



## RESEARCH ARTICLE

# Athletic Rehabilitation Specialist's Role in Raising the Level of the Players of Some Sports Clubs in the West Bank

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## Abstract

This study aims to recognize the athletic rehabilitation specialist's role in raising the level of players of some sports clubs in the West Bank from the viewpoint of athletes, the study depends on the analytical descriptive approach, and the sample of the study contained 74 male and female players. The study relied on the questionnaire as a tool for data collection, and the validity and stability of performance were confirmed. The results of the study indicated the importance of the role of sports rehabilitation specialists in raising the level of players of some sports clubs in the West Bank. It also found no significant differences in the view of different sports players about the importance of an athletic rehabilitation specialist due to the type and age variable of the athlete. While there are significant differences due to the type of sport variable in favor of team sports. The study recommended the need to have an athletic rehabilitation specialist among the training staff in sports clubs in the West Bank.

## Keywords

Athletic, Rehabilitation, Club, West Bank, Sport

## INTRODUCTION

The scientific progress of our time is present, including all aspects of the daily life of man, including the sports side, in particular sports in its current form, which has led to its interaction with Natural and Human Sciences with a view to preparing the individual a comprehensive, balanced preparation for reaching the highest levels of sports activity. Since the player is the effective component of the positive results we have always found, efforts to enhance the level of sports performance before and during the competition for the results he has honored, elected, and qualified to enter the stardom world. This is more opportunities for sports injuries that you have to stop performance for a certain period of time to take into proper treatment, after that period has passed, the player returns with all the physical

capabilities that qualify him to perform the duties required of him. Sports injuries are a disaster in the field of sports practice in general. Each area or part of the body is subject to diverse and dangerous injuries, and the level of the player is affected by the gravity of the injury and the duration of the treatment and rehabilitation of infected members. (Fadli and Mohammad, 2017)

Athletic rehabilitation is a science that deals with sports injuries and aims to help the player restore the job of the injured part and return to sports that he has been practicing and preventing further injuries. This science includes assisting and treating the infected on the field and transforming this patient into specialized medical staff and cooperating as a unit to get the patient to safety. Athletic rehabilitation and sports medicine have evolved so that the qualified therapist can be predicted before it occurs. The sports therapist has

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sufficient science in Medical Sciences and Mechanical movement of the body.

Anatomy, Physiology, First Aid, and all these Sciences are based on scientific or international studies. The sports therapist has enough information about sports until he has a full foundation through which he can handle the injured athlete. Also, swelling, pain, and limited movement are the three complaints after any sporting injury, adding that the athlete aspires to return to what he was before the injury of his power and movement. Therefore, the sports therapist will be as much responsible to reach the patient at the best level.

Modern sports medicine and modern physical education are mainly directed to the prevention of injuries and strive to reduce their incidence to the minimum, where sports injuries and pathological complications rates have risen. This is one of the most important tasks of an athletic rehabilitation specialist, as an athletic rehabilitation specialist plays a central role and therefore the absence of an athletic rehabilitation specialist affects (Fadli and Mohammad, 2017).

There are many studies that dealt with the importance of athletic rehabilitation, and we mention the study of (Feng and Wang, 2022) which came under the title of "Study on Sports Injuries and Rehabilitation in Badminton Players". The study aimed to discuss sports injuries and rehabilitate badminton players using the questionnaire and descriptive approach, which was applied to 60 badminton players. The study summarized that the degree of infection of badminton players was mostly light, with some medium and high injuries. A mixture of basic reinforcement associated with rehabilitation and expansion of manual therapy can accelerate the muscle rehabilitation of the lumbar spine in the rehabilitation process of badminton injuries. The study recommended combining physical training with traditional rehabilitation techniques and increasing athletic rehabilitation's effectiveness.

