



# Psychological Hardiness among a Sample of Primary School Children

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## ABSTRACT

The study aimed to reveal the differences between the average scores of male and female children in the study variable (psychological hardiness). The study sample was divided into the following: (1) The survey sample consisted of 200 boys and girls from the fifth and sixth grades of primary schools in Port Said Governorate in order to verify the authenticity and stability of the tools used in the study, and (2) The basic study sample consisted of 200 boys and girls from the fifth and sixth grades of primary schools in Port Said Governorate, 100 males and 100 females, and their ages ranged from 9:12 years. The sample was chosen in a random way. The researcher used the following tools: the psychological Hardiness scale prepared by Zainab El Qudah (2016). The results showed that : There were statistically significant differences at the level of significance (0.01) for males in both the challenge and control dimensions and the overall score on the Psychological hardiness scale. The differences were for females in the post-commitment dimension.

## 1. Introduction

Psychological hardiness is one of the most important elements of psychological resistance to the negative effects that crises and pressures may produce, and the individual's possession of this trait is of great importance in making the individual control the circumstances surrounding him and achieving the goals he/she desires

(Salah El-Din & Abdel Hamid, 2005, p. 208).

The concept of psychological hardiness goes back to (Kubaza), which she discovered after a series of studies aimed at identifying the underlying factors that help people maintain their psychological and physical health despite their exposure to stressful events. Kobaza believes that psychological hardiness is an individual's general belief that he is effective

and able to use all the resources available to him, whether psychological or environmental, in order to perceive, interpret, and effectively confront stressful life events in an undistorted or distorted way, and to interpret them objectively and positively in a way that enables him to coexist with them in a positive manner. (Mukhaimer, 1996, p. 277)

The concept of psychological hardiness, which exists in individuals to varying degrees, represents a structure that includes three axes (dimensions): commitment, control, and challenge. People with psychological hardiness are distinguished by their appreciation of the meaning, value, and importance of themselves, their work, and their lives in general. Moreover, they believe that change and transformation are a constant law in life, and they make these changes opportunities for learning and growth instead of considering them as obstacles and threats. (Mehrparvar, 2012, p. 818)

Psychological hardiness contributes to giving the individual the psychological strength that enables him to effectively confront the stressful events he faces, and creates a personality capable of endurance that is able to resist pressures to the point of reaching the stage of compatibility, and looks to the present and future with a look full of hope. Optimism is devoid of anxiety and depression. (Al-Shami, 2020, p. 4)

### 1.1. Statement of the Problem

The research problem and its questions: The research problem is summarized in answering the following question: is there a statistically significant difference between the average scores of males and females in the dimensions of the psychological hardiness scale and the total score?

### 1.2. Objective of the Study

It examines the effect of the gender variable on the psychological hardiness of the children in the study sample.

### 1.3. Significance of the Study

The importance of the research lies in the importance of its variables, which are: psychological hardiness and the results it reveals

in order to know the relationship between the variables, and the differences or lack of differences that may exist among the study sample in the study variables and their dimensions. The importance of the research is summarized as follows:

1. The importance of the sample that the research deals with, who are children at the end of primary education and on the verge of entering adolescence. Therefore, caring for the child, enhancing his self-confidence, and establishing the concept of psychological hardiness in him at this stage makes us avoid the presence of an adolescent who is vulnerable to falling into the clutches of psychological disorders.

2. This research may be an addition to the theoretical frameworks and previous studies of the psychological heritage.

3. The results of this research may contribute to providing a theoretical understanding of the nature of its variables, which may open a field for research and investigation.

4. The results of the research and its recommendations and proposals contribute to developing good plans.

### 1.4. Research Hypothesis

There is a statistically significant difference between the average scores of males and females in the dimensions of the psychological hardiness scale and the total score.

### 1.5. Concepts of the Study

#### 1.5.1. The Concept of Psychological Hardiness.

Funk defined psychological hardiness as: “a general personality trait that the diverse and enhanced environmental experiences surrounding the individual from childhood work to form and develop.” (Funk, 1992, p. 336)

Mukhaimer defined it as: “a pattern of psychological contract that the individual commits to himself, his goals, values, and others around him, and the individual’s belief that he can have control over the events he faces by bearing responsibility for them, and that what happens Change in aspects of his life is exciting

and necessary for growth rather than a threat or hindrance.” (Mukhaimer, 1996, p. 284)

Gerson defined it as: “the individual’s ability to confront pressures with confrontation skills, logical analysis, emotional discharge, cognitive avoidance, and surrender.” (Gerson, 1998, p. 120)

## 1.6. Scope of the Study

The study is determined by the following Scopes:

### 1.6.1. Objective Scopes

They are determined by the issue of psychological hardiness among a sample of primary school children.

