



RESEARCH ARTICLE

Mental Durability of Postgraduate Students

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ARTICLE INFO	ABSTRACT
Received: May 22, 2024 Accepted: Jul 5, 2024	The current research aims to identify (mental durability of postgraduate students). The researcher has adopted the associative prescriptive curriculum in her study. The current study identifies graduate students at Baghdad University from specializations (scientific-humanitarian) of both sexes (male-female), and for the academic year (2023/2024). The study sample consisted of 200 students selected in a random class manner. In order to achieve the research's objectives, the researcher adopted the measure prepared by The Lithian, 2020. The measure may be from (40) paragraphs spread across four areas, by (10) paragraphs per area: (Control, Commitment, Challenge, and Trust). After statistically collecting and analysing the data using the following statistical means: (one sample T test, two separate samples T test, Pearson correlation coefficient, Alpha-Kronbach equation), the current research has reached the following results: Postgraduate students have mental durability, and there are no differences in the variable depending on sex (male-female) and specialization (scientific-human), and that there are significant differences in mental durability according to the degree variable (PhD-MA) and for PhD and highly calculated T value (3,250).
Keywords Mental durability Postgraduate students	
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INTRODUCTION

Mental durability is the force that allows human beings in general and university students in particular to overcome difficulties and rise after exposure to crises to achieve positive growth and efficiency. And that the concept of mental durability derives its place on the scientific map from the social landscape, Human beings have faced challenges since their inception and must avoid, overcome or coexist with them. He also needs to have features, characteristics and abilities to help him. The weak presence of these features and abilities leads to a slowdown and weakness in dealing with them, thereby affecting his balance and psychological integrity and thus reflects on his level of learning and education. (Arnsten, 2009) Mental durability affects the outcomes of the learning process and students' levels of achievement by reducing the impact of a range of psychological factors that negatively affect their learning such as anxiety and stress factors experienced by students (Bell et al., 2013:281) (Hussein, jumaa, 2024:454).

CHAPTER 1:- INTRODUCING RESEARCH**Search Problem:**

Today, we live in an age of anxiety, psychosocial and intellectual crises and the various pressures imposed by accelerating changes throughout the world. These pressures are addressed every day individually or collectively, making individuals in general and students in particular at various school

stages feel a little strange as the university stage is a stage of determination for them to continue studying and choose the appropriate physical specialization for their tendencies, abilities, social conditions and economic conditions. (Albanna, 2023: 220- 221) This confrontation is direct or indirect which sometimes leads to a feeling of anxiety and frustration (Qarguli and Akili, 2019:292).

The concept of mental durability has emerged and plays a prominent role in helping students cope with, overcome and recover from problems and crises, as well as controlling emotions, self-confidence, abilities and adherence to decisions. Students without mental durability impair their achievement, competence and determination. In particular, postgraduate students need mental durability to be able to excel academically.

The researcher felt the problem of her research during her work in the field of education and what young people in general face and graduate students of different ages in particular a set of intellectual, psychological, behavioral and ethical challenges imposed on them by the values of their society and the overlap of new cultures as a result of technological and cognitive openness and cross-fertilization of ideas, which poses a threat to the student's environment, intellectual, intellectual and cognitive and cognitive system and cognitive awareness.

The current research problem can therefore be identified through the following questions:

Are postgraduate students mentally durable? Does their mental robustness vary by sex (male-female), specialization (scientific-human) and diploma (master's degree-Ph.D.)? This is what the results of the current study will reveal.

The importance of research:

Students' stress events are many, and unavoidable, responding to these circumstances with very strong responses of emotion, confusion and ambiguity. But some of them over time are well aligned with these attitudes of life. Others do not correspond to the degree of frustration, and that students able to overcome these adverse events without falling into frustration are characterized by so-called mental durability (Abu Ghazala, 2009:205). Recent years have seen great interest in positive concepts in educational psychology because they are concepts focused on the development of individuals in general. In particular, as a capital supportive of development and reform within society, university students are the chosen elite of each society, so societies seek to prepare these students optimally to be able to assume their responsibilities in the future and contribute effectively to the building and progress of society, understanding the tool of development and development in the economic, educational and social aspects (Al-Khafaji, 2022:7). Studies suggest that mental durability affects individuals in general and university students in particular, as individuals with greater mental durability suffer from less anxiety and depression and feel psychosocial and that anxiety and depression negatively affect mental durability (dry, 2023:798). After this presentation the researcher summarizes the importance of doing the current research:

