not apply) for which the following grades are given (3, 2, 1)

For positive statements, and vice versa for negative statements (the scale includes 19 negative statements and 17 positive statements). The researchers relied on the following criteria:

Table (02): Shows the levels of self-esteem scale scores.

high	average	low	
108-85	84-61	60-36	self-esteem

Statistical Methods:

We used the Statistical Package for the Social Sciences (SPSS) software, version: IBM SPSS V23. The following are the equations calculated using SPSS:

- Arithmetic mean and standard deviation.
- Simple correlation coefficient (Pearson): To calculate the relationship between the two variables.
- T-test for two independent samples.
- * Presentation and analysis of results related to the study's hypotheses:
- Hypothesis 1: The level of Psychological Hardiness and self-esteem among university students in the study sample is average.
- First: Psychological Hardiness scale:

Table 03: Shows the level of Psychological Hardiness among students.

Evaluation	standard deviation	arithmetic mean			
average	5.36	73.62			
Psychological Hardiness Scale:					

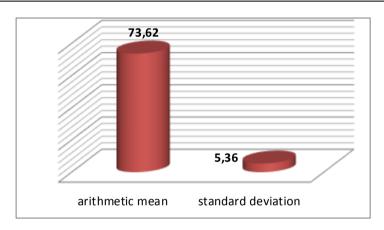


Figure (02): Graphical representation of the results of the Psychological Hardiness scale.

Based on the results of the statistical analysis shown in Table (3), which represents the results of the Psychological Hardiness scale as a whole, and Figure (2), which represents the graphical representation of its results, we note that the level of Psychological Hardiness was average, with an arithmetic mean of (73.62) and a standard deviation of (5.36). Psychological Hardiness helps university students adapt positively to difficult situations and pressures, return to a state of psychological balance after exposure to trauma, and avoid the negative effects of stress and anxiety. It is considered one of the most important personal traits that help them succeed in their academic and personal lives, as it is a

significant factor in achieving academic success and adapting to the demands of university life and beyond.

02: Self-esteem scale:

Table 04: Shows the level of self-esteem among students.

Evaluation	standard deviation	arithmetic mean	
average	4.54	76.19	
Self-esteem scale			

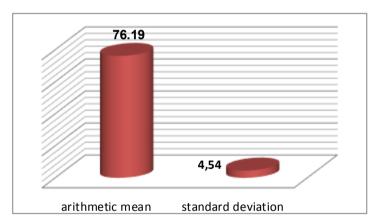


Figure (03): Graphical representation of the results of the self-esteem scale.

Based on the results of the statistical analysis shown in Table (4), which represents the results of the self-esteem scale as a whole, and Figure (3), which represents the graphical representation of its results, we note that the level of self-esteem was average, with the arithmetic mean value reaching (76.19) with a standard deviation of (4.54).

When a student has high self-esteem, they are able to effectively and competently face the challenges and pressures that accompany university life. They also have a greater ability to cope with psychological pressures and daily challenges, and feel satisfied with themselves.

The second hypothesis: There are significant differences (statistically significant) between the average scores of students in the level of psychological resilience and self-esteem attributed to the gender variable.

First: Psychological Hardiness scale:

Table 05: Results of the t-test for the second hypothesis

p. valeu (sig)	Sample mean		DF	T calculated	
	Males	females			
0.00	77.29	70.5	35	-4.92	

We note from the t-test results that the p-value is 0.00, which is less than the significance level of 0.05. Therefore, we reject the null hypothesis that there are no significant differences. This means that there are significant (statistically significant) differences between the students' mean scores on psychological resilience attributable to the gender variable. We can say that males are often expected to demonstrate greater resilience and the ability to withstand the various pressures they face. They may also be subjected to greater pressure to prove their strength and independence, which may push them to develop higher psychological resilience. Society often encourages males to display strength and refrain from expressing emotions, which may make them appear more psychologically resilient. In contrast, females may be encouraged to express their emotions, which may make them appear less resilient in some situations.

Biological differences between the sexes may also influence this. These differences reflect differences in how individuals deal with various challenges based on biological, social, and cultural factors.

02: Self-esteem scale:

Table 06: Results of the t-test for the second hypothesis

p. valeu (sig)	Sample mean		DF	T calculated
	Males	females		
0.00	73.5	79.56	35	-5.29

We note from the results of the t-test that the p-value is 0.00, which is less than the significance level of 0.05. Therefore, we reject the null hypothesis that there are no significant differences, meaning that there are significant differences (statistically significant) between the averages of students' scores in the level of self-esteem attributed to the gender variable.

-Hypothesis 3: There is a statistically significant correlation between Psychological Hardiness and self-esteem among students.

Table (07): Shows the relationship between Psychological Hardiness and self-esteem.

Significance level	Correlation	Z	Self-esteem scale	Psychological Hardiness scale
	0.425	37		Commitment
	0.653	37	Self-esteem scale	Control
	0.545	37		Challenge
0.05	0.753	37		Psychological Hardiness scale

We note from Table (07) the presence of a statistically significant direct relationship at the significance level of 0.05 between the dimensions of the Psychological Hardiness scale (commitment dimension, control dimension, challenge dimension) and the Self-esteem scale among students, as the values of the correlation coefficient reached (0.42), (0.65), (0.54), respectively, which are statistically significant values at the significance level of 0.05, as well as the presence of a strong statistically significant direct relationship between the psychological resilience scale and the self-esteem scale, as the value of the correlation coefficient reached (0.753), which is a statistically significant value at the significance level of 0.05.

Psychological Hardiness leads students to adopt a positive outlook on life, i.e. to think positively, which reduces the impact of negative experiences on their self-esteem. Self-esteem also helps students accept their weaknesses and deal with them in a positive and effective way, which increases their ability to adapt to pressures and deal with them effectively and competently. We can say that strengthening one leads to strengthening the other (psychological resilience and self-esteem), which creates a healthy psychological environment for the

university student, helping him achieve psychological balance and success in university and professional life in the future.

* Study Recommendations:

- Work to equip students with various skills that help them deal effectively and positively with the situations they encounter, whether inside or outside of university.
- Conduct the study at other levels, such as high school and middle school students.
- Design guidance programs to help students raise their level of psychological resilience.
- Conduct further studies by linking the psychological resilience variable and examining its relationship with other variables (such as self-confidence, future anxiety, motivation, mental health, life skills ...).

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