



**The Contribution of Water Sports Activities (Swimming)
in Achieving Psychological Hardiness Among Adolescents
(15-17)
A Field Study Conducted on Some Swimmers from Clubs
in the Wilaya of Tissemsilt.**

Nour Eddine CHETOU,

E-mail: n.chetoui22@univ-chlef.dz

Kenza DARREDOUNE,

University of Chlef,

Laboratory: Creativity and Motor Performance.

E-mail: k.darredoune@univ-chlef.dz

Abstract

The current quantitative study aimed to determine the extent to which water sports activities (swimming) contribute to achieving psychological toughness among adolescents. We relied on the descriptive analytical approach. A measure of psychological toughness was designed and distributed to a random sample of various Tissemsilt associations and clubs practicing swimming activities, as the number reached 38 swimmers from the Esperance Swimming Association, the Blue Star Swimming Association, and the Al-Raed Swimming Association. To achieve the objectives of the study, the researchers used a measure of psychological toughness adapted to the environment of the sample to be studied. The data was analyzed using the program (SPSS) and percentages reinforced with the goodness-of-fit factor (χ^2). The results indicated a high level of psychological toughness among children practicing swimming, as they are able to control and make the right decisions and enjoy balance and psychological

stability. The researchers recommend the necessity of generalizing the practice of swimming activity among children and that the state pay attention to providing swimming pools and equipment for swimming activity in remote and isolated areas in order to develop children in all aspects.

Keywords: water sports activities, swimming, psychological resilience, adolescents (15–17)

La contribution des activités nautiques (natation) au développement de la résistance psychologique chez les adolescents (15-17 ans)

Étude de terrain menée auprès de nageurs issus de clubs de la wilaya de Tissemsilt.

Résumé

La présente étude quantitative visait à déterminer dans quelle mesure les activités aquatiques (natation) contribuent au développement de la résistance psychologique chez les adolescents. Nous nous sommes appuyés sur une approche analytique descriptive. Un outil de mesure de la résistance psychologique a été conçu et distribué à un échantillon aléatoire de diverses associations et clubs de Tissemsilt pratiquant des activités de natation, soit 38 nageurs de l'Association de natation Espérance, de l'Association de natation Blue Star et de l'Association de natation Al-Raed. Pour atteindre les objectifs de l'étude, les chercheurs ont utilisé une mesure de la résistance psychologique adaptée à l'environnement de l'échantillon étudié. Les données ont été analysées à l'aide du programme (SPSS) et les pourcentages ont été renforcés par le facteur d'adéquation (χ^2). Les résultats ont indiqué un niveau élevé de résistance psychologique chez les enfants pratiquant la natation, car ils sont capables de se contrôler, de prendre les bonnes décisions et de bénéficier d'un équilibre et d'une stabilité psychologique. Les chercheurs recommandent de généraliser la pratique de la natation chez les enfants et invitent l'État à veiller à fournir des piscines et des équipements pour la natation dans les zones reculées et isolées afin de favoriser le développement des enfants dans tous les domaines.

Mots-clés : sports nautiques, natation, résilience psychologique, adolescents (15-17 ans)



Introduction

The difficult living conditions that humans go through are among the most powerful human problems, and being exposed to stress is an inevitable matter. The reality of life is fraught with ambiguity, obstacles, difficulties, and forms of failure, as we cannot escape the requirements of change in personal growth at any stage of our lives.

The ability to face life's pressures requires an objective and sound view of life and its daily problems, adapting and coping with the present with positive flexibility and clear insight, in order to excel in facing life's difficult events, bear social responsibility, and take responsibility for personal behavior and control of environmental conditions, with the ability to innovate and renew. Although some people are exposed to daily stressful events, they maintain their psychological health, physical performance, and safety. (Hamed Abdel Salam Zahran, 2005, p. 13)

Psychological hardiness is derived from existential philosophy, as its main goal is to create a meaningful personality through making correct and sound decisions and the continuous pursuit of exploiting all available possibilities. This approach describes individuals who remain in good health despite dealing with daily life stresses at a high level and who exhibit a distinct set of good behaviors and constructive, positive beliefs that make them unique and different from others who fall prey to psychological and physical illnesses. The concept of a hardy personality began to emerge as a set of related attitudes represented in commitment, control, and challenge, which together provide the existential courage necessary to

transform continuous life pressures from potential disasters into opportunities for growth, renewal, and innovation. In this way, continuity in building and perceiving the meaning of experience replaces clinging to old, preconceived ways of understanding life. (Samira Mohamed Shend, Heba Sami Mahmoud Ibrahim, & Amal Abdullah Said Al-Saadi, 2015)