- 1- The current study draws its importance from the importance of the variable (mental durability), the results of which are of great importance in the field of educational psychology. The mental durability variable gives students the flexibility to cope with their stress and enable them to regain balance after experiencing difficulties.
- 2- The scarcity of local and Arab research and studies on the variable mental durability of postgraduate students "according to the science of the researcher". This study is an attempt to bridge the knowledge gap as well as an addition in the field of educational psychology.
- 3- Providing an Arabic version of the MT in accordance with the Clough et al., 2002 model in the Iraqi environment. This will have a return for use in subsequent research and studies.

Research Objectives: Current Research Identification aims to:

- 1- Degree of mental durability in postgraduate students.
- 2- The significance of differences in mental durability depending on the type of study variable (M.D.).
- 3- The significance of differences in mental durability in postgraduate students depending on the sex variable (male-female), and specialization (scientific-human).

The limits of the present research are determined by the male and female graduate students at Baghdad University and by scientific and humanitarian studies, and by the two studies (master's and doctoral), for the academic year (2023/2024).

Terminology: Terms Limitation**Mental durability defined by:**

1- Kluge et al. (Clough et al., 2002) "a set of social tendencies in the individual and his ability to relax and calm, It is able to compete in different situations at lower levels of anxiety than others with a sense of self-confidence, He has the ability to make himself himself, as well as the ability to exercise restraint and control emotions during competition or exposure to difficult conditions "(Clough et al, 2002: 32-45).

2- (Al-Anazi, 2011) "The ability of a person to deal effectively with psychological stresses, the ability to adapt to everyday difficulties, and to deal successfully with frustration, trauma and everyday problems, so as to develop specific and realistic goals for problem-solving, and to interact seamlessly with others, respecting them and self-esteem" (Abdelaziz, 2011:97).

3- (Lithi, 2020) "The ability of an individual to accomplish and perform effectively in compressive situations, in which control is shown, defying odds, commitment, acting with confidence" (Lathi, 2020:142).

Theoretical definition of mental durability:

The researcher adopted the definition of "leathy, 2020" as a theoretical definition of mental durability because she adopted its measure.

The theoretical researcher (Clough et al., 2002) adopted a theoretical basis because (lithic, 2020) was based on the building of a mental durability scale on Clough et al., 2002).

Procedural definition: -

"The student's overall degree by answering the paragraphs of the Mental Durability Measure (MT) prepared to measure this purpose.

CHAPTER 2:- (THEORETICAL FRAMEWORK AND PREVIOUS STUDIES)**Axis I: Theoretical framework****Concept of mental durability: -**

Psychological stresses are severe psychological phenomena affecting the health of the individual in general and the university student in particular. The severity of these stresses and their frequent exposure lead to negative effects on the personality and dysfunction of his mental health (Shaaban, 2020:310).

The concept of mental durability has emerged and has been linked to psychology studies in its various branches, both of which are rooted in human forces, a trend that maximizes human forces and seeks to detect and develop them. Mental durability is the force that helps students to overcome challenges and rise after exposure to crises for development (Alaser, 2011:9). This concept initially

originated in athletes' sports, education and competitive functions and was developed in professional psychology (Godlewski & Kline, 2012), while research that sought to study mental durability at the university level is as modern and scarce as McGeown, St Clair-Thompson & Clough, 2016) points out.

