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## Comparison of the Retirement Experiences between Retired Athletes from Iran and Iraq

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### ABSTRACT

The aim of this quantitative research was to examine and compare the retirement experiences of retired athletes from selected sports federations in Iran and Iraq. Using the snowball sampling method, 188 retired professional athletes (103 from Iran and 85 from Iraq) were selected from team sports and individual sports. The research data were collected using the Sport Career Termination Questionnaire. Data analysis was conducted using parametric and non-parametric statistical methods. The results indicated significant difference between the sport career length of the athletes of both groups; there was a significant difference between the sport career termination reasons of two groups; there was a significant difference between the retirement problems in two groups; there was a significant difference between the two groups in the amount of support received by the athletes during the retirement period, and significant difference existed between the level of retirement satisfaction in the two groups. It is recommended that sports authorities in Iran and Iraq pay more attention to retired athletes, strive to address the issues and challenges of their retirement course, and provide programs aimed at developing skills and job competencies for retired athletes. In particular, it is recommended that Iraqi sports authorities maximize the utilization of retired athletes within the country's sports structure and implement effective programs for the prevention and treatment of sports injuries among athletes. Future researchers are encouraged to employ both longitudinal and qualitative research methods to gain a better and richer understanding of sports retirement.

### Introduction

Retirement is one of the significant stages in an individual's occupational life that can lead to anxiety, confusion, and emotional turmoil for the retired individual, impacting them psychologically and emotionally (Goudarzi et al., 2022; Muratore & Earl, 2015).

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Sports retirement represents a distinctive form of retirement with notable differences from retirement in other professions. Notable distinctions include the relatively younger age at retirement for retired athletes compared to other professions (Falola, 2014; Fernandez et al., 2006; Hatamleh, 2013; Moosavi, 2014; Smith & McManus, 2008), the need for a new occupation post-retirement for livelihood, and the limited opportunity for further experience and education (Hatamleh, 2013; Jodai & Nogawa, 2012; Knights et al., 2019). Moreover, in contrast to other professions, sports retirement often occurs suddenly and swiftly, with athletes having limited control and autonomy in their retirement decision-making (Carapinheira et al., 2018; Dhurup et al., 2020; Witnauer et al., 2007). These differences underscore the necessity of paying special attention to sports retirement and retired athletes.

Sports retirement is defined as the withdrawal from a professional sports career. When an athlete ceases competitive participation in sports, he enters the retirement phase (Ekström & Sundqvist, 2009; Knights et al., 2019; Hashemei Afousi et al., 2015). Research has indicated that at least 20% of athletes experience crises during the retirement period, requiring assistance and support for resolution (Subijana et al., 2020). A review of research background reveals that retirement from sports is associated with psychological distress in 39% of athletes, affecting their well-being and welfare. This figure is nearly double the reported distress among retirees from other professions (Haslam et al., 2021). This underscores the imperative need for the study of sports retirement.

By examining the research background, it becomes apparent that the majority of sports retirement studies have been conducted in Western countries. However, cross-cultural research in the field of sports retirement suggests that the issues and problems faced by athletes, their reactions to retirement, the reasons and conditions for termination from sports, and their adaptation to retirement may be culturally and socially influenced (Alfermann et al., 2004; Dhurup et al., 2020; Stambulova et al., 2007). Therefore, one cannot easily generalize the findings of research conducted in Western countries to Asian countries, particularly those in the Middle East. As far as the researcher is aware, there has been no research on sports retirement in Iraq, making it imperative to conduct research in this area. Such research could help identify the needs, issues, and problems of retired athletes, enabling policymakers to propose suitable solutions. In Iran, researchers such as Moshkelgosha et al. (2012), Hemmatinezhad et al. (2013), Hashemi et al. (2015), and Moemeni et al. (2021) (Hemmatinezhad et al., 2013; Hashemi et al., 2015; Moshkelgosha et al., 2012) have conducted research; however, sufficient information in this area is still lacking. Considering the limited information on sports retirement in Iran and Iraq, the researcher was motivated to investigate and compare the experiences of sports retirement in these two countries.

Sports retirement can pave the way for the emergence of various issues and problems, such as sleep disorders, nutritional disturbances, anxiety, depression, suicidal tendencies, identity issues, occupational problems, psychological challenges, social difficulties, and economic issues (Alfermann et al., 2004; Goudarzi et al., 2022; Hattersley et al., 2019; Hemmatinezhad et al., 2013; Moshkelgosha et al., 2012; Subijana et al., 2020). For these reasons, the retirement period is recognized as one of the most significant challenges faced by athletes (Silver, 2021; Stambulova, 2017). Numerous studies have demonstrated that at least 20% of retired athletes encounter multiple and substantial problems during the retirement phase, essentially experiencing a retirement crisis (Stambulova, 2017; Subijana et al., 2020). Therefore, in the present research, the challenges of the retirement period for retired Iranian and Iraqi athletes have been studied and examined. This is crucial for several reasons: a) Sports organizations can gain awareness of the problems faced by retired athletes, enabling them to assist in better coping with these issues. Identifying the needs and challenges of retired athletes facilitates the provision of ideal and practical services for them (Oulevey et al., 2020). b) Sports organizations can offer proactive programs for active athletes, ensuring they do not face such issues in the future during retirement. c) Sports organizations can assess the effectiveness of the programs and interventions they have implemented and, if ineffective, make necessary adjustments. For instance, if a program for teaching occupational skills to athletes has been provided and retired athletes still experience occupational problems, a reevaluation of these programs is warranted.

The review of research background indicates a close and significant relationship between the problems experienced by athletes during retirement and the reasons for termination from sports (Babic et al., 2019; Hashemi et al., 2015; Taylor & Ogilvie, 1994). Therefore, researchers in various countries focus on examining the reasons for athletes' retirement from different sports disciplines. In the present study, the researcher aimed to investigate and compare the reasons for retirement from sports among retired Iranian and Iraqi athletes. This topic is crucial from several perspectives: a) Awareness can be gained about potential issues at the national sports level (such as discrimination and unfairness by coaches towards athletes, neglect of sports injury prevention, etc.). b) Considering the link between reasons for termination from sports and retirement problems, potential issues for athletes can be identified, and necessary programs can be designed to assist them or leverage programs from neighboring countries. For instance, rehabilitation and general health maintenance programs can be offered to athletes who retired due to sports injuries, medical insurance can be allocated, and preventive programs for active athletes can be designed. c) Sports managers, armed with knowledge of these reasons, can adopt programs to prevent the recurrence of such issues in the future. For example, if athletes retire due to issues with coaching staff, more careful selection of coaches can be implemented.