Sports activities are considered one of the branches of general education, deriving their theories from various sciences, and practiced through different individual and collective activities that are selected, directed, and organized to prepare individuals comprehensively in accordance with the needs of society. They have become the focus of global interest, as almost no society is devoid of their forms. They constitute, through their rules and systems, a fundamental, important, and broad field of general education in building society, as they express organized behavior with an educational, instructive, and cultural nature. Within their interactive framework among individuals and groups, they contribute to preparing the individual physically, psychologically, intellectually, and emotionally throughout the different stages of life, enabling him socially to achieve good social relations and moral qualities such as order, discipline, and respect. (Ministry of Education, 2005, p. 48)

To this extent, water sports activity contributes to achieving psychological balance and social adaptation among children, especially in terms of social relations, communication, and interaction among them. It also serves as a field to refine interests and desires, develop skills, create an atmosphere of fair competition, and achieve the noble goal of satisfaction by affirming the spiritual, mental, and physical bonds of the child. Thus, this field represents an opportunity for self-affirmation.



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

Based on these premises, great importance arises in our study of the contribution of water sports activities (swimming) in achieving psychological hardiness among adolescents. The Wilaya of Tissemsilt was chosen to conduct this study. The main question is as follows:

General Question:

Do water sports activities (swimming) contribute to achieving psychological hardiness among adolescents?

Sub-questions:

1. Do water sports activities (swimming) contribute to achieving the trait of commitment and discipline among adolescents?
2. Do water sports activities (swimming) contribute to achieving good control among adolescents?
3. Do water sports activities (swimming) contribute to raising the level of challenge among adolescents?

General Hypothesis

Water sports activities (swimming) contribute to achieving psychological hardiness among adolescents.

Partial Hypotheses:

1. Water sports activities (swimming) contribute to achieving the trait of commitment and discipline among adolescents.
2. Water sports activities (swimming) contribute to achieving good control among adolescents.
3. Water sports activities (swimming) contribute to raising the level of challenge among adolescents.

Research Objectives

Through this research, we seek to achieve a set of goals and objectives in the field of psychological hardiness and its impact on adolescents, as follows:

- Highlight the importance of swimming practice in strengthening psychological hardiness among adolescents.
- Emphasize the great importance of the water sports activity (swimming) in forming the adolescent's personality in all aspects.
- The contribution of water sports activities (swimming) to balancing the adolescent's personality and achieving commitment and discipline.
- The contribution of water sports activities (swimming) in enabling the adolescent to control his desires and channel his energy into positive work.
- Highlight the role of recreational (water) sports activities in eliminating psychological and physical exhaustion.
- The contribution of water sports activities (swimming) in raising the level of challenge among adolescents to overcome obstacles and difficulties.
- Highlight the role of practicing water sports activities in maintaining physical health among adolescents.
- Shed light on the preventive health role of practicing water sports activities (swimming).

1. Definition of Research Terms and Concepts

Water Sports Activities (Swimming):

Water sports activities (swimming) are among the important activities in human life, as happiness, joy, and cheerfulness are clear characteristics on individuals' faces



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

when they practice swimming. This is evident when individuals practice swimming or other water sports activities, whether in pools or on beaches. Water sports activities (swimming) give the individual playful movement and the opportunity to feel happiness and joy as a result of the diversity of activity forms in water, increasing relaxation and recreation. (Nabil, Mohamed, & Hani, 2022, p. 167)

Definition of Swimming (Terminologically):

It is one of the basic types of water sports practiced in water by moving the arms, legs, and trunk to reach a specific point. (Osama Kamel Rateb, 1998, p. 22)

Operational Definition of Swimming:

It is one of the branches of sports activities practiced in the aquatic environment, where the swimmer uses the trunk with the lower and upper limbs for movement and transition from one place to another.