Mental durability has been associated with other positive qualities of the personality such as toughness, mental toughness, self-efficacy and psychological resilience. All these concepts indicate that they are "a combination of commitment, discipline and challenge and work by transforming burdensome conditions and adversity into an opportunity for development" (Kobasa, 1979: Maddi, 2002). Durability is defined as "the ability to reflect disciplined and to respond to pressure that allows an individual to persist, calm and relax (Clough, Earle, & Sewell, 2002; Loehr, 1986). Mental durability indicates a wide range of positive features it serves as a protective shield that protects him from the pressures he experiences at various stages of his life (Hardy, Imose & Day, 2014). Jones et al., 2002) referred to mental durability as "an individual's ability to deal better with others in competition situations, training, working life, and to enjoy consistency, focus, cohesion and trust under these circumstances" Jones et al., 2002: 205-215), in this regard (Loulter et al., 2010) indicates that mental durability is "the individual possesses a set of values including trends, emotions, behaviours and knowledge that influence his or her responses and interpretation of pressure situations and the pursuit of his or her goals continuously" (699-716: Loulter et al., 2010). Mental durability is characterized by not only effective coping mechanisms with stress but also helping the individual to actively and continuously search for opportunities for psychological development (Gould, Griffes & Carson, 2011).

Relationship of mental durability to other concepts: -

1- Mental durability and psychological toughness: The concept of psychological toughness goes back to Kopaza (Kobasa, 1979) it aims to know the psychological variables underlying people's physical and psychological health despite their stress. The concept of mental durability with psychological toughness is both characterized by psychological resilience, active confrontation with hardship, stress and challenge to achieve goals. Each has three components: (Commitment, Control, Challenge) And it differs from a fourth component: trust in abilities and relationships between personality and people with a high level of mental durability who are able to commit, control and challenge when facing difficulties as well as trust in their ability to perform the task successfully and are characterized by assurance across different social situations (Papageorgiou, Wong & Clough, 2017), (Mahmoud, 2019:41).

2- Grit: The concept of perseverance refers to the desire and effort to achieve long-term goals and that persistent individuals make efforts to achieve long-term goals and objectives despite feeling distrust of themselves or their abilities. While individuals with mental durability are characterized by continuous hard work and maintaining a high level of self-confidence and belief in abilities and are able to succeed (Duckworth, Peterson, Matthews, & Kelly, 2007). Mental durability not only focuses on actions but also on emotional control when facing challenges (Gross, 2014).

3- Mental durability and resolve: The term "resolve" (et al., 2007) Duckwort refers to persistence and perseverance in achieving long-term goals. People with high degrees of resolve are active towards the goals despite self-doubt (Papageorgio et al., 2017).

Characteristics of individuals with mental durability: -

Clough et al., 2002) described individuals with mental durability as friendly, high social skills, able to maintain their calm and emotional stability in different situations and like to fight competition and challenges, not that they rarely fall prey to anxiety and have a lower level of stress than their peers (Issa and Abdul Majid, 2021:79). Clough & Strycharczyk, 2015) identified the hallmarks of individuals with mental durability in four fundamental features: cognition, ability to take over, control and influence the course of their lives. (Cattel, 1957) viewed mental toughness as one of sixteen traits

describing personality and that persons with mental durability are persons with autonomy, self-reliance, realism and responsibility (Crust, 2008; Crampton, 2014).

Explanatory models of mental durability: -

1- Model (Kobasa, 1979), divided the concept of psychological toughness into three dimensions:

A- Control: means an individual's perception of his or her ability to control, influence and substantially change the course of environmental events surrounding him or her.

B- Challenge: Positive reaction to events and crises as events requiring preparedness, preparation, personality mobilization and capacity to confront and overcome.

C- Commitment: Adherence to what one seeks to achieve goals and tasks in the face of adverse pressures and events (Hussein and Shammari, 2023:624).

2- Model (Bull, 1996), indicated that mental durability consists of several

Dimensions are:

A- Strong desire for success.

B- Maintaining positivity in the face of life conditions.

C- Control of controllable aspects (lithium, 2020:145).

3- The quadruple model of mental durability The 4Cs Model of mental toughness, indicates (Crust,2003) The term mental durability is synonymous with the psychological hardness to which she refers (Kobasa,1979) However, Clough et al., 2002, they worked to compare mental toughness with psychological toughness and its role in stress relief operations and concluded that mental toughness is an extension of mental toughness, and this model explained mental toughness to be composed of (Control, Commitment, Challenge, Trust) is the model used to interpret the results of the current study, and this model is as follows: -

A- Control: - On two levels, emotion control and life control in general and refers to an individual's ability to control both their emotions and life attitudes in general and how much he or she feels able to influence the situations facing him or her.