Another factor that can play a crucial role in the quality of athletes' retirement is the level of support they receive (Hemmatinezhad et al., 2013; Knights et al., 2019; Salehi, 2017; Yanrong et al., 2015). The higher the support retired athletes receive, the better the quality of their retirement life will be (Moemeni et al., 2022). Therefore, the existence of supportive systems for the retirement period is of particular importance. Additionally, the expected level of support that athletes anticipate from various sources (expected support) should be examined to implement measures that reduce the gap between expected support and received support. This can contribute to improving the quality of life for retired athletes. Thus, in the current study, the researcher has examined the level of received and expected support from various sources and compared it among athletes from the two countries, Iran and Iraq.

Given the aforementioned points, the researcher seeks answers to the following questions: A) Is there a difference in the reasons for retiring from sports between retired Iranian and Iraqi athletes? B) Are there differences in the issues and problems during the retirement period among retired Iranian and Iraqi athletes? C) Is there a difference in the level of received and expected support among retired athletes from the two countries? D) Is there a difference in the duration of the sports career between athletes from the two countries? E) Is there a difference in satisfaction with the retirement period among retired athletes from Iran and Iraq?

## Method

The present study is a descriptive - comparative research. The statistical population in this study is divided into two groups. The first group includes all retired male athletes from selected Iranian federations (including judo, wrestling, athletics, weightlifting, football, volleyball, basketball, and futsal). The second group consists of all retired male athletes from selected Iraqi federations (including judo, wrestling, athletics, weightlifting, football, volleyball, basketball, and futsal). Three criteria were considered for selecting research samples (in both countries): 1) Participants must be professional athletes, 2) They should have participated in international competitions representing their country, and 3) At the time of data collection, less than one year and more than 15 years should have passed since their retirement. This time frame is considered to ensure that athletes have experienced retirement life (minimum one year) and have not forgotten the issues and problems of retirement (less than 15 years).

Accurate information about the number of retired athletes was not available in the sports federations of Iran and Iraq. In other words, due to the lack of a comprehensive database containing information such as addresses and contact numbers of retired athletes, a snowball sampling method was employed, similar to previous studies like Hemmatinezhad et al. (2013), Moosavi (2014), Hashemi et al. (2015), Kaul (2017), and Salehi (2017) (Hemmatinezhad et al., 2013; Kaul, 2017; Hashemi et al., 2015; Moosavi, 2014; Salehi, 2017). The researcher approached sports federations

and identified some retired athletes. After direct communication with these individuals, more retired athletes were identified. Each retired athlete introduced one or more additional retired athletes to the researcher. By contacting these individuals, more retired athletes were identified, and based on the research criteria, those who met the inclusion criteria were selected for participation in the study. This process continued until identified retired athletes became repetitive, concluding the sampling process. After identifying and selecting retired athletes, the purpose of the research was explained to each of them, and they were invited to participate. A total of 112 retired Iranian athletes and 92 retired Iraqi athletes from various team sports (Football, Volleyball, Basketball, and Futsal) and individual sports (Judo, Wrestling, Track and field, and Weightlifting) participated in the study. After collecting and reviewing the research questionnaires, 103 questionnaires from Iranian athletes and 85 questionnaires from Iraqi athletes were deemed usable for data analysis.

The data collection instruments employed in the present study were as follows: A) *Demographic Information Questionnaire*: This questionnaire aimed to collect general and population-based information about the respondents. It included questions about current age, retirement age, duration of sports career, educational level, marital status, and more; B) *Sport Career Termination Questionnaire (SCTQ)*: This questionnaire was developed by Cecić Erpič (1998) based on a qualitative study of former Slovenian athletes who had retired from sports (Hashemi et al., 2015). This questionnaire identifies and evaluates the characteristics of the process of retiring from professional sports. The SCTQ was reviewed by Cecić Erpič in 2000 and 2001 and has been successfully utilized in previous research studies such as Hemmatinezhad et al. (2013), Hashemi et al. (2015), and Salehi (2017) (Hemmatinezhad et al., 2013; Hashemi et al., 2015; Salehi, 2017). Several sections of this questionnaire were used in line with the research objectives, as follows: B<sub>1</sub>) Reasons for Sports Career Termination: This questionnaire consists of 22 closed-ended Likert-scale questions, ranging across a 5-point spectrum. It aims to assess the reasons leading athletes to retire from sports; B<sub>2</sub>) Retirement Course Problems: This questionnaire evaluates the health-related, self-concept, psycho-social, and occupational problems experienced by athletes during their retirement course. Comprising 29 questions, items 1 to 4 assess health-related problems, items 5 to 15 gauge psycho-social problems, items 16 to 22 focus on occupational problems, and items 23 to 29 evaluate self-concept problems; B<sub>3</sub>) Received and Expected Support: This questionnaire examines the level of support that athletes expect to receive after retiring from sports from various individuals and organizations (spouse, parents, friends, other family members, teammates or club members, sports federations, club coaches, National Olympic Committee, and sports psychologists) and the actual support they have received (Received Support). The questionnaire consists of 9 items measured on a five-point Likert scale.

The abovementioned questionnaires are available in Persian and have been used in previous studies (Hemmatinezhad et al., 2013; Hashemi et al., 2015). In this study, we used these questionnaires to collect data related to retired Iranian athletes. The questionnaires used for Iraqi athletes were translated into Arabic by an English-Arabic language specialist, and to address potential ambiguities in the items, the questionnaires were provided to two retired Iraqi athletes for their feedback. After their confirmation, the questionnaires were further validated by experts. Following the validation process, the researcher proceeded to collect the data.