Definition of Psychological Hardiness:

Linguistic Definition:

Hardness (ṣalābah) means firmness, toughness, and strength. The hardness of wood, for example, means its rigidity and strength; hardness also denotes endurance and resistance. It is said: "He showed patience and hardness," meaning steadfastness and determination not to waver from his decision or stance. (Antoine Naameh et al., 2000, p. 845)

Terminological Definition:

Psychological hardiness is defined as the human ability to face various obstacles and pressures by using the available

societal resources, such as social support. (Tanheed Adel Fadel Al-Bayraqdar, 2011, p. 32)

Operational Definition:

It is the individual's ability to overcome crises and difficulties by turning weaknesses into strengths.

Definition of Adolescence:

Linguistic Definition:

The word "muraahaqa" (adolescence) is derived from the verb "rahq," meaning "to approach." It is said, "a boy approaching puberty," i.e., nearing it. (Ibn Manzur, 2003)

Terminological Definition:

It is a transitional stage from childhood to youth, characterized by complexity, transformation, and growth, accompanied by clear physical and psychological changes that make the child a full member of society. (Mikhail Ibrahim Saad, 1991, p. 220)

Operational Definition:

It is a human age stage in which the individual transitions from childhood to youth, accompanied by several physiological and psychological changes.

2. Previous Studies

Study 01:

(Raed Faeq Qasim Hussein, 2021) This study clarifies the relationship between psychological hardiness and the level of achievement motivation among physically disabled athletes in the West Bank.

The study examined the relationship between psychological hardiness and achievement motivation among



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

physically disabled athletes in the West Bank. The sample size was set at (86) male and female players involved in the Palestinian Paralympic Committee in 2012–2013. The researchers selected the sample intentionally and used the descriptive method. The results indicated that the level of psychological hardiness among those practicing sports activity was high, and that physical activity plays a major role in achieving psychological hardiness.

Study 02:

(Wali Abdelnour, 2002) *The Level of Sports Competition Anxiety and Its Relationship with the Level of Psychological Hardiness among Senior Volleyball Players.*

This study examined the level of competition anxiety and its relationship with the level of psychological hardiness among senior volleyball players. The study sample consisted of players from the second national division (seniors). The researcher selected the sample randomly and used the descriptive correlational method. To enrich the study, the researcher used the Competition Anxiety Scale and the Psychological Hardiness Scale. The researcher concluded that daily sports activity contributes to increasing psychological hardiness and thus reducing competition anxiety.

Study 03:

(Ben Dargi Abdel Rafiq & Mihoubi Issa, 2023) *The Role and Importance of Practicing Sports Activities in Enhancing and Strengthening the Mental Health of Middle School Students.* This study examined the role and importance of practicing various sports activities in enhancing and strengthening the

mental health of middle school students. The study sample consisted of 60 male and female students from some middle schools in the Wilaya of Batna. The researcher selected the sample randomly and used the descriptive method. To enrich the study, the researcher used the Mental Health Scale. The results showed that practicing sports activities plays a major role in enhancing mental health and building a strong personality.

3. The Applied Aspect

The Approach Followed:

The scientific method is the basic tool and ideal way followed by researchers in their study of a particular problem that expresses the value of the research topic. This is intended to discover phenomena and facts and reach accurate results. The scientific method consists of rules and principles established to discover accurate, realistic, and organized scientific facts and information. (Bouhouche & Mahmoud, 1995, p. 29)

The researchers relied on the descriptive analytical method, considering it the most appropriate approach in human research and studies and their phenomena. The author (Sami Mohamed, 2000, p. 370) defines the descriptive analytical method as the most common one, as it describes phenomena accurately and focuses on analyzing, evaluating, and interpreting the relationships that exist in facts.

(Talaat Hammam, 1987, p. 73) states that the sample is a small portion of individuals taken from the general population to be studied. It is selected in a specific way depending on the type of study, and then the results are verified and generalized to the whole study population. The research sample was chosen randomly, and here a group of



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

adolescents practicing swimming activity from various associations and clubs in Tissemsilt were selected. Their number reached 38 swimmers from the Esperance Swimming Association, the Blue Star Swimming Association, and the Al-Raed Swimming Association in Tissemsilt.

Research Fields:

- **Spatial field of the study:** The study was conducted in various swimming associations and clubs in Tissemsilt.
- **Temporal field of the study:** The field study started in February 2023 and extended to mid-June 2023.