B- Commitment: - Indicates the ability to carry out tasks successfully or continue a goal or task despite the existence of obstacles and problems. Individuals differ in the degree of focus on their goals. Some may behave easily, some are bored and others turn their attention to competing goals while others are more persistent (Mahmoud, 2019:43).

D- Challenge: - Taking difficult attitudes as opportunities for individual growth and self-development more than threatening or threatening the life of the individual (Issa and Abdul Majid, 2020:79).

E- This dimension describes an individual's sense of confidence in his or her abilities and abilities to overcome general or personal problems in his or her life. This dimension is divided into:

i- Trust in abilities and capabilities.

ii- Trust between personality (Mahmoud, 2019:42), i.e. a person's faith in himself to accomplish difficult tasks, this dimension indicates the difference between individuals with high confidence in themselves and individuals with less trust but similar abilities.

4- Model (Fourie & Potgieter, 2001), Faure and Butgieter noted that mental durability is made up of several dimensions: motivation, confronting stress, trust, target direction, competitiveness, psychological toughness, moral dimension.

Theme 2: Previous studies

1- Study (Laithi, 2020): (Mental durability and its relationship with academic motivation and methods of coping with pressure for a sample of students of Helwan University)

The study aimed to reveal the correlation between mental durability and academic motivation and the methods of coping with pressure of a sample of students of Helwan University. The study sample consisted of 348 students and students of Helwan University colleges. (education, social service, engineering, science), distributed to (164) males, and (184) Female results showed a statistically significant correlation between mental durability and its four dimensions (Control, challenge, commitment, trust), academic motivation and methods of coping with stresses in the research sample, the results of the study indicated that there are no differences between research variables attributable to sex (male, female), and specialization (scientific, human) (lithic, 2020:139).

2- Study (Isa, Abdelmajid, 2021): (Modeling causal relationships between mental durability and organizing emotions and psychological well-being in a sample of students of the Faculty of Education)

Research's goal is to model relationships between mental durability, emotion regulation, and psychological well-being

With a sample of university students at the University of Damanhour, after applying the scale, the results reached the impact of mental durability on other research variables, while the results of the study showed no differences between the studied variables (Issa, Abdul Majid, 2021:71).

1- Study (Stamp et al., 2015):

(The relationship between mental toughness and psychological well-being of undergraduate students)

The study aimed to identify the relationship between mental durability and psychological well-being among undergraduate students. The study sample reached 168 students from 9 universities in the United Kingdom. The research's findings include that mental durability predicts mental well-being, and that mental durability is important in the educational context (Stamp et al., 2015).

2- Study Lin et al., 2017):

(Mental toughness and Individual Differences in education, performance in work and education, psychological well-being, and personality)

The study aimed to recognize mental durability and individual differences in education, performance in science and education, psychological and personal well-being. The study sample consisted of 115 undergraduate students at the British University. The results indicated the association of mental durability with psychological well-being, psychological traits and learning efficiency (Lin et al., 2017).

CHAPTER 3:- RESEARCH METHODOLOGY AND PROCEDURES

1- Research methodology:

The researcher (Associative Descriptive Curriculum) adopted the objectives of the study, "based on monitoring, analysing and interpreting what exists and helping to present a future picture in the light of current indicators".

2- Research Community:

Society means all individuals with information related to the phenomenon under consideration. In order to achieve the goals, society should describe in detail (Raheem, 2024:69). The current research society consists of (9851) * students from scientific and humanitarian disciplines by (3,940) students and (5,911) students.

3- Sample Search:

The sample is part of the study community and should be truly and honestly representative of the community so that the researcher can disseminate the results of his research (Zaidi, 2024:52), and the research sample consisted of 200 students and graduate students at the University of Baghdad.

***The researcher relied in her data on the University of Baghdad/Department of Planning and Follow-up/Statistics Division**

4- Search Tool:

Research in the collection of data for the study community is based on identification and is one of the scientific methods that enables the researcher to obtain the data he needs for his study (Obeid and Abdeid, 2020:483). The researcher adopted a scale (lithium, 2020) and is based on a model (Clough et al., 2002).