To gather data, the questionnaires were provided to retired athletes, accompanied by necessary explanations regarding the questionnaires and the research. Out of the 204 distributed questionnaires, 16 were excluded due to contamination or non-return from the final sample. Nine of the excluded questionnaires belonged to retired Iranian athletes, and seven belonged to retired Iraqi athletes. Ultimately, 103 questionnaires from retired Iranian athletes and 85 questionnaires from retired Iraqi athletes were used for data analysis.

SCTQ used by Iranian researchers such as Hemmatinezhad et al. (2013), Hashemi et al. (2015), and Salehi (2017) (Hemmatinezhad et al., 2013; Hashemi et al., 2015; Salehi, 2017), has been validated for its reliability. The reliability of the questionnaires was determined using Cronbach's alpha coefficient. The reliability calculations, as shown in the table below, indicate that all research variables have Cronbach's alpha coefficients higher than 0.70. It is worth mentioning that the standard level for this coefficient should fall between 0.70 and 1. The closer this value is to 1, the more indicative it is of the reliability of the research questionnaires.



**Table 1.** Cronbach's alpha coefficient of research questionnaire

questionnaires	Number of items	Cronbach's alpha
Reasons for Sport Career Termination	22	<b>0.729 for Iranian athletes</b>
		<b>0.734 for Iraqi athletes</b>
Retirement Course Problems	29	<b>0.916 for Iranian athletes</b>
		<b>0.831 for Iraqi athletes</b>
Received and Expected Support	18	<b>0.826 for Iranian athletes</b>
		<b>0.881 for Iraqi athletes</b>
Total reliability	69	<b>0.821 for Iranian athletes</b>
		<b>0.806 for Iraqi athletes</b>

All analyses in this research were conducted using SPSS<sub>26</sub> and Excel version 2019 software. It is noteworthy that the current study is extracted from a master's thesis in the field of sports management at Bu-Ali Sina University. The research adheres to ethical principles and has obtained an ethics code (IR.BASU.REC.1400.045) from the Ethics Committee in Research at Bu-Ali Sina University. The study is committed to ethical considerations, such as ensuring respondent anonymity, confidentiality, and avoiding irrelevant or inappropriate questioning.

## Results

Data analysis revealed that 85 retired male athletes were from Iraq and 103 were from Iran. Table 2 reports the average current age of the research participant.

**Table 2.** Average current age and retirement age of the research participants by country

	Number	Mean	SD	Minimum	Maximum
<b>Iraqi (current age)</b>	85	38.90	7.812	23	59
<b>Iraqi (retirement age)</b>	85	30.03	4.75	21	44
<b>Iranian (current age)</b>	103	35.13	6.095	23	52
<b>Iranian (retirement age)</b>	103	29.82	4.28	21	38

Table 2 shows that the average age of Iranian participants (35.13 years) is approximately 3 years less than that of Iraqi participants (38.90 years). The retirement age of athletes from both countries is close to 30 years, and as observed, the average retirement age of Iraqi athletes is slightly higher than that of Iranian athletes. Other results from the current research indicate that 84.5% of Iranian participants are employed in another job after retirement from sports, while 14.6% are still unemployed in a different occupation post-retirement. Regarding Iraqi athletes, 82.4% of them are engaged in a new job after retirement, and 17.6% are still struggling to find employment in a different field. The findings suggest that the employment status of Iranian retired athletes is relatively better during the retirement period. Furthermore, the results indicate that Iranian retired athletes have higher educational levels compared to Iraqi athletes. Other results reveal that the percentage of Iranian athletes who remain involved in sports as managers, heads, or coaches after retirement (44.7%) is higher than that of Iraqi athletes (24.7%). This indicates that the sports system in Iraq has yet to effectively utilize retired athletes in its system and benefit from their experiences.

Due to the non-normal distribution of data, the Mann-Whitney U test was employed to examine the duration of the sports career among retired athletes from the two countries (first hypothesis of the research). As the results indicate, there is a significant difference in the duration of sports careers between retired athletes from the two countries (Table 3), with Iranian retired athletes having a longer duration compared to Iraqi retired athletes.

**Table 3.** The results of Mann-Whitney U test regarding the comparison of the sport career length

Component	Nationality	N	Mean of sport career length	Average rates	Mann-Whitney U	Z	Significant level
Sport career length	<b>Iranian</b>	103	7.66± 2.12	102.49	3549.500	-2.232	0.026**
	<b>Iraqi</b>	85	7.01± 2.94	84.82			

\*\*P<0.01 N<sub>total</sub>=188 (N<sub>Iran</sub>=103, N<sub>Iraq</sub>=85)

In order to compare the reasons for sports career termination among retired athletes from the two countries, the Mann-Whitney U test was employed (second hypothesis of the research). As the results indicate, there is a significant difference in the reasons between retired athletes from the two countries (Table 4). Based on previous research (Alfermann et al., 2004; Cooper et al., 2021; Hemmatinezhad et al., 2013; Du & Eva, 2007), the primary reasons leading athletes to retire include aging, injuries, finding new job, and similar factors. For the comparison of these reasons between Iranian and Iraqi athletes, the Mann-Whitney U test was utilized. The results demonstrate a significant difference in the mentioned reasons between athletes from the two countries, revealing that Iraqi athletes retire more due to factors like aging and injuries, while Iranian athletes retire more often due to reasons such as finding suitable job (Table 5).

**Table 4.** The results of the Mann-Whitney U test regarding the comparison of reasons for sport career termination

Component	Nationality	N	Average rates	Mann-Whitney U	Z	Significant level
Sport career length	<b>Iranian</b>	103	104.24	3549.500	-2.231	0.026*
	<b>Iraqi</b>	85	86.46			

\* P<0.05 N<sub>total</sub>=188 (N<sub>Iran</sub>=103, N<sub>Iraq</sub>=85)

**Table 5.** The results of the Mann-Whitney U test regarding the comparison of main reasons for sport career termination

Component	Nationality	N	Average rates	Mann-Whitney U	Z	Significant level
<b>Aging</b>	<b>Iranian</b>	103	80.66	2952.000	-4.098	**0.0001
	<b>Iraqi</b>	85	111.27			
<b>Injuries</b>	<b>Iranian</b>	103	86.80	3584.000	-2.218	*0.027
	<b>Iraqi</b>	85	103.83			
<b>Finding a suitable job</b>	<b>Iranian</b>	103	102.64	3539.000	-2.332	*0.020
	<b>Iraqi</b>	85	84.64			