Exploratory Study:

The exploratory study has great importance, as it is considered the basic foundation for achieving the desired objectives in the research. It is an important stage, as it contributes to enriching scientific research. The exploratory study helps the researcher test all the necessary means in his research to ensure their effectiveness, validity, accuracy, and clarity (Mukhtar, 1995, p. 47).

In our research, we conducted the exploratory study, which has great and significant importance, as it serves as the fertile ground on which researchers build their initial perceptions about their study and its field of application. We contacted and approached some associations and clubs in Tissemsilt practicing swimming activity, and the psychological hardiness scale was distributed to a sample of 38 swimmers from the Esperance Swimming Association,

the Blue Star Swimming Association, and the Al-Raed Swimming Association, selected randomly.

Psychological Hardiness Scale:

The scale was designed by Kobasa and translated by (Imad Mukhaymer, 2002).

Table No. 01 shows the dimensions of the scale:

Dimensions	Number of Statements per Dimension
Commitment	16
Control	16
Challenge	16

Scientific Basis of the Tool:

The psychometric characteristics of the study tool were represented as follows:

Validity:

Content validity of the scale was used by distributing and presenting the preliminary version of the scale to 05 professors from the Institute of Science and Techniques of Physical and Sports Activities, specialization in Educational Physical Activity, from Ahmed Ben Yahia El-Wancharissi University, Tissemsilt, to express their opinions on the content of the scale and its suitability for the study. Most of the professors' responses indicated the need to change some items, and thus the scale became adapted in its final form and ready for application.



Table No. 02 shows the reliability of the scale.

Calculation of Cronbach’s Alpha Reliability Coefficient (SPSS):

Study Sample	Sample Size	Number of Items	Cronbach’s Alpha
	12	09	0.86

Source: SPSS statistical program outputs, version 26.

Statistical Tools:

The statistical methods used in this research were as follows:

- **Percentage:**

$$\text{Percentage} = \frac{\text{Number of Responses}}{\text{Total Number}} \times 100$$

$$\text{Percentage} = \frac{\text{Total Number}}{\text{Number of Responses}} \times 100$$

- **Chi-square Test (χ^2):**

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where:

O = Observed frequencies

E = Expected frequencies

4. Presentation, Analysis, and Discussion of the First Hypothesis:

Water sports activities (swimming) contribute to achieving the trait of commitment and discipline among adolescents.

First Dimension: Commitment

Question 01:

Whatever difficulties I face, I can achieve my goals.

Purpose:

The contribution of swimming in helping adolescents overcome difficulties and achieve their goals.

Statements	00 No	01 Little	02 Average	03 Much	Total
Frequency	02	01	14	21	38
Percentage	05.26%	02.63%	36.84%	55.27%	100%

χ^2 calculated = 29.5

χ^2 tabulated = 7.82

Degrees of freedom = 3

Significance level = 0.05

Statistical significance = Significant

4.1. Analysis, Interpretation, and Discussion of Results:

From observing Table No. 01, which aims to show the contribution of swimming in helping adolescents overcome difficulties and achieve their goals, and from analyzing the scale directed to swimmers, we obtained the results shown in the table. We notice that 55.27% indicate that most swimmers overcome the difficulties they face and achieve their goals easily, while 5.26% of swimmers do not overcome the difficulties, they face nor achieve their goals easily. Since the calculated χ^2 value (29.5) is greater than the tabulated χ^2 value (7.82) at the 0.05 significance level and 3 degrees of freedom, there are statistically significant differences, meaning that most swimmers overcome the difficulties they face and achieve their goals easily.

Question 02:



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

The life in which we are exposed to pressures and work to face them is the life we must live.

Purpose:

The contribution of swimming in overcoming life pressures and turning them to one’s advantage.

Statements	00 No	01 Little	02 Average	03 Much	Total
Frequency	01	03	14	20	38
Percentage	02.63%	7.90%	36.84%	52.63%	100%

χ^2 calculated = 25.7

χ^2 tabulated = 7.82

Degrees of freedom = 3

Significance level = 0.05

Statistical significance = Significant

4.2. Analysis, Interpretation, and Discussion of Results:

From observing Table No. 02, which aims to show the contribution of swimming in overcoming life pressures and turning them to one’s advantage, and from analyzing the scale directed to swimmers, we obtained the results shown in the table. We notice that 52.63% indicate that most swimmers overcome life pressures and turn them to their advantage positively, while 2.63% of swimmers do not overcome life pressures positively. Since the calculated χ^2 value (25.7) is greater than the tabulated χ^2 value (7.82) at the 0.05 significance level and 3 degrees of freedom, there are statistically significant differences, meaning that most swimmers overcome life pressures and turn them to their advantage positively.