One of the studies that discussed sports injuries in group games is a study (Rajab et al., 2022) which was titled "An Analytical Study of the Center for Wing Players Exposing Basketball Injuries" which aimed at identifying the most common injuries for basketball young women, according to the center of the wing players, using the questionnaire tool and descriptive approach, that was applied to an intentional sample

consisting of 40 players from basketball for young women. The study summarized that most injuries to basketball young women in the lower limb are 98.31% of Foot joint and fingers injury, the most severe Injury to the upper limb is 44.99% of the face, and the most affected body in the basketball is the lower limb. The study recommended that basketball coaches be recommended to raise the physical capabilities of the basketball players, especially the wing players, request coaches focus on warm-up better before training courses for basketball players and use calm exercises after training to secure the safety of players and not exposure to injuries, work on holding workshops and lectures for players and coaches to make them aware of injuries, work to open sports medicine centers to diagnose sports injuries in a correct way and work to open sports centers to rehabilitate sports injuries.

A study by Al-Barzai (2021), which came under the title "The Reality of the Professional Preparation of the Field Injury Specialist In Kuwaiti Clubs", aimed the current study to recognize the level of educational qualification for the injury specialist in sports clubs, and determine the level of vocational rehabilitation of information and knowledge of athletic rehabilitation workers in sports clubs, using the descriptive approach in the survey method, and the questionnaire as a tool, which was distributed to 169 athletic rehabilitation specialists. The study summarized that athletic rehabilitation specialists in Kuwaiti clubs enjoy an Intermediate level with regard to professional competence in information and basic concepts related to athletic rehabilitation, mental skills, and professional skills. The study recommended the necessity of providing professional competency development programs for the injury specialist, and it is necessary not to allow non-specialists to work in the field of athletic rehabilitation.

The study by (Zuhair et al., 2022) which came under the title "Study the Reality of the Rehabilitation of Sports Injuries to the Iraqi Premier League Football Clubs " The study aimed to recognize the reality of the rehabilitation of sports injuries in the clubs participating in the Iraqi Premier League of football using the descriptive method and the questionnaire. The study summarized that the level of rehabilitation of sports injuries to the club's players was weak. The study recommended an increased interest in the

aspect of rehabilitation of sports Injuries and give it appropriate importance also to the therapeutic aspect, conducting courses for rehabilitation of topics related to therapeutic, rehabilitation, and special sports players, and building the scale of obstacles that accompany the rehabilitation of sports Injuries for the Iraqi Football Premier League players.

A study by (Zurqeyat et al., 2018) which was titled "The Impact of Mental Imagination on Improving Self-Confidence for Injured Athletes After Medical Rehabilitation" aimed at identifying the level of confidence of injured players and the impact of the mental perception of injured on their self-confidence using the semi-experimental approach, where an experiment was conducted on a sample of 4 athletics players at the University of Technology and Sciences Jordan was intentionally selected and a pre and post-test was conducted. The study summarized that self-confidence is negatively affected by sports injuries, as the level of self-confidence among the players in question in the pre-test came at an average level. The study also summarized that mental perception developed self-confidence at a high level, this confirms that mental perception is a positive way to raise the level of self-confidence among the injured players. Built on the findings of the study. It was recommended the need to use mental imagery in the athletic rehabilitation of Injured players and hold educational courses for sports coaches to educate them about the need to take care of the psychological aspects of players.

The study by (Hanashi et al., 2012), discussed this topic, which was titled "The Importance of Sports Medicine in the Treatment of Sports Injuries." The study aimed to recognize some of the sports injuries exposed by football players and the contribution of sports medicine to their prevention and treatment them using the questionnaire and descriptive approach to collect data, which was applied to a sample of 80 soccer players. The study concluded that no importance is given to sports medicine in football-specific sports circles, which negatively affects athletes and their athletic level, the study also showed the absence of an athletic rehabilitation specialist in many of the sports teams under study. The study recommended the need for coaches to take care the health of players and the need for an athletic rehabilitation specialist in sports clubs.