\*\*0.01 P< \*P<0.05 N<sub>total</sub>=188 (N<sub>Iran</sub>=103, N<sub>Iraq</sub>=85)

To compare the problems of retirement course and their priorities among retired athletes from the two countries, the Friedman and Mann-Whitney U tests were employed (third hypothesis of the research). Initially, using the Friedman test, the priorities of problems for Iranian and Iraqi athletes were determined. As observed in Tables 6 and 7, there is no significant difference in the priorities of problems between the two groups of athletes. However, the results of the Mann-Whitney U test indicate a significant difference in the level of psycho-social and self-concept problems between retired athletes from the two countries. Iraqi retired athletes, significantly, have experienced more psycho-social and self-concept problems in retirement course. Although no significant difference is observed in job-related problems and health-related problems, Iraqi retired athletes have faced more problems in these areas during retirement.

**Table 6.** Friedman test results to prioritize retirement problems of Iranian and Iraqi retired athletes

Nationality	Retirement problems	Average rates	$\chi^2$	Significant level	df
<b>Iranian</b>	<b>Health-related</b>	1.35	184.574	3	0.0001**
	<b>Job-related</b>	3.63			
	<b>Self-concept</b>	2.89			
	<b>Psycho-social</b>	2.13			
<b>Iraqi</b>	<b>Health-related</b>	1.19	165.833	3	0.0001**
	<b>Job-related</b>	3.67			
	<b>Self-concept</b>	2.75			
	<b>Psycho-social</b>	2.39			

\*\*P<0.01 N<sub>Total</sub>=188 (N<sub>Iran</sub>=103, N<sub>Iraq</sub>=85)

**Table 7.** The results of the Mann-Whitney U test to compare retirement problems in Iranian and Iraqi retired athletes

Component	Nationality	N	Average rate	Mann-Whitney U	Z	Significant level
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<b>Health-related Problems</b>	<b>Iranian</b>	103	91.80	4099.500	- 0.753	0.451
	<b>Iraqi</b>	85	97.77			
<b>Psycho-social problems</b>	<b>Iranian</b>	103	84.47	3344.500	- 2.785	0.005**
	<b>Iraqi</b>	85	106.65			
<b>Job-related problems</b>	<b>Iranian</b>	103	90.09	3923.000	- 1.226	0.220
	<b>Iraqi</b>	85	99.85			
<b>Self-concept problems</b>	<b>Iranian</b>	103	83.78	3273.500	- 2.980	0.003**
	<b>Iraqi</b>	85	107.49			

\*\*P&lt;0.01

N<sub>Total</sub>=188 (N<sub>Iran</sub>=103, N<sub>Iraq</sub>=85)

The Wilcoxon test was employed to compare the received and expected support among retired Iraqi athletes (fourth hypothesis of the first section). As evident in Table 8, the results of this test indicate a significant difference between the received and expected support among Iraqi retired athletes. In other words, these individuals did not receive the expected level of support during retirement from their spouses, parents, coaches, federations, sports psychologists, etc.

**Table 8.** Wilcoxon test results to compare the received and expected support of retired Iraqi athletes

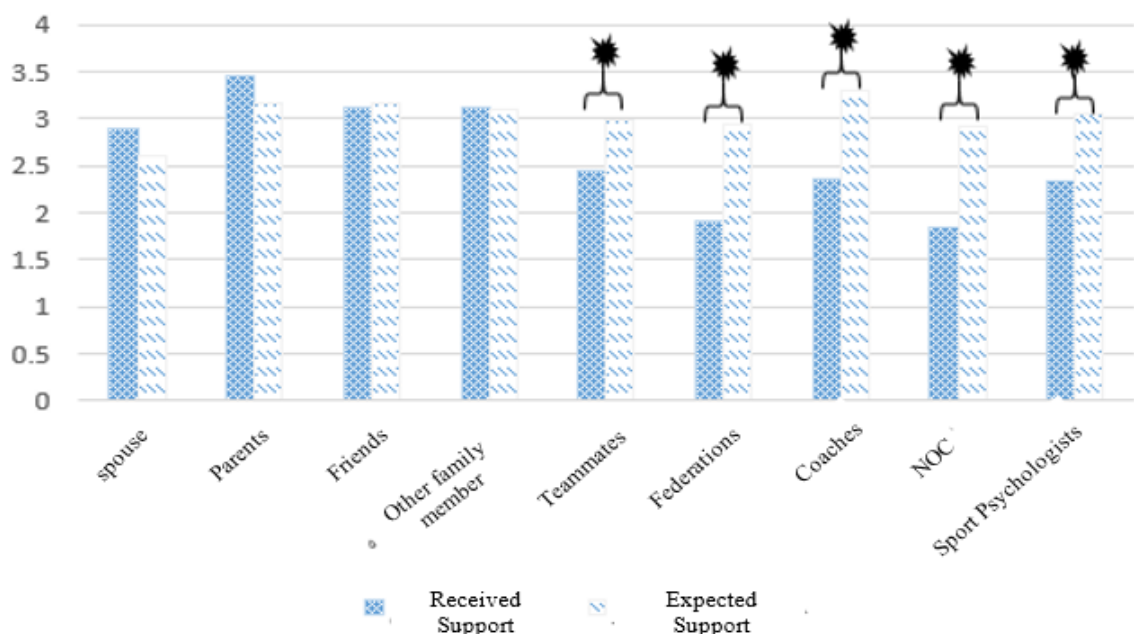
	Spouse	Parents	Friends	Other family members	Teammates	Sport Federations	Coaches	NOC	Sport psychologists	Total
<b>Z</b>	-1.730	-1.752	-0.225	-4.20	-3.367	-5.428	-5.148	-5.118	-3.280	-2.917
<b>Significant level</b>	0.084	0.80	0.799	0.675	0.001*	0.0001**	0.0001**	0.0001**	0.001*	0.0001**

\*\*0.01 P&lt;

\*0.05 P&lt;

N=85

The Figure 1 illustrates the average received and expected support among retired Iraqi athletes. As observed, there is a significant difference between the expected support from teammates, federations, coaches, the National Olympic Committee, and sports psychologists during retirement and the actual support received from these individuals and organizations. In other words, the level of support received during retirement is less than what the athletes anticipated. However, no significant differences are observed between received and expected support from spouses, parents, friends, and other family members, indicating that athletes received the expected support from these individuals and groups.