Statistical analysis of mental durability metric paragraphs:-

Statistical analysis of paragraphs is an important step when applying any scale, to see the psychometric properties of scale vertebrae that help the researcher to select paragraphs with good characteristics. This in turn increases the scale's sincerity and stability (Anastasia & Urbina, 1997:172) As the selection of test paragraphs that are of high quality to accurately measure the psychological trait, through the conditions for the composition and wording of these paragraphs are achieved by logical methods and the arbitrators' opinions of the truthfulness of the content of each paragraph individually (Alam, 2000:367), so the researcher conducted the statistical analysis as follows:

a. " The discriminatory force of the paragraphs: The accuracy of any measure in measuring what it is designed to measure depends on the accuracy of its paragraphs (Abdul, 2015:190). The paragraph is meant to distinguish any distinction between students with a high degree of trait, and students with less ability in the measured trait (Melhem, 2000:236). The calculation of paragraph distinction is one of the most important characteristics of psychological metrics, as it significantly affects the scale's ability to detect individual differences (Ebel, 1972:398). Accordingly, the researcher extracted discriminatory force factors from the paragraphs, and followed the two extremist groups' approach: after the scale was applied to the statistical analysis sample of 200 students and carried out the following actions:

1- Sample members' scores were arranged in their response on the scale from (higher) to (lower) degrees.

2- A percentage (27%) of the higher and lower groups was adopted to represent the two extremist groups. The adoption of a percentage (27%) represents the best percentage to achieve differentiation between the two groups (Mahmoud Rahim, 2016:120). Since the sample statistical analysis consisted of 200 students, the number of individuals in the upper and lower groups was 108 students, i.e. 54 in the lower group and 54 in the upper group.

3- The T test of two separate samples was used to extract the difference between the upper and lower groups. Table 1 shows that all the paragraphs of the scale are distinct because the calculated T values are greater than the tabular T value of 1, 98 at a degree of freedom (106), and at an indicative level (0.05).

Table 1: Discriminatory Force of Mental Durability Scale Paragraphs

Level indication 0,05	Calculated T value	Lower group		Higher group		T Paragraph
		Standard deviation	Average arithmetic	Standard deviation	Average arithmetic	
Function	6,422	1,286	3,167	0,856	4,570	1
Function	5,729	1,304	3,033	1,240	4,491	2

Function	7,346	1,128	3,217	0,830	4,672	3
Function	3,292	1,417	2,972	1,356	3,885	4
Function	5,759	1,371	2,093	1,546	3,776	5
Function	7,381	0,990	3,528	0,660	4,770	6
Function	5,679	1,629	2,102	1,655	3,967	7
Function	5,716	1,152	3,507	0,841	4,660	8
Function	3,994	1,568	3,021	1,208	4,139	9
Function	2,625	1,389	3,811	1,097	4,468	10
Function	3,207	1,570	2,959	1,249	3,869	11
Function	3,908	1,450	3,192	1,208	4,235	12
Function	3,896	1,436	2,696	1,459	3,824	13
Function	2,361	1,393	2,944	1,626	3,659	14
Function	5,771	1,062	3,646	0,756	4,710	15
Function	3,924	1,251	3,881	0,629	4,658	16
Function	6,683	1,461	3,063	0,759	4,619	17
Function	3,313	1,339	3,641	0,817	4,376	18
Function	3,296	1,380	3,524	1,091	4,344	19
Function	2,900	1,617	2,756	1,494	3,659	20
Function	4,666	1,320	3,857	0,507	4,790	21
Function	3,109	1,398	3,907	0,870	4,631	22
Function	3,148	1,275	3,833	0,980	4,549	23
Function	2,364	1,338	3,676	1,262	4,291	24
Function	3,456	1,265	3,685	1,045	4,487	25
Function	6,940	1,000	3,410	0,797	4,665	26
Function	3,265	1,373	3,876	0,872	4,627	27
Function	6,779	0,695	4,124	0,435	4,910	28
Function	3,259	1,741	2,870	1,555	3,946	29
Function	3,706	1,589	3,585	0,815	4,521	30
Function	3,135	1,482	3,368	1,206	4,215	31
Function	3,934	1,754	2,507	1,525	3,800	32
Function	3,168	1,466	2,733	1,428	3,650	33
Function	3,764	1,487	2,665	1,634	3,841	34
Function	2,446	1,403	3,911	1,063	4,520	35
Function	3,387	1,567	3,745	0,863	4,602	36
Function	3,200	1,413	2,581	1,495	3,512	37
Function	3,251	1,634	2,944	1,592	3,993	38
Function	3,610	1,536	2,796	1,406	3,859	39
Function	3,325	1,414	3,960	0,792	4,722	40