### 1.6.2. Temporal Scopes

Temporal Scopes of the study are determined by the date of application in the second semester of the academic year 2021-2022.

### 1.6.3. Spatial Scopes

Primary schools in Port Said Governorate.

### 1.6.4. Human Scopes

The human limits of the study were determined by a sample of primary school children in Port Said Governorate, consisting of (200) male and female children from the fifth and sixth grades of primary schools in Port Said Governorate, with (100) males and (100) females, and it ranged Their ages range from (9-12) years, with an average age of (10.5) and a standard deviation of (3.1). The study is also determined by: statistical tools and methods and the possibility of generalizing the results of this study in light of these limitations, and designing programs to enhance psychological resilience in children.

## 2. Theoretical Framework

### 2.1. Psychological hardiness

The concept of psychological hardiness is one of the concepts that has recently attracted the attention of researchers, as psychological hardiness is the protective shield that enables the individual to confront the crises and difficulties he faces (Al-Shammari, 2015, p. 24)

The first indications of the term psychological hardiness go back to Kobasa, who conducted several studies that ended up laying the foundation for the term psychological hardiness. She concluded that some people have the ability to face difficulties and overcome crises and stressful events. Despite being exposed to many life pressures, Kobaza directed her attention to those normal people who have the ability to confront pressures and confront crises, and thus they feel their value and have the ability to realize themselves. (Al-Azzam, 2014, p. 2)

Both Kobaza and Madi agreed that psychological hardiness is a characteristic of the personality that diverse and positive childhood experiences contribute to its formation, and people who are able to resist psychological pressures are more likely to maintain their psychological and physical health, as they welcome stressful situations and see them as necessary for their growth. Psychological hardiness is their source of resistance to the stressful events they face. (Maddi & Kobasa, 1984, p. 571).

The emergence of the concept of psychological hardiness The concept of psychological hardiness arose at the hands of the American (Susan Kobasa) while she was preparing her doctoral thesis under the supervision of her professor (Salvatormadi) at the University of Chicago in the United States of America, which she completed in 1977, and despite the presence of beginnings Early on, Kobasa preceded Kobasa in pointing out the psychological and social variables that mitigate the severity of the impact of stress. However, her doctoral dissertation and her subsequent research (Kobasa, 1979, 1982, 1983, 1985) - in addition to the research of her professor Madi - brought about a major shift in the field of studying stress. Psychological to the point that scientists considered the research of (Maddi & Kobasa, 1984) a milestone in the history of the study of psychological stress (Mukhaimer, 2019, pp. 11-13).

The conventional definition of psychological hardiness is defined by (Averill, 1973) as: “a characteristic of healthy people who are characterized by high endurance despite being

exposed to many pressures and who possess positive psychological, mental and physical characteristics.” (Averill, 1973, pp. 286-301) and Funck defined it as: “a characteristic of personality that works. It is shaped and developed by the diverse environmental experiences that surround the individual from childhood.” (Funck, 1992, p. 88)

Mukhaimer defined it as: “a pattern of psychological contract in which the individual is committed to himself and his goals and the individual’s belief that he can have control over the stressful events he encounters.” And he takes responsibility for the events he is exposed to and that the changes that occur in aspects of his life are exciting and necessary for growth rather than a threat or an obstacle to him.” (Mukhaimer, 1996, p. 284)

## **2.2. Dimensions of psychological hardiness:**

There are three dimensions that make up psychological hardiness, which Kobasa reached through her studies that explain what psychological hardiness is and what are the characteristics of a person who is characterized by strong psychological hardiness. These dimensions are: commitment, control, challenge, or what Kobasa called (3c). These dimensions will be presented below.