**Figure 1.** Comparison of mean received and expected support in retired Iraqi athletes

The results indicate a significant difference between the received and expected support of retired Iranian athletes, as assessed by the Wilcoxon test (Hypothesis four, Part two) (Table 9).

**Table 9.** Wilcoxon test results to compare the received and expected support of retired Iranian athletes

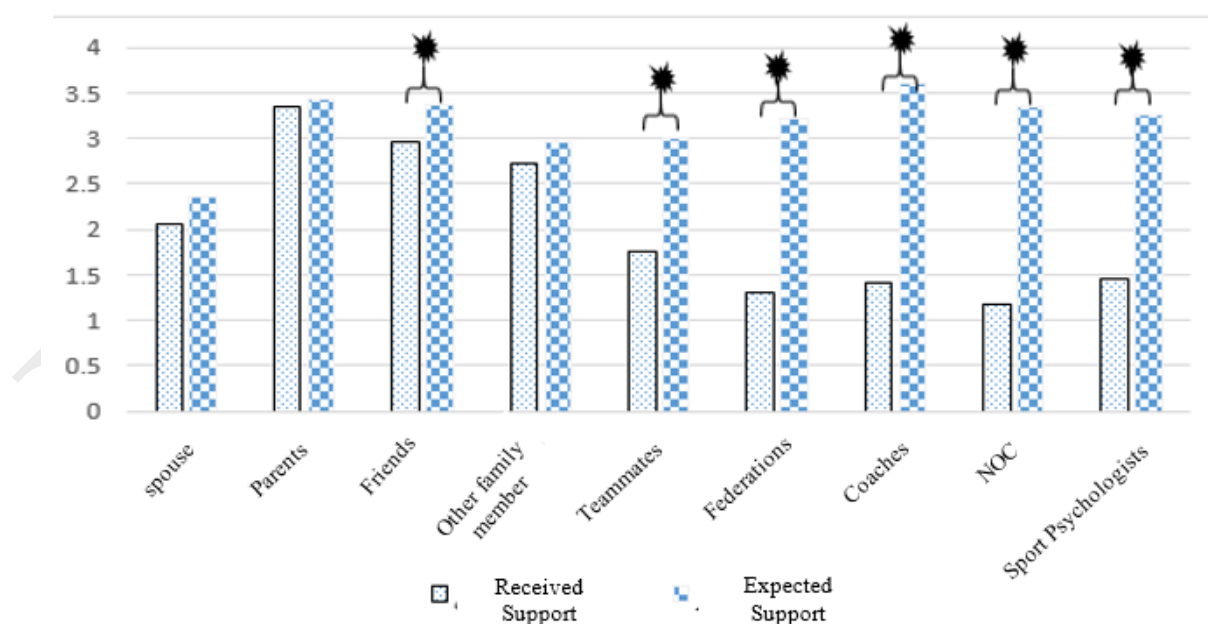
	Spouse	Parents	Friends	Other family members	Teammates	Sport Federations	Coaches	NOC	Sport psychologists	Total
<b>Z</b>	-1.453	-0.721	-2.343	-1.337	-5.694	-7.236	-7.572	-7.572	-6.673	-7.382
<b>Significant level</b>	0.146	0.471	0.019*	0.181	0.0001*	0.0001**	0.0001**	0.0001**	0.0001*	0.0001**

\*\*P&lt;0.01

\*P&lt;0.05

N=103

Figure 2 illustrates the average received support and expected support of retired Iranian athletes. As observed, there was a significant difference between the anticipated support from sports psychologists, National Olympic Committee, coaches, federations, teammates, and friends, and the actual support received during the retirement period. In other words, the received support during retirement was less than what they expected. Regarding spouses, parents, and other family members, no significant difference was observed between the received support and the expected support of athletes. This indicates that athletes have received the support they anticipated from these individuals and groups.

**Figure 2.** Comparison of mean received and expected support in retired Iranian athletes

The Mann-Whitney U test was employed to compare the support received by Iranian and Iraqi athletes during retirement (Fourth hypothesis, Part Three). The results of this test indicated a significant difference between the received support of athletes from the two countries (Table 10).

**Table 10.** Mann-Whitney U test results to compare the received and expected support between retired Iranian and Iraqi athletes

Component	Nationality	N	Average rates	Mann-Whitney U	Z	Significant level
Spouse	Iranian	103	110.41	4099.500	-0.478	0.761



<b>Parents</b>	<b>Iraqi</b>	85	111.58	4220.000	-0.436	0.663
	<b>Iranian</b>	103	92.97			
<b>Other family members</b>	<b>Iraqi</b>	85	96.35	3615.000	-2.133	0.033*
	<b>Iranian</b>	103	87.10			
<b>Friends</b>	<b>Iraqi</b>	85	103.47	4002.000	-1.038	0.299
	<b>Iranian</b>	103	90.85			
<b>Teammates</b>	<b>Iraqi</b>	85	98.92	2825.000	-4.429	0.0001**
	<b>Iranian</b>	103	79.43			
<b>Sport Federations</b>	<b>Iraqi</b>	85	112.76	2824.000	-5.048	0.0001**
	<b>Iranian</b>	103	79.42			
<b>Coaches</b>	<b>Iraqi</b>	85	112.78	2285.500	-6.225	0.0001**
	<b>Iranian</b>	103	74.19			
<b>NOC</b>	<b>Iraqi</b>	85	119.11	2690.000	-5.609	0.0001**
	<b>Iranian</b>	103	78.12			
<b>Sport Psychologists</b>	<b>Iraqi</b>	85	114.35	2763.000	-4.931	0.0001**
	<b>Iranian</b>	103	78.83			
<b>Total</b>	<b>Iraqi</b>	85	113.49	2368.500	-5.417	0.0001**
	<b>Iranian</b>	103	75.00			
	<b>Iraqi</b>	85	118.14			
	<b>Iranian</b>	103	75.00			

\*\* P<0.01 \*0.05 P< N<sub>Total</sub>=188 (N<sub>Iran</sub>=103, N<sub>Iraq</sub>=85)

Figure 3 presents a comparison of the average support received by retired Iranian and Iraqi athletes during retirement. As observed, the mean support received by retired Iraqi athletes from sports psychologists, the National Olympic Committee, coaches, teammates, and other family members during retirement has significantly exceeded that of retired Iranian athletes.