B- Internal consistency (believe the paragraphs):

Calculating the veracity of the paragraph through its association with external or internal property is more important than its logical honesty (Tahir, 2018:15) and internal consistency is calculated as follows:

The subparagraph's degree relationship to the overall grade:

Instaze indicates that a paragraph's attachment to an internal or external angle is an indicator of its honesty, and where there is no appropriate external test, the total scale is the best internal test in calculating this relationship. (Anastasi, 1976:260, the researcher relied on the calculation of the paragraph's certification of the Pearson correlation coefficient between the grades of each paragraph

and the overall grade, because the grades of the paragraph were continuous and graded, and all the correlation coefficients were found to be statistically significant when compared to the critical value of the attachment coefficient of 0.139 at an indicative level (0.05) and a degree of freedom (198).

Table 2: Correlation factors between each paragraph's degree and the overall degree of mental durability measure

Pearson Binding Coefficient	Paragraph number	Pearson Binding Coefficient	Paragraph number	Pearson Binding Coefficient	Paragraph number	Pearson Binding Coefficient	Paragraph number
0,407	31	0,394	21	0,378	11	0,260	1
0,316	32	0,412	21	0,295	12	0,393	2
0,299	33	0,344	23	0,390	13	0,293	3
0,284	34	0,313	24	0,454	14	0,327	4
0,287	35	0,270	25	0,300	15	0,290	5
0,400	36	0,340	26	0,351	16	0,335	6
0,250	37	0,273	27	0,370	17	0,320	7
0,310	38	0,339	28	0,397	18	0,373	8
0,327	39	0,312	29	0,370	19	0,358	9
0,440	40	0,342	30	0,233	20	0,406	10

2- The degree of the paragraph relates to the degree of the area to which it belongs:

This method was used by the researcher to determine the coefficient of association between the degree of each paragraph and the degree of the area to which it belongs, for the purpose of ascertaining the authenticity of the paragraphs of the scale in each area. The total degree of the field was adopted an internal test. After the use of the Pearson coefficient, the majority of the coefficients were statistically significant when compared to the critical value (0.139) at the indicator level (0.05) and freely (198).

Table 3: Correlation factors between the degree of each paragraph and the degree of area to which it belongs

Paragraph's link to the area of trust	Paragraph number	Paragraph's linkage to the challenge area	Paragraph number	Paragraph's link to the area of obligation	Paragraph number	The paragraph's link to the area of control	Paragraph number
0,444	31	0,465	21	0,422	11	0,392	1
0,372	32	0,488	21	0,375	12	0,385	2
0,339	33	0,390	23	0,412	13	0,355	3
0,354	34	0,368	24	0,477	14	0,425	4
0,315	35	0,303	25	0,345	15	0,398	5
0,423	36	0,394	26	0,377	16	0,433	6
0,360	37	0,323	27	0,420	17	0,428	7
0,355	38	0,378	28	0,438	18	0,470	8
0,399	39	0,346	29	0,405	19	0,450	9
0,467	40	0,381	30	0,311	20	0,496	10

Matrix of internal linkages for autonomy of fields:

To achieve this, the sample of statistical analysis has been relied upon. (200) students, and the results indicated that all correlation transactions for each field in the other areas and the overall degree are statistically significant. This indicates that the areas measure one thing: mental durability, as all correlations calculated are higher than the high critical value. (0.139) at an indicative level (0.05) with a degree of freedom (198) and this is a good indicator of the sincerity of the scale construction, and table 4 shows this.