### **2.2.1. Commitment**

Mukhaimer defined as: “a type of psychological contract by which the individual commits himself to himself, his goals, his values, and others around him.” (Mukhaimer, 1997, p. 14)

### **2.2.2. Control**

Kobaza believes that control “the individual’s belief that he is able to control the stressful events and situations that he faces, and that he is able to deal with them, and his awareness of these pressures as unstable pressures, and taking personal responsibility for what it may happen to him, as he feels that he is effective and has the ability to influence life situations and face their crises instead of giving up and feeling helpless.” (Kobasa, 1984, p. 54)

### **2.2.3. Challenge**

Kobaza defined challenge as: “the individual’s belief that renewed change in life’s events is a natural and even inevitable thing necessary for his advancement, rather than a threat to his security, self-confidence, and psychological well-being.” (Kobasa, 1979, p. 70)

## **2.3. Theories explaining psychological hardiness**

### **2.3.1. The theory (Kobasa, 1979) and the studies emanating from it.**

The American researcher Susan Kobasa presented the term psychological hardiness for the first time in 1979 in an article entitled “Stressful Life Events, Personality, and Health: An Investigation of Psychological Hardiness,” and she believes that the individual’s exposure to stress is inevitable. Life is full of pressures, setbacks, and difficult circumstances. Individuals cannot avoid failure, frustration, or feelings of alienation, and they cannot escape the demands of change in personal growth at any stage of life (Alaa El-Din, 2016, p. 19). Kobasa formulated her theory by relying on a series of results of studies that she conducted in the years (1979, 1982, 1983, 1984) to deepen and complete her doctoral thesis. These studies aimed to know the psychological and social variables. Which lies behind people maintaining their mental and physical health despite being exposed to stress (Mukhaimer, 1996, pp. 267-277).

Kobaza noticed that some people can achieve themselves and their latent potential despite being exposed to a lot of frustrations and pressures, and that many individuals do not get sick because of their exposure to psychological pressure. She hypothesized that the underlying reason for this is psychological hardiness that mitigates the negative effects of stressful events on the individual. Individuals with high hardiness face pressures without being exposed to psychological or physical illness. Kobaza worked to confirm the assumptions of her theory when she concluded that the most hardy people are the most steadfast, resistant, accomplished,

internally controlled, active, and realistic. (Kobasa, 1984, p. 66)

### 2.3.2. Maddy's Theory

The first indications of psychological hardiness appeared in 1967 in the works of the American psychologist "Salvatore Maddy," who was Cubazza's doctoral supervisor. His most important works were crystallized in his writings on "the ideal identity and the pre-illness personality," where he proved that chronic cases of loss of meaning Alienation in human existence has become one of the typical features of modern life, as have the changes and technological development that have occurred in society, as each individual has an identity that is determined based on his social role. (Maddi, 1967, pp. 312-314)

Maddi noted that people who were able to persist and face stressful events maintained three beliefs that helped them transform pressure from an adversity into a new opportunity for life and learning. These three beliefs are commitment, challenge, and control; Commitment enabled them to confront the stressful event instead of avoiding it, control enabled them to confront conflict and try to influence the results, and challenge also led them to perceive the changes resulting from pressures, whether positive or negative, as new opportunities for learning, all of which leads to maturity (Alaa El-Ddin, 2016).

Madi mentioned that the accumulation of stressful events causes an increase in stress, which can appear in the individual in the form of reactions such as irritability, anxiety, and other manifestations, and their continuation can create pathological symptoms, and these variables represented by stressful events, tension, and pathological symptoms have had an impact. In the researchers' description of psychological hardiness and considering it as an intermediary variable between stress and illness. (Yousefi, 2013, p. 125)

Since children are the research sample in this research, it is necessary to point out how to raise a child characterized by psychological hardiness. Socialization of children who are characterized by psychological hardiness (Mukhaimer, 1996) pointed out that the relationship characterized by

warmth between the child and his parents represents the most important social support for him, and makes him feel more effective when facing pressures. Children's awareness of warmth and their belief that they are loved gives them a reasonable amount of freedom in making decisions. decisions, this increases their sense of confidence and competence and makes them more able to persevere and challenge; Which makes them believe that the pressures they face are not a threat to them as much as they are a test of their psychological hardiness and ability to challenge. This perceived warmth makes them form positive versions of themselves, the world, and the future. This ensures that they realize their competence and effectiveness, and this makes them believe that they can confront problems and crises successfully. Parental rejection and neglect affect the child's resilience and reduce his ability to challenge and control, as experiences of rejection, which include (hostility, aggression, neglect, indifference) make the child feel insecure, worthless, and inadequate. He forms an overall negative image of himself, making him feel ineffective. He also distorts the experiences he is exposed to in the direction of anticipating failure and danger. Instead of taking the initiative and attacking problems to solve them, the child continues to sense constant danger, which makes him over-evaluate the events he is experiencing, and at the same time reduces his ability to confront them, which His feeling of helplessness and worthlessness increases. (Mukhaimer, 2019, p. 15)

