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Sources of Anxiety among Physical Fitness Coaches in Jordan

Ahmad Abed Alwahab Akour[1], Mohammed Akour[2]

Abstract

The purpose of the study is to determine the sources of anxiety among physical fitness coaches in Jordan, as well as to identify the difference in sources of anxiety according to study variables (gender, experience years, specialization). The study sample was comprised of (122) male and female coach, out of (130) coach in Jordan. The researcher used the descriptive approach as a survey by applying the questionnaire to the sample to obtain the necessary data, and after conducting the necessary statistical treatments, the results indicated that the degree of anxiety among physical fitness coaches was of a medium degree and their sources of anxiety were ordered as following (The field of self- threat, colleagues, (capabilities and facilities) and (ambiguity and unknown), and finally social assessment). The results also indicated that there were no statistically significant differences according to the study variables (gender, experience years, and specialization). The researcher believes that there are many sources of anxiety facing physical fitness coaches during their job in many fields, therefore the researcher believes that it is necessary to highlight the category of physical fitness coaches and work to improve their living conditions and hold workshops that develop their self-confidence and alleviate the sources of anxiety they are exposed to.

Keywords: *Sources Of Anxiety, Physical Fitness Coaches, Sport.*

Introduction

Physical fitness one of the most important and popular element in all sports, physical fitness requires active movements of the arms, legs, and torso to travel it and improve human efficiency in terms of physical, skill, psychological, social, and mental aspects (Rizq, 2003).

All sports are based on physical fitness, and learning how to act is a necessity for everyone, as well as a compulsory requirement for students at the College of Physical Education and Sports Sciences. It is a popular way to improve human motor development (Abed and Muhammad, 2019). (Hussein and Ahmed, 2000). Recent research by Divsalar et al. (2023) examined the effects of a 10-day taper on adolescent swimmers, revealing performance gains in 200m crawl and improved metabolic markers, supporting the principle that structured short-term interventions can enhance physiological responses relevant to aquatic performance.

Furthermore, Asghar et al. (2024) investigated the electro-fluid-dynamics of soft-bodied swimmers in non-Newtonian mucus environments, offering theoretical insights into propulsion efficiency that align with training approaches focusing on speed and biomechanics in aquatic contexts.

[1] Department of Coaching and Sport Management, Faculty of Physical Education and Sport Sciences, The Hashemite University, Zarqa, Jordan, Email: ahmadakour_1@yahoo.com
[2] College of Computer and Information Sciences, Prince Sultan University, Riyadh 12435, Email: makour@psu.edu.sa

Abdul Moneim (2009) and Ackley (2012) reveal that physical fitness is one of the elements in sports that is preferred during the early stages of childhood, where a child learns it with enthusiasm and perseverance. The role of a successful coach is to motivate students, increase their motivation to learn motor skills for physical fitness, as well as keeping the learners away from situations that might bring up fears related to physical fitness.

Moran (2011) states that major problem physical fitness coaches face when teaching beginners is the fear of injury, because many of the cases where physical fitness skills were not acquired were due to the fear of play that arose from watching a movie or reading a book about an exposure to court. The fear of injury in sport is an important issue for players, as psychologists have indicated that the best thing to do for that type of fear is to gradually expose the source of fear until the negative experience is positively reversed again, as confronting the source of fear gradually builds awareness of negative attitudes.

According to Muhammad (2004), one of the most important psychological phenomena in sports is anxiety, which manifests itself as an unpleasant emotional state. Anxiety affects

athletes' performance and coaches and reduces their ability to perform motor skills in an optimal manner, which results in poor performance and lack of skills mastery.

The psychological component plays an important role in physical fitness, the sources of anxiety can be diverse such as fear of water, fear of drowning, and negative experiences that accompany the individual since childhood all negatively affect the process of learning to swim and acquiring special skills in the activity (Rizq, 2003).

Taking care of the psychological aspect is also one of the important and necessary factors in the process of learning to swim. It is better for instructors of physical fitness to focus on the psychological aspect, which is an obstacle in the process of learning physical fitness skills, especially when the learner feels that the tasks required of him exceed his abilities and involve the risk of injury or suffocation in the court (Abed and Mohammed, 2019). (Stallman, 2008) The sources of anxiety among coaches of physical fitness are various in terms of level and type, which may be resulting from negative previous experiences, which formed a negative reaction from the sport of physical fitness, and this is reflected negatively on the individual's ability to perform proficiently of physical fitness. Al-Qaisi defined anxiety as a trait that leads to a feeling of fear and hesitation and changes from time to time and has multiple levels, as the individual considers it a threat to his performance (Al-Qaisi, 2015) (Rababa'a, 2013). (Brais, 2013).