This study came in order to draw attention and increase focus on the importance of athletic rehabilitation. The importance also stems from its focus on the role of athletic rehabilitation specialists in raising the level of players of some sports clubs in the West Bank from the viewpoint of sports players. This study represents a new addition to the field of research related to the study of Sports Sciences specifically in the Arab world.

The scientific importance of the current study depends on the fact that it addressed one of the most prominent problems suffered by sports clubs in Palestine and the West Bank, within the limits of the researcher's information, he did not find any studies that dealt with this subject, which would benefit scholars and researchers In the field of sports sciences through results and recommendations that could help coaches and managers of Palestinian sports clubs.

The researcher specialized in physical and athletic rehabilitation, and through the involvement of the researcher in the sports field in Palestinian clubs and follow-up of the Palestinian sports situation, he noticed that there is no specific sports qualification that rehabilitates the athlete returning from Injury, and the coach or his assistant works to follow up the returning player without having sufficient experience in the subject of rehabilitation and assessment of the situation. From here, the researcher found the need to highlight this problem, which has great importance in the future of players and their physical and athletic levels, So, it was necessary to conduct a study that clarifies the role of athletic rehabilitation specialists in raising the level of players of some sports clubs in the West Bank from the viewpoint of sports players, and accordingly, the problem of the study can be summarized in the question:

What is the athletic rehabilitation specialist's role in raising the level of players of some sports clubs in the West Bank from the viewpoint of sports players?

The objectives of this study are:

- The athletic rehabilitation specialist's role in raising the level of players of some sports clubs in the West Bank from the viewpoint of sports players.
- The role of athletic rehabilitation specialists in raising the level of players of some sports clubs in the West Bank from the viewpoint of sports players according to the variables (gender, type of sport, training age).

### Study questions

What is the athletic rehabilitation specialist's role in raising the level of players of some sports clubs in the West Bank from the viewpoint of sports players?

What is the athletic rehabilitation specialist's role in raising the level of players of some sports clubs in the West Bank from the viewpoint of sports players according to the variables (gender, type of sport, training age)?

### Study limitations

**Time limits:** The current study was applied from 1/03/2023 - 20/06/2023. **Human limits:** players of some team and individual sports in the West Bank. **Spatial limits:** the study was applied to the headquarters of individual and team sports clubs in the West Bank.

## MATERIALS AND METHODS

### Participants

The study community consists of excellent volleyball players, a number of which is according to the records of the Palestinian Volleyball Federation 2023 season (120) players and professional football players, a number of whom according to the records of the Palestinian Football Federation (240) players, the number of Muay Thai Martial Arts players is 30, and the number of

swimming is 40, so the total number of the community is 430. Research procedures were carried out in accordance with the human research ethical standards of the 2008 Principles of the Declaration of Helsinki. Birzeit University Etik Kurulu tarafından onayladı. Katılımcılardan çalışmaya dahil edilmesinden önce bilgilendirilmiş onam alınmıştır. In this study, additional precautions were taken by the researcher(s) to protect the volunteers."

### Study sample

It consisted of male and female players of some individual and team sports clubs, whose number is (74), where they were selected in a simple random way, and a questionnaire consisting of 15 paragraphs distributed over three axes was distributed to answer them. Table (1) showed the demographic variables of the sample's study.

### Study variables

**Dependent variables** Responses of the sample's study to the tool of the study.

**Independent variables** include the following:

Gender has two levels:

A. Male B. Female

The training age has three levels:

A-Less than 3 years old. B- From 3-5 years. C- More than 5 years.

The type of sport and it has two levels:

A - Team. B- individual.