The researcher believes that despite the differences between researchers and the diversity of their theories and interpretations, they all led to very similar results, which are that psychological hardiness has a strong relationship with physical diseases and psychological disorders in times of adversity and pressure. However, despite the strength of this relationship, it is inverse. If the individual has a high degree of psychological hardiness, it acts as a protective shield for the individual that enables him to confront the stressful event and try to control it, as psychological hardiness works to alleviate the feeling of stress that may result

from negative perception of events. Psychological hardiness prevents the individual from reaching a state of chronic stress and feeling that his energies are depleted, and thus he is less susceptible to physical diseases and psychological disorders that may result from the bad negative effects resulting from stress. On the other hand, the individual with low psychological hardiness places a negative evaluation of life's changes, and feels threatened and helpless. In the face of changing events, and the increase of these events leads him to feel helpless and constant tension that makes him unable to face stressful events; That is, psychological hardiness, with its three components (commitment, challenge, and control), represents a structure that grows in the individual since childhood through a parental relationship characterized by warmth, acceptance, and understanding, and provides the individual with the courage to transform the stressful events he faces into new opportunities for personal growth and learning. Accordingly, the lack of psychological hardiness in an individual, especially if he is a child (the research sample), creates a child who is unable to face the stressful events he is exposed to, and who is a weak child who is unable to face crises and is therefore vulnerable to behavioral problems and psychological illnesses.

### **3. Studies that dealt with the psychological hardiness of children.**

A study by [Odeh \(2010\)](#) entitled "Shocking experience and its relationship to methods of coping with stress, social support, and psychological hardiness among children in the border areas of the Gaza Strip." The study aimed to identify the relationship between the degree of exposure to traumatic experience and the methods of coping with stress, the level of social support, and the level of psychological hardiness among children in the border areas of the Gaza Strip, and to identify whether there are differences in these variables due to some of the following demographic variables: gender, place of residence, educational level of parents. The results of the study found that there is a direct, statistically significant relationship between the

degree of exposure to traumatic experience and the use of stress coping methods, social support, and psychological hardiness

A study by [Al-Beheiri and Al-Muqaddam \(2014\)](#) entitled "Variation of psychological hardiness according to some variables among a sample of diabetic children." The study aimed to reveal the differences between male and female diabetic children in psychological hardiness, and to show the differences between those with high and low parental competence. Diabetic children in psychological hardiness, and comparison between diabetic children and normal children in psychological hardiness. The results revealed that there were statistically significant differences between the average scores of the two samples of diabetic children, males and females, on the psychological hardiness scale, in the direction of the males.

A study by [Abdel Halim et al. \(2019\)](#) entitled "Social skills and their relationship to psychological hardiness among a sample of male and female street children." The results found that there are statistically significant differences between male and female street children on the psychological hardiness scale in the direction of males, and the average is higher for males. On my dimension (challenge, commitment). There were statistically significant differences between male and female street children on the social skills scale in the direction of males, and the average for males increased on the two dimensions (initiating interaction, expressing positive emotions). There is also a statistically significant correlation between the average scores of the study sample on the psychological hardiness scale in its three dimensions (Commitment, challenge, control) in the dimension of initiating interaction on the social skills scale. There is also a statistically significant correlation between the (commitment) dimension in the psychological hardiness scale and the (expressing positive emotions) dimension and the total score of the social skills scale. A statistically significant correlation was also found. Between psychological hardiness and the expression of positive emotions, there was no correlation

between the total score of psychological hardiness and the total score of social skills.

The study of [Mustafa \(2021\)](#) entitled “The relationship between the sense of humor and the psychological hardiness of the pre-school child,” and it aimed to identify the relationship between the sense of humor and the psychological hardiness of the pre-school child, while revealing the differences in the sense of humor and psychological hardiness according to the variable (situation). Health - type). The results of the research resulted in the following: the presence of a relationship between the sense of humor and the psychological hardiness of the pre-school child, the absence of differences depending on the health status of the children in psychological hardiness, the presence of differences depending on the gender variable in the direction of females on the total score of the psychological hardiness scale and after commitment, with no There are differences depending on the gender variable on the control dimension, and there are differences depending on the gender variable in the direction of males on the challenge dimension.