Question 03:

I feel responsible toward others and take the initiative to help them.

Purpose:

The contribution of swimming in helping adolescents assist others and become active members of society.

Statements	00 No	01 Little	02 Average	03 Much	Total
Frequency	02	07	08	21	38
Percentage	05.26%	18.42%	21.06%	55.26%	100%

χ^2 calculated = 20.7

χ^2 tabulated = 7.82

Degrees of freedom = 3

Significance level = 0.05

Statistical significance = Significant

4.3. Analysis, Interpretation, and Discussion of Results:

From observing Table No. 03, which aims to show the contribution of swimming in helping adolescents assist others and become active members of society, and from analyzing the scale directed to swimmers, we obtained the results shown in the table. We notice that 55.26% indicate that most swimmers have a positive role in society and work to help others, while 5.26% of swimmers have a neutral role and do not help others. Since the calculated χ^2 value (20.7) is greater than the tabulated χ^2 value (7.82) at the 0.05 significance level and 3 degrees of freedom, there are statistically significant differences, meaning that most swimmers have a positive role in society and work to help others.

5. Presentation, Analysis, and Discussion of the Second Hypothesis:



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

Water sports activities (swimming) contribute to good control among adolescents.

Second Dimension: Control

Question 04:

I make my own decisions and am not dictated by an external source.

Purpose:

The contribution of swimming in increasing self-confidence among adolescents and reliance on themselves in making the right decisions.

Statements	00 No	01 Little	02 Average	03 Much	Total
Frequency	00	03	10	25	38
Percentage	00%	7.90%	26.30%	65.80%	100%

χ^2 calculated = 39.2

χ^2 tabulated = 7.82

Degrees of freedom = 3

Significance level = 0.05

Statistical significance = Significant

5.1. Analysis, Interpretation, and Discussion of Results:

From observing Table No. 04, which aims to show the contribution of swimming in increasing self-confidence among adolescents and reliance on themselves in making the right decisions, and from analyzing the scale directed to swimmers, we obtained the results shown in the table. We notice that 65.80% indicate that most swimmers have self-confidence and rely on themselves in making correct decisions. Since the calculated χ^2 value (39.2) is greater than the tabulated χ^2 value (7.82) at the 0.05 significance level and

3 degrees of freedom, there are statistically significant differences, meaning that most swimmers have self-confidence and rely on themselves in making correct decisions.

Question 05:

When I set my future plans, I am sure of my ability to implement them.

Purpose:

The contribution of swimming in good planning and the ability to execute among adolescents.

Statements	00 No	01 Little	02 Average	03 Much	Total
Frequency	01	02	13	22	38
Percentage	02.63%	05.26%	34.22%	57.89%	100%

χ^2 calculated = 31.2

χ^2 tabulated = 7.82

Degrees of freedom = 3

Significance level = 0.05

Statistical significance = Significant

5.2. Analysis, Interpretation, and Discussion of Results:

From observing Table No. 05, which aims to show the contribution of swimming in good planning and the ability to execute among adolescents, and from analyzing the scale directed to swimmers, we obtained the results shown in the table. We notice that 57.89% indicate that most swimmers are creative in good planning and have the ability to execute, while 2.63% of swimmers lack creativity in planning and execution. Since the calculated χ^2 value (31.2) is greater than the tabulated χ^2 value (7.82) at the 0.05 significance level and



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

3 degrees of freedom, there are statistically significant differences, meaning that most swimmers are creative in planning and have the ability to execute.

Question 06:

My success in life matters depends on my effort and not on luck or chance.

Purpose:

The contribution of swimming in self-reliance in managing life matters.