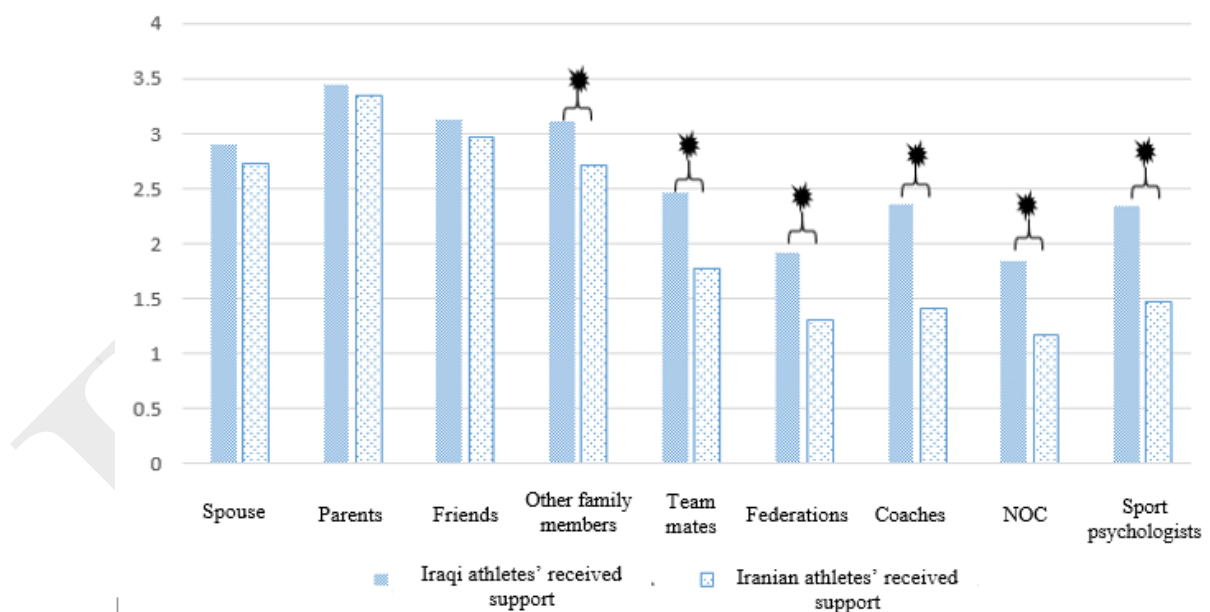


Figure 3. Comparison of mean received support between retired Iranian and Iraqi athletes

To compare the satisfaction levels of retired athletes from the two countries during retirement, the Mann-Whitney U test was employed (Hypothesis 5). The results of this test indicate a significant difference in the satisfaction of retired Iranian and Iraqi athletes during retirement, with retired Iranian athletes expressing higher satisfaction with their retirement period (Table 11).

Table 11. Mann-Whitney U test results to compare the retirement satisfaction between retired Iranian and Iraqi athletes

Component	Nationality	N	Average rates	Mann-Whitney U	Z	Significant level
<b>Retirement satisfaction</b>	<b>Iranian</b>	103	110.35	2745.000	-4.750	0.0001**
	<b>Iraqi</b>	85	75.29			

\*\*0.01 P< N<sub>total</sub>=188 (N<sub>Iran</sub>=103, N<sub>Iraq</sub>=85)

## Discussion and Conclusions

The aim of this research was to compare the retirement experiences of retired athletes from Iran and Iraq. The research results indicate a significant difference in the athletic career length between retired Iranian and Iraqi athletes, with the athletic career length of Iranians being longer than that of retired Iraqi athletes (Tables 2 and 3). These results are noteworthy from several perspectives. First, sports organizations and clubs strive to achieve better outcomes by recruiting talented athletes and enhancing their skills and capabilities. This may entail additional costs for sports clubs and the national sports system. A shorter athletic career duration can lead to increased expenses for clubs and sports organizations as they may not have sufficient time to obtain desired results from the athletes they recruit. Essentially, a shorter athletic career duration can result in wasted costs and energy for clubs and sports organizations, preventing them from achieving their desired outcomes. On the other hand, athletes may also suffer from this situation. Athletes engage and participate in sports from a young age and invest considerable time and energy in their athletic pursuits to reach professional levels. This dedication of time and resources can hinder athletes from acquiring additional skills and education necessary for alternative careers (Knights et al., 2019; Moore et al., 2022). Consequently, a shorter athletic career duration can impede athletes from earning sufficient income from sports and may leave them at a disadvantage.

Certainly, it is worth noting that various factors and multiple elements can contribute to the shorter duration of athletic careers. For instance, sports injuries can play a significant role in reducing the length of athletic careers. Sports injuries have been reported as a crucial factor leading to premature retirement from sports among athletes in different countries (Alfermann et al., 2004; Babic et al., 2019; Cooper et al., 2021; Hashemi et al., 2015; Du & Eva, 2007; Moore et al., 2022; Park et al., 2012; Taylor & Ogilvie, 1994). In fact, sports injuries can prompt early retirement and impose substantial costs on the healthcare and sports system of a country, as well as its sports clubs.

As mentioned in the preceding lines, the research results demonstrate a significant difference between the reasons for career termination among Iranian and Iraqi retired athletes (Hypothesis two). This finding aligns with previous studies (Alfermann et al., 2004; Moosavi, 2014; N. Stambulova et al., 2007; Taylor & Ogilvie, 1994). A review of the research background indicates that the reasons for career termination vary across different countries. Moreover, these reasons can differ even within various provinces of a single country due to factors such as the sporting structure, gender, specific sports disciplines, and more (Hashemi et al., 2015; Moosavi, 2014).