#### **4. Methodology of the Study**

##### **4.1. Participants**

The research sample consisted of: 1. The exploratory sample consisted of (200) male and female children from the fifth and sixth grades of primary schools in Port Said Governorate (outside the original sample); This is to verify the validity and reliability of the tools used in the study. 2. The sample of the basic study consisted of (200) male and female children from the fifth and sixth grades of primary school in three primary schools in Port Said Governorate, which are (Othman bin Affan Primary School, Al-Obour Primary School, and Martyr Ali Jawad Hosni Primary School), with (100) of them. Males and (100) females. Their ages ranged from (9-12) years with an average age of (10.5) and a standard deviation of (3.1). The sample was selected by a simple random method.

##### **4.2. Instruments**

To achieve the research objectives, answer its questions, and test the validity of its

hypothesis, the researcher used the psychological hardiness scale for children, prepared by ([Al-Qudah, 2016](#)). First: The psychological hardiness scale for children prepared by ([Al-Qudah, 2016](#)) A) Description of the scale The scale in its initial form consisted of 23 items distributed over three dimensions: (control, commitment, challenge), and the scale's items were distributed on each dimension as follows: 1. Control dimension: It included paragraphs (1, 2, 3, 4, 5, 6). 2. After commitment: It included paragraphs (7, 8, 9, 10, 11, 12, 13, 14, 15, 16). 3. After the challenge: It included paragraphs (17, 18, 19, 20, 21, 22, 23). The answers to each item of the scale are graded on a quadrilateral scale, so that (4) marks are given for the answer “I strongly agree”, (3) marks are given for the answer “I agree”, two marks are given for the answer “I disagree”, and one mark is given for the answer “I strongly disagree”, and this is in the case of Positive paragraphs, but in the case of negative paragraphs, the grades are reversed so that (4) marks are given for the answer: I strongly disagree, (3) marks are given for the answer: I disagree, two marks are given for the answer: I agree, and one mark is given for the answer: I strongly agree. Positive paragraphs are represented by paragraphs (1, 4, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 23), the negative paragraphs are represented in paragraphs (2, 3, 7, 9, 18, 22).

#### **5. Psychometric properties of the psychological hardiness scale for children in its initial form**

##### **5.1. The validity of the scale**

###### **5.1.1. Appearance validity.**

The original preparer of the scale presented the scale in its initial form to (10) faculty members specializing in the field of psychology to determine the suitability of the vocabulary for each dimension, and the amendments proposed by the arbitrators were made, including deleting, modifying, and reformulating some of the vocabulary. The percentage of agreement between the judges on the validity of the questions was (80%), and the scale became

composed of (23) items distributed across the dimensions of the scale.

### 5.1.2. Internal construct validity.

After taking into account the arbitrators' observations and developing the scale in its final form, the scale's preparer applied the scale to a survey sample of (25) male and female children, and correlation coefficients were calculated between each item of the scale and the total score of the scale, and correlation coefficients between the dimensions of the scale. the psychological hardiness scale and the total score of the scale.

The values of the correlation coefficients between each item of the scale and the total score of the scale ranged between (0.40/0.76), and the correlation coefficients between the dimensions of the psychological hardiness scale and the total score of the scale ranged between (0.69/ 0.82) This is a good indicator of the validity of the study tool.

### 5.2. The stability of the scale

To calculate the stability of the scale, the scale's developer used the test and repeat method (Test\_Retest) with a time difference of two weeks. The scale was applied to (25) male and female children from the study population, and the value of the overall Pearson correlation coefficient was (0.67), and this value is considered Suitable for conducting the study. The reliability coefficient of the psychological hardiness scale was calculated using the Cronbach Alpha method and amounted to (0.80), and these values indicate that the scale has an appropriate degree of stability.