Through the researchers' experience in physical fitness courses, they noticed that there are many sources of anxiety facing physical fitness coaches during their job in many fields, The researchers believe that the reason behind this may be the self-threat, or colleagues, or social assessment or other reasons, as a result, the researchers conducted this research to identify the sources of anxiety among physical fitness coaches in Jordan.

Questions of the Study:

- What are the sources of anxiety among physical fitness coaches?

- Are there statistically significant differences at the significance level ($\alpha = 0.05$) on the sources of anxiety according to the study variables (gender, experience years, specialization)?

Materials & Methods

Methodology: The researchers used the descriptive approach in its survey form on the study sample due to its relevance to the nature and objectives of the study.

Community or population: The study population consisted of physical fitness coaches in amman / jordan (N=130).

Sample: The study sample consisted of (122) male and female coach The following table shows the distribution of the sample members according to the study variables.

variable	level	No.	percentage
gender	Male	84	68.9 %
	Female	38	31.1 %
Total		122	100 %
experience years	Less than 1 year	13	10.7 %
	1 - 3	50	41 %
	3 – 5	45	36.9 %
	Mor than 5 years	14	11.5 %
Total		122	100 %
specialization	physical education	82	67.2 %

Table 1. Distribution of Study Sample Members According to Study Variables

Study tool: The questionnaire was used to collect the responses of the study sample to recognize the sources of anxiety among physical fitness coaches, according to the following:

Questionnaire: After referring to the previous literature that dealt with sources of anxiety, such as the studies of (Al-Wodyan, 2004) and (Al-Qaisi, 2015) and stating what is intended to be measured in this study, the researchers built the questionnaire in its initial form consisting of

(45) items.

Validity of the tool: the questionnaire was presented to a group of arbitrators specialized in psychology and physical education, who recommended that some phrases to be deleted and others to be modified, so that the questionnaire in its final form consisted of (40) paragraphs distributed over the fields of study (self-threat, colleagues, capabilities and facilities, ambiguity, and the unknown, social assessment). The response to the questionnaire was according to the five-point Likert scale.

Reliability of the tool: The reliability of the tool was verified by using Cronbach's alpha equation to calculate the internal consistency coefficient, and the results were as in the tables (2).

FIELD	**NO OF ITEMS**	**CRONBACH'S COEFFICIENT**
self-threat	11	0.933
Colleagues	8	0.789
capabilities and facilities	6	0.661
ambiguity and the unknown	7	0.834
social assessment	8	0.725
Sources of anxiety in general	40	0.755

Table 2. Reliability Coefficients of the Scale

It is clear from the presentation of Table (2) that the reliability coefficient of the sources of anxiety in general was (0.755), which is an acceptable value indicating the reliability of the scale items in the individual domains and the scale.

Results

Results related to the first question: What are the sources of anxiety among physical fitness coaches?

To answer this question, the averages (means) and standard deviations of the responses of coaches were calculated for each individual field and for the entire fields as shown in Table (3).

order	Source of anxiety	No.	M	SD	Degree of Agreement
1	self-threat	1	4.09	0.58	High
3	Colleagues	2	2.95	0.57	Medium
2	capabilities and facilities	3	2.79	0.59	Medium
4	ambiguity and the unknown	4	2.79	0.74	Medium
5	social assessment	5	1.71	0.46	Low
	Sources of anxiety in general		2.96	0.25	Medium

Table 3. Means And Standard Deviations of the Sources of Anxiety Among Physical Fitness Coaches in Descending Order.