Statements	00 No	01 Little	02 Average	03 Much	Total
Frequency	02	02	13	21	38
Percentage	05.26%	05.26%	34.22%	55.26%	100%

χ^2 calculated = 27.05

χ^2 tabulated = 7.82

Degrees of freedom = 3

Significance level = 0.05

Statistical significance = Significant

5.3. Analysis, Interpretation, and Discussion of Results:

From observing Table No. 06, which aims to show the contribution of swimming in self-reliance in managing life matters, and from analyzing the scale directed to swimmers, we obtained the results shown in the table. We notice that 55.26% indicate that most swimmers rely on themselves in managing their life matters, while 5.26% of swimmers do not rely on themselves but seek help from others. Since the calculated χ^2 value (27.05) is greater than the tabulated χ^2 value (7.82) at the 0.05 significance level and 3 degrees of

freedom, there are statistically significant differences, meaning that most swimmers rely on themselves in managing their life matters.

5.4. Presentation, Analysis, and Discussion of the Third Hypothesis:

Water sports activities (swimming) contribute to raising the level of challenge among adolescents.

Third Dimension: Challenge

- **Question 07:** I believe that the pleasure of life lies in the individual's ability to face its challenges.
- **Purpose:** The contribution of swimming to the adolescent's enjoyment and facing the challenges of difficult life.

Statements	00	01	02	03	Total
No	Little	Moderate	Much		
Frequency	02	04	14	18	38
Percentage %	05.26%	10.52%	36.84%	47.38%	100%

χ^2 calculated = 18.8

χ^2 tabulated = 7.82

Degree of freedom = 03

Significance level = 0.05

Statistical significance = Significant

- **Analysis, interpretation, and discussion of results:** From observing Table No. 07, which aims to identify the contribution of swimming to the adolescent's enjoyment and facing the challenges of difficult life, and from analyzing the responses of the swimmers, we obtained the results shown in the table, where we



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

notice that 47.38% indicate that most swimmers enjoy their lives and work to face life's difficult challenges, while 05.26% of swimmers do not enjoy their lives and do not work to face life's difficult challenges. We obtained a calculated χ^2 value of 18.8, which is greater than the tabulated χ^2 value of 7.82 at a significance level of 0.05 and a degree of freedom of 03. Therefore, there are statistically significant differences, since the calculated χ^2 value is greater than the tabulated one, indicating that most swimmers enjoy their lives and work to face life's difficult challenges.

- **Question 08:** I tackle problems to solve them and do not wait for them to occur.
- **Purpose:** The contribution of swimming to overcoming problems before they occur.

Statements	00	01	02	03	Total
No	Little	Moderate	Much		
Frequency	01	01	11	25	38
Percentage %	02.63%	02.63%	28.94%	65.80%	100%

χ^2 calculated = 40.7

χ^2 tabulated = 7.82

Degree of freedom = 03

Significance level = 0.05

Statistical significance = Significant

- **Analysis, interpretation, and discussion of results:** From observing Table No. 08, which aims to identify the contribution of swimming to overcoming problems before they occur, and from analyzing the responses of the swimmers, we obtained the results

shown in the table, where we notice that 65.80% indicate that most swimmers work on solving problems before they occur, while 02.63% of swimmers do not work on solving problems before they occur. We obtained a calculated χ^2 value of 40.7, which is greater than the tabulated χ^2 value of 7.82 at a significance level of 0.05 and a degree of freedom of 03. Therefore, there are statistically significant differences, since the calculated χ^2 value is greater than the tabulated one, indicating that most swimmers work on solving problems before they occur.

- **Question 09:** I believe that the life that should be lived is the one that involves challenges and working to face them.
- **Purpose:** The contribution of swimming to perseverance and challenge in facing work problems.

Statements	00	01	02	03	Total
No	Little	Moderate	Much		
Frequency	02	04	13	19	38
Percentage %	05.26%	10.52%	34.22%	50%	100%

χ^2 calculated = 19.8

χ^2 tabulated = 7.82

Degree of freedom = 03

Significance level = 0.05

Statistical significance = Significant

- **Analysis, interpretation, and discussion of results:** From observing Table No. 09, which aims to identify the contribution of swimming to perseverance and challenge in facing work problems, and from analyzing the responses of the swimmers, we



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

obtained the results shown in the table, where we notice that 50% indicate that most swimmers work to face work problems with perseverance and challenge, while 05.26% of swimmers do not work to face work problems with perseverance and challenge. We obtained a calculated χ^2 value of 19.8, which is greater than the tabulated χ^2 value of 7.82 at a significance level of 0.05 and a degree of freedom of 03. Therefore, there are statistically significant differences, since the calculated χ^2 value is greater than the tabulated one, indicating that most swimmers work to face work problems with perseverance and challenge.