## 6. Psychometric properties of the psychological hardiness scale for children in the current study

### 6.1. The validity of the scale and the validity of the factor analysis

The researcher applied the scale to a survey sample of fifth and sixth grade students, numbering (n = 200), in order to conduct a factor analysis, where a matrix of intercorrelations between the scale items was prepared. Then it was subjected to factor analysis using the

principle Components method, and the "Kaiser" test was used to extract the extracted factors as an indicator to stop or continue extracting the factors that represent the basic structure, where the factors whose latent roots are greater than the correct one are retained. The "Gilford" test was used, which is considered to be the test for the essential saturation that is statistically significant for an item on the factor is ( $\pm 0.3$ ) or more. Then the axes were rotated using the Varimax Rotation method. In order to reach the best result according to which the factors can be interpreted, the following is a detailed presentation of the factors that resulted from the factor analysis for the psychological hardiness scale. Below is a presentation of the factors and items that each factor is saturated with, and the values of their saturations on the factor.

#### • The first factor: Control.

This factor obtained (9.478%) of the total factorial variance (after rotation), and the latent root of this factor reached (3.712), and it was essentially saturated with (6) items, as shown in [Table 1](#).

#### • The second factor: Commitment.

This factor obtained (15.227%) of the total factorial variance (after rotation), and the latent root of this factor reached (5.806), and it was essentially saturated with (9) items, as shown in [Table 2](#).

#### • The third factor: Challenge.

This factor obtained (12.728%) of the total factorial variance (after rotation), and the latent root of this factor reached (3.986), and it was essentially saturated with (7) items, as shown in [Table 3](#).

According to the results of the factor analysis, item (11) in the scale was deleted; This is because it is not saturated with any of the three factors. After factor analysis, the scale consisted of 22 items, distributed among its factors as follows: ∞ Items of the first dimension: from 1 to 6 ∞ Items of the second dimension: from 7 to 15 ∞ Items of the third dimension: from 16 to 22.



**Table 1.** Control operand saturation coefficients

Item Number	The saturation value
1	0,4251
2	0,317
3	0,602
4	0,382
5	0,575
6	0,354
Latent root	3,712
Interpreted contrast ratio	9,478%

**Table 3**

Item Number	The saturation value
17	0,564
18	0,449
19	0,472
20	0,535
21	0,261
22	0,340
23	0,421
Latent root	3.986
Interpreted contrast ratio	12.728%

**Table 2.** Saturation coefficients of commitment factor items

Item Number	The saturation value
7	0,499
8	0,583
9	0,472
10	0,382
11	0,261
12	0,501
13	0,493
14	0,549
15	0,535
16	0.381
Latent root	3.712
Interpreted contrast ratio	15.227%

**6.2. Reliability of the scale**

**A- Cronbach’s alpha coefficient method.**

The researcher used Cronbach’s Alpha Coefficient to calculate the scale’s stability in the case of Deleting the item score from the total score of the scale, so the value of the general alpha coefficient for the scale as a whole was (0.863). The reliability coefficient for each item was also calculated, so the values of the item stability coefficients were as shown in [Table 4](#).

**Table 4**

Item Number	Alpha coefficient values	Item Number	Alpha coefficient values	Item Number	Alpha coefficient values	Item Number	Alpha coefficient values
1	0.843	7	0.855	13	0.851	19	0.854
2	0.851	8	0.848	14	8	20	2
3	0.848	9	0.841	15	0.855	21	0.857
4	0,847	10	0.844	16	0.851	22	0.851
5	0,853	11	0.865	17	0.853	23	0.858
6	0.840	12	0.846	18	0.844	-	-

It is clear from the previous table that all the values of the reliability coefficients for the items are lower than the reliability coefficient for the scale as a whole, except for the item (11). Its value was higher than the value of the general alpha coefficient for the scale as a whole, so it was deleted. Which indicates that the rest of the scale items have an appropriate degree of reliability.

**B- The split-half method**

The split-half method was used to verify the reliability of the scale as a whole. The value of the correlation coefficient between the two halves of the scale was (0.575), and after

correcting the effect of splitting with the Guttman equation, the value of the reliability coefficient for the scale as a whole was (0.730). It is clear from the above that the scale An appropriate degree of stability.

**6.3. Internal consistency**

Internal consistency was calculated by calculating the correlation coefficients between the score of each item and the total score of the factor using the Statistical Package for the Social Sciences, known for short as Spss V.20. The values of the correlation coefficients were as shown in [Table 5](#).