Concerning individual domains: The first field: self-threat: the means and standard deviations

were calculated for all paragraphs of the domain, as shown in Table (4):

Item No.	Rank	Item	M	SD	D. of agreement
1	9	I feel suffocated when I play sport	4.32	0.47	High
2	11	I'm afraid of when I'm playing	4.28	0.61	High
3	10	I'm afraid of infectious diseases	4.16	0.55	High
4	2	I am afraid of walking in water if it is higher than chest level	4.08	0.58	High
5	7	I get worried when I get close to the deep area of the pool	4.07	0.79	High
6	1	I think I can't breathe while physical fitness	4.07	0.81	High
7	4	I get so scared when I try to float on my back	4.06	0.79	High
8	6	My hands and face get sweaty when I am coaching	4.04	0.78	High
9	8	I'm afraid of drowning in the pool	4.03	0.76	High
10	5	I feel very nervous, even if the water is a little deep	3.98	0.74	High
11	3	I hesitate to float on my belly in shallow water	3.93	0.70	High
		Total	4.09	0.58	High

Table 4. Descending Means, Standard Deviation, And Degree of Agreement for The Items in the Self-Threat Domain in Descending Order

The second field: The capabilities and facilities:

Item No.	Rank	Item	M	SD	D. of agreement

1	8	I feel worried when I did not use visual teaching aids to help learn physical fitness skills	2.98	0.64	medium
2	1	I feel anxious when there are not enough safety and security factors in the pool	2.94	0.82	medium
3	2	I feel anxious when the lifeguard is not in the pool during physical fitness lessons	2.89	0.70	medium
4	4	I am worried about using inappropriate training aids	2.85	0.87	medium
5	3	I am concerned that there is no first aid room in the pool	2.84	0.87	medium
6	5	The lack of sanitation facilities in the physical fitness pool worries me	2.80	0.81	medium
7	7	Not having enough time to train increases my fear of physical fitness	2.71	0.60	medium
8	6	I feel a lack of concern about the general cleanliness in the pool which makes me anxious in the pool	2.30	0.89	medium

Table 5. Means In Descending Order, Standard Deviations, and Degree of Agreement.

The Third field: colleagues Domain: the means and standard deviations were calculated for all the paragraphs of the domain, as shown in Table (6):

Item No.	Rank	Item	M	SD	D. of agreement
1	1	I worry about the close relationship that some colleagues have with the physical fitness instructor	3.48	0.91	medium
2	2	My anxiety increases when I hear about a colleague failing	3.07	0.63	medium
3	4	It worries me to hear some negative comments from colleagues during the physical fitness lecture	2.93	1.05	medium
4	6	I get worried when my colleagues watch me in the lecture,	2.92	1.08	medium

5	3	I am concerned about the poor communication and social relations among colleagues enrolled in physical fitness courses	2.77	1.10	medium
6	5	I am concerned that there are individual differences between colleagues	2.55	1.16	medium
Total			2.95	0.57	medium

Table 6. Means in Descending Order, Standard Deviations, and Degree of Agreement.

The Fourth field: Ambiguity and Unknown: the means and standard deviations were calculated for all paragraphs of the field, as shown in Table (7):

Item No.	Rank	Item	M	SD	agreement
1	7	I don't feel secure when I enter the pool	3.19	1.24	medium
2	1	I can't imagine getting into the water that I can't see its bottom	3.09	1.09	medium
3	2	I have ambiguous thoughts when I enter the pool	2.90	1.13	medium
4	3	The view of the water surface and its depth increases my fear	2.70	0.92	medium
5	4	I feel something unnatural during physical fitness lessons	2.66	1.05	medium
6	5	I feel like something is pulling me down while physical fitness	2.58	0.79	medium
7	6	I'm afraid of the unknown when I try to put my face in water	2.43	0.85	medium
		Total	2.79	0.74	medium

Table 7. Means In Descending Order, Standard Deviations, and Degree of Agreement for the Items of the Fourth Domain (Ambiguity and the Unknown)

The Fifth field: Social assessment: the means and standard deviations were calculated for all paragraphs of the field, as shown in Table (8):

Item No.	Rank	Item	M	SD	D. of agreement
1	1	I'm afraid of physical fitness because my parents don't encourage me to be a	2.37	1.28	low

		coach			
2	2	I am afraid of physical fitness because my brother/sister is afraid to learn	1.98	0.87	low
		physical fitness			
3	3	I do not feel that coaching physical fitness is necessary in our society	1.81	0.79	low
4	4	Severe warnings from parents during childhood increased my fear of water	1.76	0.77	low
5	8	Society has a great role in increasing my fear of coaching physical fitness	1.50	0.52	low
6	5	I am afraid of coaching physical fitness because one of my relatives drowned	1.49	0.52	low
		in water			
7	6	when I was chilled, we were always prevented from approaching water	1.40	0.53	low
8	7	I do not want to be physical fitness coach because of the required dress code	1.39	0.52	low
Total			1.71	0.46	low

Table 8. Means In Descending Order, Standard Deviations, and the Degree of Agreement.