6. Discussion and Interpretation of Results:

- **Discussion and interpretation of the first hypothesis:**

Through what was presented in the first hypothesis, which indicates the contribution of aquatic sports activities (swimming) in achieving the trait of commitment and discipline among adolescents, and through paragraphs (01, 02, 03) directed to swimmers and the analysis and discussion of results, it was found that the majority of swimmers emphasize the importance of practicing swimming in achieving moral values, discipline, and commitment, through self-discipline, respect for time, and adherence to rules. Hence, it can be said that the hypothesis has been confirmed. This was also confirmed by the study of *Ben Dargi Abdel Rafiq and Mihoubi Issa (2023)*, which addressed the role and importance of practicing various sports activities in enhancing and strengthening mental health among middle school students. The results showed that

practicing sports activities plays a major role in enhancing mental health, building a strong personality, and achieving the traits of discipline and commitment.

- **Discussion and interpretation of the second hypothesis:**

Through what was presented in the second hypothesis, which indicates the contribution of aquatic sports activities (swimming) in the process of good control among adolescents, and through paragraphs (04, 05, 06) directed to swimmers and the analysis and discussion of results, it was found that the majority of swimmers emphasize the importance of swimming's contribution to the process of good control among adolescents and achieving psychological stability and balance, through individuals becoming accustomed to making sound decisions. Hence, it can be said that the hypothesis has been confirmed. This was also confirmed by the study of *Raed Faeq Qassem Hussein (2021)*, which examined the relationship between psychological hardiness, achievement motivation, and control among physically disabled athletes in the West Bank. The results showed that the level of psychological hardiness among those practicing sports activities was high, and therefore, practicing physical activity plays a major role in achieving psychological hardiness and good control.

- **Discussion and interpretation of the third hypothesis:**

Through what was presented in the third hypothesis, which indicates the contribution of aquatic sports activities (swimming) in raising the level of challenge among



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

adolescents, and through paragraphs (07, 08, 09) directed to swimmers and the analysis and discussion of results, it was found that the majority of swimmers emphasize the contribution of swimming in raising the level of challenge among adolescents, through their habituation to working with determination and achieving results. Hence, it can be said that the hypothesis has been confirmed. This was also confirmed by the study of *Wali Abdelnour (2002)*, which examined the level of anxiety in sports competition and its relationship to the level of psychological hardiness among volleyball players (seniors). The results showed that daily sports practice contributes to raising psychological hardiness and the level of challenge among players, thus reducing competition anxiety.

1. Aquatic sports activities (swimming) contribute to achieving the trait of commitment and discipline among adolescents.
2. Aquatic sports activities (swimming) contribute to the process of good control among adolescents.
3. Aquatic sports activities (swimming) contribute to raising the level of challenge among adolescents.

Conclusion:

- Aquatic sports activities (swimming) significantly contribute to achieving the trait of commitment and discipline among adolescents.

- Swimming activities greatly contribute to self-discipline, instilling moral values, and promoting good behaviors in society.
- Swimming greatly contributes to good control among adolescents in managing life affairs, making sound decisions, and self-reliance.
- Practicing swimming leads to positive development in patterns of valuable behavior in adolescents' social lives.
- Aquatic sports activities (swimming) contribute to raising the level of challenge among adolescents, making them work to prove themselves and demonstrate their abilities to earn a high place in society.
- Aquatic sports activities (swimming) contribute to raising the functional efficiency of the body, thus enjoying high physical fitness and a body free of diseases.
- Practicing swimming promotes direct interaction between participants and the formation of friendships and healthy social relationships.
- Practicing swimming helps reduce psychological and nervous tension and daily routine among adolescents.
- Practicing swimming contributes to raising the level of psychological hardiness, such as confidence, stability, psychological balance, the ability to commit, challenge, and control emotions.

Proposals and Recommendations:

We present some recommendations:

- Spreading the culture of aquatic sports in society and raising awareness of their importance.