Table 4: Internal attachment matrix for mental durability measure

Trust area	Challenge area	Commitment	Field of control	Total degree	Fields
0,485	0,522	0,456	0,511	1	Total degree
0,305	0,298	0,312	1		Field of control
0,325	0,330	1			Commitment
0,361	1				Challenge area
1					Trust area

Scale Stability:

The concept of scale stability refers to consistency and accuracy in measurement (Alam, 2000:131). Consistency has been calculated in the following ways:

A- Test Method - Retest:

For the purpose of extracting stability in this way, the scale has been reapplied on the sample of stability formed by (40) students and students with a interval of 14 days from the first application, where Adamzadams showed)) that the reinstatement of the scale for the purpose of identifying its stability should not exceed two weeks from the first application and then calculate the Pearson correlation factor between the first and second application degrees and the coefficient of the link (0.85) for the scale, indicating that if the correlation coefficient between the first and second applications (0.70) and more, this is a good indicator of the consistency of tests in educational and psychological sciences (Al-Issawi, 1985:58).

B- Alpha Cronbach equation:

The aim of establishing a constant factor in this way is to ensure consistency of the individual's performance on the whole scale from paragraph to paragraph, if it indicates the overall homogeneity of the paragraphs of the scale and the stability of the responses of individuals, and that the content of the scale whenever it is homogeneous, the stability of internal consistency will be high. (Al-Zamli et al., 2009:276), and the stability in this way has been extracted from the scores of the basic sample forms of the adult (200) Form. Using the Kronbach equation, the alpha (0.82) coefficient is a good constant.

Statistical means:

The statistical tools used in the current research were calculated by SPSS:

- 1- One sample T test: To recognize the variable level at the sample.
- 2- The T test for two independent samples: to calculate the discriminatory force of the scale paragraphs, and also used to identify differences in mental durability.

3- Pearson Correlation Coefficient: Use in finding correlations between the paragraph degree and the total degree and the field as well as the correlation matrix.

4- alfa Cronbach equation: for internal consistency, used to extract stability in the alpha way of internal consistency of the search tool.

CHAPTER 4:- PRESENTATION, INTERPRETATION AND DISCUSSION OF RESULTS

First goal:

Recognize the mental durability of postgraduate students.

To achieve this goal, the researcher applied a 40-paragraph mental durability measure to the research sample of 200 students. The results of the research showed that the average calculation of this sample score on the scale had reached (133,456) degree with a standard deviation of (16,311) degree, and for the indication of the difference between the computational average and the hypothetical average which reached (120) Degree, the researcher used one sample T test, and the difference was shown to be statistically D at an indicative level (0.05), with the calculated T value (6,412) being greater than the total tabular T value (1,96), and to the degree of freedom (153) this means that the research sample has a great degree of mental durability and table (5) shows this.

Table 5: Computational average, standard deviation and T value of mental durability measure

Indication (0,05)	T value		Hypothetical average	Standard deviation	Average arithmetic	Number	Variable
	Tabular	Calculated					
Function	1,96	11,670	120	16,311	133,456	200	Mental durability

This result can be interpreted according to the Clough et al., 2002 model in that there are several positive dimensions or components responsible for effective confrontation towards pressing attitudes such as controlling the course of life and surrounding events, The commitment to what the individual seeks to achieve the goal, and the challenge of any consideration of pressing attitudes as events must be overcome. Trust in personal and cognitive abilities and that students appreciate the conditions and see them as an opportunity to grow and thus resist them to reach a state of psychological equilibrium and thus reflect on their academic excellence. This result is consistent with the study (Elleithy, 2020), study (Issa, Abdul Majid, 2021), study (Madeed and Sabar, 2023) and study (Stamp et al., 2015) which found that the research sample had mental durability.

Second objective: To identify statistically significant differences in mental durability in postgraduate students according to the degree variable (doctorate-master's degree).

In order to achieve this goal, a measure of mental durability was applied to the individuals of the research sample consisting of 200 students. After discharging and statistically processing the data, the researcher used the T-test of two independent samples to find differences in the mental durability of the sample according to the certificate variable and the results were as shown in Table 6.