**Table 1.** Demographic variables of the study sample

Variables		No.	Percentage %
Gender	Male	41	55.4
	Female	33	44.6
	Total	74	100
Training age	Less than 3 years	10	13.5
	Between3-5 years	15	20.3
	More than 3 years	49	66.2
	Total	74	100
Sport type	Team	54	73
	Individual	20	27
	Total	74	100

### Study tool

The researcher reviewed several similar and related studies on sports rehabilitation (Hemmat et al., 2017; Greising et al., 2020; Zaremski et al.,2019) and the researcher prepared a questionnaire suitable for the study based on the researcher's own experience and taking advantage of previous researchers.

### Tool validity

It was shown by presenting it to some experts in the field of sports and rehabilitation specialists, everyone agreed on the smooth formulation of the phrases and their content, the main axes, and the connection of each phrase to the axis that follows as well as the realism of the phrases.

**Tool stability**

Cronbach's alpha coefficient was used to calculate the stability of the tool, as the stability of the total score for all paragraphs was 85%.

**Statistical analysis**

The collected data was using the tool of the study, the questionnaire, and then uploaded to an Excel file, organized, and entered into the statistical (SPSS) program for analyzing the study data after encoding the answers, where descriptive statistics were used to calculate the arithmetic means (SMA), standard deviations (SD), t-test independent samples, and the One-way ANOVA test.

**RESULTS****First question results**

What is the extent of the role of athletic rehabilitation specialists in raising the level of

players of some sports clubs in the West Bank from the viewpoint of sports players?

The arithmetic means, standard deviations, percentages, and total scores were used to answer this question for each paragraph in the scale, and Table (2) are shown that. To present the results of this study and interpret the results, the following percentages were adopted: (4 and above) 80% and above, the athletic rehabilitation specialist's role in raising the level of players is very high. (3.50-3.99)70-79.9%, the athletic rehabilitation specialist's role in raising the level of players is high. (3-3.49) 60-69.9%, the athletic rehabilitation specialist's role in raising the level of players is medium. (2.50-2.99) 50-59.9, the athletic rehabilitation specialist's role in raising the level of players is low. (Less than 2.50) less than 50%, the athletic rehabilitation specialist's role in raising the level of players is very low.

**Table 2.** SAM (Arithmetic means) and SD (standard deviations) of the role of athletic rehabilitation therapist in raising the level of players of some sports clubs in the West Bank (N=74)

No.	Paragraph	SMA	SD	Percentage	Paragraph Level
8	The correct diagnosis of the injury is one of the most important factors for the success of the hospitalization process	4.69	0.57	94	Very high
5	The psychological factor affects the hospitalization process	4.46	0.74	89	Very high
6	The specialist plays a pivotal role in the hospitalization process	4.34	0.58	87	Very high
2	The athletic rehabilitation specialist works to raise the level of confidence of the players in themselves.	4.34	0.60	87	Very high
3	The athletic rehabilitation specialist helps to improve the player's performance	4.32	0.68	86	highVery
10	It is the specialist who determines the size of the injury and the period of hospitalization	4.22	0.73	84	Very high
11	The athletic rehabilitation specialist works to raise the morale of the player	4.22	0.67	84	Very high
12	Athletic rehabilitation improves my performance	4.20	.66	84	Very high
11	athletic rehabilitation enhances my sense of self-confidence	4.16	.76	83	Very high
13	athletic rehabilitation sessions positively affect me	4.14	.58	83	Very high
4	I feel positive energy if I talk to a athletic rehabilitation specialist	4.07	.75	81	Very high
7	The absence of the role of a athletic rehabilitation specialist negatively affects the hospitalization process	3.96	.83	79	High
9	Self-treatment of players negatively affects the hospitalization process	3.84	.83	77	High
15	Absences from athletic rehabilitation sessions negatively affect my sports performance.	3.73	.76	75	High
14	My performance is negatively affected after treatment sessions	2.34	1.16	47	Very low
	The total degree of the role of the athletic rehabilitation specialist in raising the level of players of some sports clubs in the West Bank	4.07	0.34	81	Very high

It is clear from Table (2) that the athletic rehabilitation specialist’s role in raising the level

Paragraph 8, which states that "the correct diagnosis of the injury is one of the most important reasons for the success of the hospitalization process," ranked first on the scale with a percentage of 94%, while paragraph No. 14, which states that "my performance is negatively affected after treatment sessions," ranked last in the scale with a percentage of 47%.