The results of the current research indicate a significant difference between retired Iranian and Iraqi athletes in the main reasons cited for sports career termination, such as aging, injuries, finding and engaging in a new job. Iraqi athletes significantly retired more due to injuries and aging compared to Iranian athletes, while Iranian athletes significantly retired more due to finding a new job compared to Iraqi athletes. Earlier discussions touched upon the topic of injuries. It's noteworthy to add that sports-related injuries can play a significant and influential role in the quality of the retirement period and the problems retired athletes experience (Filbay et al., 2019; Moore et al., 2022). Sports injuries may impact an individual's ability to find a new job after retirement, hinder their capability to perform daily activities, and contribute to emotional and psychological issues for the retired individual (Shahlaee Bagheri et al., 2021).

Aging was another main reason for Iraqi athletes to retire from sports more significantly than Iranian athletes. The competitive nature of sports dictates that athletes experiencing aging and a decline in their physical abilities are unable to compete with younger athletes. Therefore, they are forced to retire from sports or continue their athletic endeavors at lower competition levels. However, this phenomenon varies across different sports disciplines. In some sports like gymnastics, swimming, wrestling, and similar ones, athletes retire at younger ages. In contrast, sports requiring less physical ability (or perhaps more skill proficiency) might see retirement at older ages. It could be argued that Iraq has not developed its champion and professional sports infrastructure to the extent of Iran, making competition for athletes somewhat easier. Alternatively, the smaller number of professional athletes allows individuals to compete at higher ages.

Another finding of the research was that Iranian athletes significantly more than Iraqi athletes retire from sports due to finding new job. Descriptive findings further indicated that Iranian athletes, post-retirement, are more involved in sports as coaches, managers, leaders, etc., compared to Iraqi athletes. 44.7% of retired Iranian athletes stated that they are actively engaged in sports as coaches, managers, referees, leaders, etc., after retirement, while only 24.7% of retired Iraqi athletes were involved in sports post-retirement. This suggests that Iraq's sports sector should pay more attention to this matter and make greater use of retired athletes who have accumulated experience and knowledge in the field of sports. This approach could contribute to the country's sports progression and success.

Perhaps the findings of this research can to some extent justify the differences in retirement problems between athletes from the two countries (Hypothesis Three), based on the reasons for career termination. The results of the third research hypothesis indicated a significant difference between the problems experienced by retired Iraqi and Iranian athletes during their retirement. Iraqi athletes, significantly, face more psycho-social and self-concept problems during retirement. Even though no significant difference was observed in health-related and job-related problems between athletes of the two countries, the averages of these problems were higher for retired Iraqi athletes. This issue is multifaceted, and as mentioned, one of the reasons for this could be related to the reasons for career termination.

Among the self-concept problems that athletes may grapple with during retirement, issues like diminished self-esteem and self-belief, reduced self-confidence, and fear of an uncertain future can be highlighted. Sports-related injuries can have negative effects on retired individuals, leading to self-concept and emotional challenges. Sports injuries may contribute to physical disabilities and body changes in retired athletes, impacting their self-esteem, joy, and satisfaction, potentially resulting in negative effects on their self-confidence. Hence, one could argue that a higher prevalence of self-concept problems among Iraqi athletes might be linked to a higher incidence of sports-related injuries. On the other hand, Iranian athletes, due to more available job opportunities in the sports sector and greater involvement in recommended occupations, may experience higher self-esteem, satisfaction, and subsequently encounter fewer self-concept problems. Regardless, it is essential to emphasize the need for increased attention to sports psychologists, particularly in Iraq, where this aspect has not been adequately addressed, with hopes that psychologists will play a more significant role in the sports domain in both countries in the near future.

Additionally, the higher average job-related problems among Iraqi athletes may be influenced by the economic structure and the crisis situation in Iraq. Due to recent crises, including the presence of ISIS, conflicts between the central government and the Kurdistan Region, and similar issues, Iraq has yet to achieve relative stability. In various economic and occupational aspects, the country may have struggled to provide a favorable situation for retired athletes. Moreover, another finding of the research indicated that the job-related skills and competencies of retired Iraqi athletes were comparatively lower than those of Iranian athletes. This factor could contribute to the increased job-related problems faced by Iraqi athletes. Therefore, it is crucial for officials to prioritize occupational planning for athletes, as these individuals invest significant time and energy in their sports careers, often lacking the opportunity to acquire skills in other job sectors. Post-retirement, many athletes commonly encounter job-related issues and challenges. Studies suggest that there has been considerable negligence in career planning for athletes in Middle Eastern countries. Therefore, both sports organizations, especially in Iraq, are advised to engage career specialists and consultants to assist retired athletes and work towards resolving their problems effectively.

Athletes should be aware that not only do they lose their primary source of income upon retirement from sports, but they might also face challenges securing their desired job or utilizing their skills for an extended period after retirement. Therefore, it is crucial for athletes to engage in necessary planning throughout their sports careers and seek economic advice to make informed decisions. This proactive approach will enable them to make purposeful and valuable investments, ensuring they can benefit from these investments during retirement.

It should be noted that the sports profession in Iraq is relatively nascent compared to Iran, and consequently, the issues and problems faced by retired athletes are new and may not have

received the necessary attention from national authorities and sports officials. This lack of attention could be another reason for the higher level of problems experienced by Iraqi athletes compared to their Iranian counterparts.

The research also revealed a significant difference between the received support and the expected support of retired Iraqi athletes, as well as between the received support and the expected support of retired Iranian athletes (Hypothesis 4). This finding aligns with previous research (Hemmatinezhad et al., 2013; Moemeni et al., 2022). Researchers like Rohrs-Cordes & Paule-Koba (2018) and Subijana et al. (2020), argue that the level of support received by retired athletes is a significant factor influencing successful adaptation to retirement. They report that a higher level of received support is likely to lead to better and easier adaptation to retirement, resulting in fewer problems for athletes (Rohrs-Cordes & Paule-Koba, 2018; Subijana et al., 2020). Therefore, support can be considered a crucial factor for athletes during the retirement course. Support can be provided in various forms by organizations and individuals. Sports organizations can offer programs such as financial, educational, and occupational support to assist retired athletes effectively. This way, retired athletes will experience fewer problems and will adjust to retirement more easily.