Table 6: Computational average, standard deviation and T value of mental durability scale depending on certificate variable

Indication level (0,05)	T value		Standard deviation	Average arithmetic	Sample	Certificate	Variable
	Tabular	Calculated					

	Function	1,96	3,250	16,131	137,342	74	PHD	Mental durability
				17,732	129,453	126	Masters	

The table above shows that there are statistically significant differences in mental durability according to the degree variable (doctor-master's degree) and in the doctoral interest that the calculated T value of 3,250 was greater than the tabular T value of 1,96 at an indicative level (0.05) and a degree of freedom (198).

The researcher explains this finding that the doctorate is the highest degree and when the student reaches it he is at an advanced stage that makes him have cumulative experience in passing various crises and trials and is armed with many experiences and events that he has experienced in his life, a stage that coincides with autonomy and self-reliance.

Third objective: To identify statistically significant differences in the mental durability of postgraduate students according to the sex variable (male-female).

In order to achieve this goal, a measure of mental durability was applied to the individuals of the research sample consisting of 200 students. After discharging and statistically processing the data, the researcher used the T-test of two independent samples to find differences in the mental durability of the sample according to the sex variable and the results were as shown in Table 7.

Table 7: Computational average, standard deviation and T value of mental durability scale depending on certificate variable

	Indication level 0.05	T value		Standard deviation	Average arithmetic	Sample	Gender	Variable
		Tabular	Calculated					
	No Function	1,96	0,655	16,423	134,298	92	Male	Mental durability
				16,610	132,767	108	Female	

The table above shows that there are no statistically significant differences in mental durability according to the sex variable (male-female) because the calculated T value of 0.655 was smaller than the tabular T value of 1,96 at an indicative level (0.05) and a degree of freedom (198). This result is that graduate students of both sexes live in the same environment and are exposed to the same economic, social, security and cultural conditions in the country and have the same ways to cope with pressures and crises. This result is consistent with the study (Lithi, 2020) and (Issa, Abdul Majid, 2021) and varies with the study (Madeed and Sabar, 2023) which indicated differences between males and females.

Goal 4: Identify statistically significant differences in the mental durability of postgraduate students according to the specialization variable (scientific-human).

In order to achieve this goal, a measure of mental durability was applied to individuals of the research sample consisting of 200 students. After discharging and statistically processing the data, the researcher used the T-test of two independent samples to find differences in mental durability in the sample according to the specialty variable and the results were as shown in Table 8.

Table 8: Computational average, standard deviation and T value of mental durability scale depending on specialty variable

Indication level	T value		Standard deviation	Average arithmetic	Sample	Specialize	Variable
	Tabular	Calculated					
No Function	1,96	1,392	16,244	135,142	82	Scientific	Mental durability
			16,821	131,875	118	Humanitarian	

The table above shows that there are no statistically significant differences in mental durability according to the specialization variable (scientific-humanitarian) because the calculated T value of 1,392 was smaller than the tabular T value of 1,96 at an indicative level (0.05) and a degree of freedom (198). This result is explained by the researcher's explanation that students from both disciplines experience similar studies and are exposed to the same environmental conditions and that students as they enter the university community are eager and all hope for a postgraduate degree that helps them attain a prestigious scientific and material level, so they are better able to cope with the difficult circumstances surrounding them.

CONCLUSIONS

- 1- Postgraduate students have mental durability towards difficult conditions.
- 2- There are no differences depending on sex and specialization.
- 3- There are statistically significant differences in the variable depending on the degree and in the interest of PhD students.

RECOMMENDATIONS

- 1- Urge the responsible authorities to conduct workshops and courses to develop the concept of mental durability.
- 2- Promoting the concept of all students to cope with various crises.
- 3- The concept of mental durability is rooted in psychological studies in general and in educational psychology studies in particular.

PROPOSALS

- 1- Conduct a similar study on a number of other universities to compare outcomes.
- 2- Conduct a similar study to be applied to other stages.
- 3- Conduct a study on the relationship of mental durability to other psychological variables.

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