**Second question**

**Table 3.** Results of the T-test for the significance of differences in the role of athletic rehabilitation specialists in raising the level of players of some sports clubs In the West Bank according to the gender variable (N= 74).

Depending Variable	Gender		T value	Significance level*		
	Male (N=41)	Female (N=33)				
	SMA	SD	SMA	SD		
The role of the athletic rehabilitation specialist in raising the level of players of some sports clubs in the West Bank	4.03	0.31	4.11	0,36	-1.04	0.30

\*Significance level ( $\alpha \leq 0.05$ )

It is clear from Table (3) that there are no statistically significant differences at the ( $\alpha \leq 0.05$ ) level in the role of athletic rehabilitation specialists in raising the level of players of some sports clubs In the West Bank due to the gender variable.

**Third question**

Are there significant differences at the significance (0.05) level in therole of the athletic rehabilitation specialist in raising the level of some

of players of some sports clubs in the West Ban was very high, with a percentage of (81%).

Are there any significant differences at ( $\alpha \leq 0.05$ ) level in the role of the athletic rehabilitation specialist in raising the level of players of some sports clubs in the West Bank due to the variable of gender? To determine the differences and answer the question, a T-test was applied to independent samples, and Table results (3) show that.

sports clubs In the West Bank due to the variable of training age?

First: To answer the question, the researcher used the one-way ANOVA to know the role of the athletic rehabilitation specialist in raising the level of players of some sports clubs in the West Bank according to the variable of training age, and Table (4) explains that.

**Table 4.** Results of the one-way ANOVA for the role of the athletic rehabilitation specialists in raising the level of players of some sports clubs in the West Bank according to the variable of training age.

Variable	Contrast source	Total deviation squares	Freedom Degree	Average squares	P	Sign.
Training Age	Between-group	0.09	2	0.04	0.40	0.67
	in group	8.23	71	0.11		
Total		8.32	73			

\*Significance level ( $\alpha \leq 0.05$ )

The results of the study on the third question showed that, when using (ANOVA) to knowing the role of athletic rehabilitation in raising a level of players in the West Bank

depending on the variable of the training age, there are no statistical differences at the significance ( $\alpha \leq 0.05$ ) level.

**Fourth question**

Are there statistically significant differences at ( $\alpha \leq 0.05$ ) level in the role of the athletic rehabilitation specialist in raising the level of players in some sports clubs In the West Bank due

to the variable of the sport type? To determine the differences and answer the question, a T-test was applied to independent samples, and Table results (5) show that.

**Table 5.** T-test results on the significance of the difference in the role of the athletic rehabilitation specialist in raising the level of players of some sports clubs in the West Bank depending on the sport type variable (n=74).

Sport type Depending variable	Team (N =54)		Individual (N=20)		T-value	Sign. level
	SMA	SD	SMA	SD		
The athletic rehabilitation specialist's role in raising the level of players of some sports clubs in the West Bank	4.43	0.34	3.01	0.39	2.41	0.02

\*Significance level ( $\alpha \leq 0.05$ )

It is clear from Table (5) that there are statistically significant differences at significance ( $\alpha \leq 0.05$ ) level in the role of athletic rehabilitation specialists affected in raising the level of players of some sports clubs In the West Bank due to the type of sport variable in favor of players who play team sport.

## DISCUSSION

Athletic rehabilitation is an important part of the field of sports medicine today, as it protects players from various injuries by increasing their physical level. Moreover, the presence of a specialist sports doctor contributes to increasing the quality of players' ability to deal with their injuries. The sports rehabilitation process has an important role in maintaining the level and physical readiness of players, and in addition to efforts to reduce injuries in general, it also contributes to accelerating the recovery process of players exposed to various injuries (Dimen, 2012; Popchak et al., 2017).