The significant difference between the received and expected support of retired athletes in Iran and Iraq indicates that retired athletes expected relatively high support from individuals and organizations (sports organizations, coaches, and sports psychologists), while the reported level of received support was significantly lower. This underscores the need for increased attention from sports authorities and planners in both Iran and Iraq. As mentioned earlier, retired athletes who receive less support during retirement are more likely to experience various social, economic, psychological, and physical problems (Rohrs-Cordes & Paule-Koba, 2018; Stoltenburg et al., 2011). Some research results suggest that lack of support and neglect of retired athletes can be a factor leading athletes towards substance abuse (Moemeni et al., 2022). This highlights the crucial role of support and attention to retired athletes.

In addition, it should be pointed out that support can play a significant role in adapting to retirement, and the lack of support for retired athletes, who have honored their country in sports for years and have striven to raise their country's flag, is a form of wasting human capital in society. Officials should pay as much attention to the reintegrating healthy individuals into society (which is the final stage of human resource management) as they do to recruiting and employing talented athletes. Therefore, officials should be responsive to the needs of retired athletes to the best of their ability. It is essential to recognize that the fate of retired athletes is like a mirror that reflects upon active athletes in the field of sports. If retired athletes face unfavorable conditions, active athletes may engage in sports with less enthusiasm because they might perceive a similar and undesirable future for themselves. Hence, supporting retired athletes will not only be fruitful for them but can also serve as a motivating factor for current athletes to compete with higher motivation and dedication.

Another finding of the research was that retired Iraqi athletes received more support from federations, sports psychologists, coaches, teammates, and the National Olympic Committee compared to retired Iranian athletes. Perhaps the larger number of retired Iranian athletes compared to retired Iraqi athletes could be one of the reasons for this situation, making it challenging for these organizations to support all retired Iranian athletes adequately. Nevertheless, it is evident that sports organizations in both Iran and Iraq have not satisfactorily provided support to retired athletes, and it is expected that officials pay increased attention to this matter.

The research findings indicate that retired Iranian athletes express higher satisfaction with their retirement course compared to retired Iraqi athletes (Hypothesis 5). The level of satisfaction during retirement is influenced by various factors. According to the Activity Theory, the more active retired athletes are during this period, the higher their satisfaction level will be. Descriptive findings from this study show that the average weekly physical activity of retired Iranian athletes ( $43.1 \pm 33.4$  hours) is higher than the average weekly physical activity of retired Iraqi athletes ( $42.2 \pm 62.3$  hours). Furthermore, the Mann-Whitney U test revealed a significant difference ( $Z = -3.63$ ,  $\text{Sig} = 0.0001$ ), indicating that the physical activity of retired Iranian athletes during the week is significantly higher than that of retired Iraqi athletes. Given the Activity Theory, one can expect that the higher physical activity of retired Iranian athletes contributes to their greater satisfaction



with the retirement course compared to retired Iraqi athletes. Additionally, other studies suggest that if athletes are somehow involved in sports-related roles (e.g., coaching, refereeing, management) after retirement, they are likely to have higher satisfaction with their post-retirement period. The current research findings support this, indicating that retired Iranian athletes are more engaged in sports-related occupations during retirement, suggesting a potential reason for their higher satisfaction compared to retired Iraqi athletes.

Indeed, the health, both physical and mental, of retired athletes can significantly impact their satisfaction with the retirement course. Given that retired Iraqi athletes reported a significantly higher rate of retirement due to sports-related injuries compared to Iranian athletes, and the average health-related issues were higher among Iraqi athletes, it is reasonable to expect that the satisfaction of Iranian athletes with their retirement course is higher than that of Iraqi athletes. Health plays a crucial role in shaping the overall experience of retirement, and these differences in health-related problems may contribute to variations in satisfaction levels between the two groups of retired athletes.

Absolutely, addressing the problems and challenges that retired athletes face during their retirement course is crucial for enhancing their satisfaction (Hashemi et al., 2015; Taylor & Ogilvie, 1994). Since retired Iraqi athletes experienced more problems during retirement compared to Iranian athletes, it is expected that Iranian athletes would have higher satisfaction with their retirement period. The combination of factors, including health, activity levels, and the overall experience of retirement, may contribute to the observed differences in satisfaction levels between the two groups. Therefore, it is recommended for Iraqi sports authorities to focus on providing employment opportunities in sports-related fields, establishing appropriate healthcare systems for treating sports-related injuries during retirement, and addressing the overall problems faced by retired athletes to enhance their satisfaction.

Indeed, like any other research, this study faced certain limitations. For instance, variations in educational levels and individual perceptions could lead to different interpretations of the questionnaire, and to mitigate this, the researcher provided necessary explanations to the respondents to ensure clarity in answering the questions. Additionally, due to a lack of previous research in Iraq, there was no opportunity for comparing and analyzing findings with prior studies. The absence of a centralized source or database containing information about retired athletes from Iran and Iraq prevented random sampling, and snowball sampling was employed. Although the researcher attempted to diversify the initial samples to reduce potential bias in selecting subsequent samples, caution must be exercised when generalizing the research findings.

In the realm of research, particularly in the nascent field of sport retirement research in Iraq, it is imperative for scholars to employ quantitative, qualitative, and mixed research methodologies to thoroughly investigate various facets of this phenomenon. By identifying the impacts of this phenomenon, researchers can propose effective strategies for enhancing the quality of life for retired athletes. Furthermore, given that existing research, both foreign and domestic, predominantly falls within the categories of cross-sectional and quantitative studies, researchers are advised to conduct qualitative and longitudinal studies over time to gain a deeper understanding of this phenomenon. Considering that both Iranian and Iraqi athlete groups have reported encountering problems during their retirement periods, researchers should undertake the design and implementation of interventions tailored to retired athletes, assessing their effectiveness through rigorous examination.

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### **Author Contributions**

First author: Conceptualization; Writing, review, and editing; Data analysis.

Second author: Data gathering; Data analysis; Writing manuscript.

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## Conflicts of Interest

The authors declare no conflict of interest.

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