**Table 5**

Item Number	the value of the correlation coefficient	Item Number	the value of the correlation coefficient	Item Number	the value of the correlation coefficient	Item Number	the value of the correlation coefficient
1	0.657**	7	0.685**	13	0.742**	19	0.653**
2	0.611**	8	0.740**	14	0.612**	20	0.719**
3	0.741**	9	0.639**	15	0.351*	21	0.713**
4	0.329*	10	0.643**	16	0.623**	22	0.732**
5	0.641**	11	0.136	17	0.351*	23	0.754**
6	0.701**	12	0.765**	18	0.657**	-	-

- (\*) Significant at the 0.05 level (\*\*) Significant at the 0.01 level

It is clear from the previous table that the values of the items’ correlation coefficients with the factor’s total score are statistically significant at the 0.01 level, while others are statistically significant at the 0.05 level, except for the item (11), which was the value of its correlation coefficient with the factor. The second was not statistically significant, so it was excluded. As for the rest of the scale items, they were consistent with the total score of the factor to which they belong. This indicates that the scale has an appropriate degree of consistency. From the previous validity and reliability procedures, the scale in its final form consists of (22) items distributed among its factors as follows: The first factor: control, represented by items (from 1 to 6), the second factor: commitment, represented

by items (from 7 to 15), and the third factor. The challenge is represented by the vocabulary items (from 16 to 22), and the scale in this final form is valid for application to the main study sample.

**7. Results**

Presenting, discussing, and interpreting the results of the research hypothesis

To test the validity of the hypothesis, which states that “there is a statistically significant difference between the average scores of males and females in the dimensions of the psychological hardiness scale and the total score.” The researcher used the “t” test for independent groups of equal number, and [Table 6](#) shows the results of this hypothesis:

**Table 6.** Means, standard deviations, “t” value, and its level of significance for males and females in the dimensions of the psychological hardiness scale and the total sample score

Sample Variable	Gender						Significance Level	“T” Value
	Females			Males				
	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation		
<b>control</b>	100	15.7	4.5	100	17.8	2.9	3.9	0.01
<b>commitment</b>	100	25.7	4.9	100	24.2	4.8	2.1	0.05
<b>challenge</b>	100	18.9	3.1	100	21.1	2.6	5.6	0.01
<b>Total score</b>	100	60.3	9.5	100	63.2	8	2.4	0.05

It is clear from the previous table that: There were statistically significant differences at the level of significance (0.01) for males in both the challenge and control dimensions and the overall score on the psychological hardiness scale. The differences were for females in the post-commitment dimension.

## 8. Conclusion

Thus, the results of the current research agree with the study (Abdel Halim et al., 2019), which indicated that there are statistically significant differences between the average scores of male and female street children on the psychological hardiness scale, and the differences were in the direction of males, and also agreed with the results of the study (Mustafa, 2021), which indicated that there were statistically significant differences between the average scores of male and female children in the sample in both the challenge and control dimension of psychological hardiness in the direction of males, and the differences were in the direction of females in the commitment dimension. The result of this hypothesis in the current research differed from the results of the study (Mustafa, 2021), which indicated that there were differences between the average scores of males and females in the total degree of psychological hardiness, and they were in the direction of females. The result of this hypothesis, which showed that males have higher psychological hardiness than females, especially in the two dimensions (control and challenge), can be interpreted as a natural result consistent with the

upbringing methods that prevail in our society that support and enhance the control component of male children, so parents encourage their male children to control what surrounds them. Of events and variables so that they can control them, the family in our Arab societies also reinforces the component of challenge in its male children, encouraging them to confront stressful events and turn them into challenges that they can overcome. (Mukhaimer, 1996) indicated that by looking at the upbringing methods used with males and females, we will find strengthening Parents appreciate the independence of the male child, so they impose fewer restrictions on him and encourage him to behave independently, make decisions on his own, and bear responsibility for his decisions. These methods make the male child more independent, more capable of making decisions, and thus more psychologically solid. While the family imposes many restrictions on the girl, making her less able to make decisions and more dependent; She always feels that she needs the support of others in making her decisions, and thus she is less psychologically tough. (Mukhaimer, 1996, p. 294)

## 9. Recommendations

- It is necessary to design counseling programs to develop psychological hardiness in children.
- establish specialized psychological counseling centers for children, and prepare highly qualified psychological counselors to

prevent and treat the emotional disorders that appear in them.

- Preparing scales to measure psychological hardiness in children

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