The related results of the 1<sup>st</sup> question: By examining the results of the first axis in the questionnaire of this study, which was distributed to a sample of (74) sports club players, the study concluded with regard to the first question, which states: "How important is the athletic rehabilitation specialist's role in raising the level of players of some sports clubs in the West Bank?" The results were related to the first axis, which came with a

very high impact, with percentages ranging between (81%), where it was found that the highest paragraph was represented in the paragraph that states (the correct diagnosis of infection is one of the most important factors for the success of the hospitalization process) by 94%, as for the lowest paragraph. It was represented in the paragraph that states (my performance is negatively affected after treatment sessions), which amounted to 47%. The researcher attributes the results of the study to realize the sports clubs' players the importance of the role played by the athletic rehabilitation specialist for the players.

The results of the study came different from the results of the study (Hanachi et al., 2012), which confirmed that sports medicine is not taken care of in sports circles, and the absence of a sports physiotherapist in many sports clubs. It was Incompatible with the study (Zuhair et al., 2022), which emphasized that awareness of the role of physiotherapists among club players in the Iraqi league is weak. The related results of the 2<sup>nd</sup> question by examining the results of the second axis of this study, which was distributed to 74 male and female players from sports clubs. The study concluded with regard to the second question, which states, "What is the importance of the role of the athletic rehabilitation specialist in raising the level of players of some sports clubs in the West Bank, according to the study variables (gender, sport type, training age)?" The study concluded that there are no statistically significant

differences regarding the importance of the role of athletic rehabilitation specialists in raising the level of players of some sports clubs in the West Bank due to the gender variable.

The researcher points to the importance of athletic rehabilitation for both sexes in order to raise the level of players' performance and to prevent common sports injuries, the researcher also attributes that there are no statistical differences due to the training age variable that sports players of various levels of experience are aware of the importance of physical therapy and the role of an athletic rehabilitation specialist, the researcher points the result of the study to the fact that team sports players are more susceptible to injury than individual sports players, affecting their perspective of the importance of athletic rehabilitation specialist in order to heal sports injuries. And as I agreed with the study of (Zuraikat and Majali,2018; Close et al.,2019; Macdonald et al.,2019)

### Conclusions

Within the limits of the research nature and its objectives, the researcher reaches the following conclusions:

1. The effect of the hospital axis on the players by 94%, the psychological axis by 81%, and the performance axis by 47%.
2. The effect of psychological impact was very high on the players.
3. Lack of material support for Palestinian clubs due to the presence of an athletic rehabilitation specialist.
4. Sports training suffers from no periods to evaluate players and their level periodically.

### Recommendations

Through the outcomes of the study, the study recommends:

1. Increased interest in educating athletes about ways to avoid sports injuries and prevent them.
2. Providing material and moral support to the athletic rehabilitation specialist in Palestinian sports clubs.
3. Increased awareness of sports players about the importance of follow-up and undergoing athletic rehabilitation sessions, especially after sports injuries.
4. The necessity of conducting more studies on the role of athletic rehabilitation and physiotherapists from the viewpoint of athletes and various sports players in the Arab world.

### Conflict of Interest:

There is no personal or financial conflict of interest within the scope of the study.

### Information on Ethics Committee Permission

Birzeit University Etik Kurulu tarafından onayladı. Katılımcılardan çalışmaya dahil edilmesinden önce bilgilendirilmiş onam alınmıştır. In this study, additional precautions were taken by the researcher(s) to protect the volunteers."

### Researchers' Contribution Statement

Planned by the author: Study Design, Data Collection, Statistical Analysis, Data Interpretation, Manuscript Preparation, Literature Search. Author have read and agreed to the published version of the manuscript.

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