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

- Providing swimming pools, especially in remote areas, to enable the practice of aquatic sports activities.
- Authorities and the state should support clubs and associations active in the field of aquatic sports by providing various means and equipment specific to aquatic sports.
- Organizing swimming and diving courses and competitions and involving the largest possible number of participants to spread aquatic culture and social values and principles.
- Organizing awareness seminars to highlight the importance of practicing swimming on the various functional systems of the body, such as the respiratory system, etc.
- Raising public awareness in society about the value and concept of aquatic sports and the importance of their practice for physical fitness and mental health.

Sources and References

1. Ibn Manzur. (2003). *Lisan al-Arab*, entry "Rahaq," letter R. Beirut, Lebanon: Dar Al-Sader.
2. Osama Kamel Rateb. (1998). *Teaching Swimming* (2nd ed.). Cairo, Egypt: Dar Al-Fikr Al-Arabi.
3. Antoine Naameh et al. (2000). *Al-Munjid in Contemporary Arabic Language*. Beirut: Dar Al-Sharq.
4. Ben Dargi, Abdel Rafiq, & Mihoubi, Issa. (January 1, 2023). *The Role of Sports Activities in Enhancing the Mental*

- Health of Middle School Students. Al-Auras Journal of Sports Sciences, 1(1), 95–105.*
5. Bouras, Mounir. (April 21, 2023). *The Descriptive Method in Human and Social Studies – Legal Sciences as a Model. Al-Nibras Journal for Legal Studies, 6(4), 190.*
 6. Tanheed, Adel Fadel Al-Bayraqdar. (May 23, 2011). *Psychological Stress and Its Relationship to Psychological Hardiness among Students of the College of Education. Journal of Basic Education Research, 11(1), 32.*
 7. Hamed Abdel Salam Zahran. (2005). *Mental Health and Psychotherapy* (4th ed.). Cairo, Egypt: Alam Al-Kutub.
 8. Khalil, Nida Nabil, Al-Najjar, Mahmoud Mohamed, & Ahmed Mohamed Abdel Ghani Hani. (December 2022). *Recreational Water Activities and Their Impact on the Phenomenon of Aging Diseases. Journal of Physical Education and Sports Sciences, 30(12), 167.*
 9. Raed Faeq Qassem Hussein. (December 31, 2021). *The Relationship Between Psychological Hardiness and Achievement Motivation Among Athletes with Physical Disabilities in the West Bank. Integration Journal of Social and Sports Sciences Research, 5(2), 305–325.*
 10. Sami, Mohamed. (2000). *Research Methodology in Education and Psychology.* Dar Al-Ibrah for Publishing, Distribution, and Printing.
 11. Samira Mohamed Shand, Heba Sami Mahmoud Ibrahim, & Amal Abdullah Said Al-Saadi. (December 2015). *The Psychometric Properties of the Psychological Hardiness Scale. Journal of Psychological Counseling, (44), 446–462.*
 12. Talaat Hammam. (1987). *Dictionary of Psychological and Social Sciences* (2nd ed.). Amman, Jordan: Dar Al-Furqan for Publishing and Distribution.



Soumission : 02/03/2025 Acceptation : 02/07/2025 Publication : 15/08/2025

13. Imad Mukhaimer. (2002). *Psychological Hardiness Scale*. Cairo: Anglo-Egyptian Library.
14. Ammar Bouhouche & Mohamed Mahmoud. (1995). *Practical Research Methodology and Research Methods*. Algiers, Algeria: University Publications Office.
15. Mahfouz Joudah. (2012). *Scientific Research Methods in the Field of Administrative Sciences*. Jordan: Zahran Publishing and Distribution.
16. Mohi Eddine Mukhtar. (1995). *Some Research Techniques and Report Writing in Methodology*. Algiers: University Publications Office.
17. Mikhail Ibrahim Saad. (1991). *Problems of Childhood and Adolescence*. Beirut, Lebanon: Dar Al-Afaq Al-Jadida.
18. Wali Abdelnour. (August 10, 2002). *Competition Anxiety and Its Relationship to Psychological Hardiness Among Senior Volleyball Players*. *Sports System Journal*, 9(3), 503-517.
19. Ministry of Education. (2005). *Physical and Sports Education Curriculum for First-Year Secondary*. Algeria.