Results related to the second question: Is there a statistically significant difference at the significance level ($\alpha = 0.05$) between the means of the sources of anxiety among physical fitness coaches due to the following variables: (gender, experience, and specialization)? as shown in table (9):

Variable	Level	N	M	SD
Gender	Male	84	2.95	0.26
	Female	38	2.98	0.23
	Less than 1 year	13	2.95	0.29
Experience	1 - 3	50	2.97	0.26
	3 – 5	45	2.93	0.23
	Mor than 5 years	14	3.03	0.23

Specialization	Physical education	82	2.96	0.26
	others	40	2.95	0.22
	Total	122	2.96	0.25

Table 9. Means And Standard Deviations of The Sources of Anxiety According to the Study Variables.

According to the research variables, as shown in the previous table, there are noticeable differences in the means of the sources of anxiety. Table (10) shows the results of a threefold variance analysis of the responses.

Source of variance	sum of squares	degrees of freedom	mean of squares	F	significance level
Gender	0.035	1.00	0.04	0.55	0.46
experience	0.109	3.00	0.04	0.57	0.64
specialization	0.001	1.00	0.001	0.02	0.89
error	7.42	116.00	0.06		
total	7.561	121.00			

Table 10. Three-Way ANOVA Of the Sources of Anxiety According to the Research Variables

The results of Table (10) indicate that there are no statistically significant differences at the level ($\alpha = 0.05$) in the means of the sources of anxiety, according to the study variables,

based on the calculated p-values (0.55, 0.57, 0.02), respectively, and with a significance level of (0.46, 0.64, 0.89), respectively.

To find out whether there are differences in the domains of the scale regarding the study variables, the means and standard deviations were calculated, according to those variables, as shown in Table (11):

Variable	Level	Statically	D1	D2	D3	D4	D5
	Male	N	84	84	84	84	84

		M	4.07	2.78	2.94	2.80	1.70
Gender		SD	0.58	0.60	0.557	0.75	0.47
	Female	N	38	38	38	38	38
		M	4.15	2.81	2.97	2.77	1.74
		SD	0.58	0.57	0.61	0.73	0.46
	Less than 1 year	N	13	13	13	13	13
		M	3.94	2.94	2.68	2.98	1.79
		SD	0.57	0.56	0.49	0.63	0.49
Experience		N	50	50	50	50	50
	1 - 3	M	4.16	2.72	3.06	2.79	1.67
		SD	0.62	0.62	0.54	0.78	0.48
		N	45	45	45	45	45
	3 - 5	M	4.02	2.72	2.94	2.83	1.73
		SD	0.55	0.53	0.59	0.72	0.47
		N	14	14	14	14	14
Mor than 5 years		M	4.25	3.15	2.89	2.51	1.77
		SD	0.52	0.57	0.64	0.74	0.41
		N	82	82	82	82	82
	Physical education	M	4.10	2.80	2.93	2.83	1.71
Specialization		SD	0.59	0.59	0.56	0.74	0.48

		N	40	40	40	40	40
	others	M	4.09	2.78	3.01	2.73	1.71
		SD	0.56	0.60	0.60	0.73	0.45
Total		N	122	122	122	122	122
		M	4.09	4.09	2.95	2.79	1.71
		SD	0.58	0.58	0.57	0.74	0.46

Table 11. Means of the Sources of Anxiety Among Physical Fitness Coaching

(D1: Self-threatening, D2: Potentials and facilities, D3: colleagues, D4: Ambiguity and the unknown, D5: Social assessment)

Table (11) indicates that there are apparent differences between the means of the fields of sources of anxiety among physical fitness coaching, according to the study variables (gender, experience, and specialization). Multiple Analysis of Variance (MANOVA) was conducted for the responses of the sample; Table (12) presents the results.

Source of variance	Fields	sum of squares	degrees of freedom	mean of squares	F	significance level
	D1	0.28	1	0.28	0.84	0.36
	D2	0.00	1	0.00	0.01	0.93
Gender	D3	0.11	1	0.11	0.34	0.56
HOTELLING'S TRACE VALUE: 0. 008 SIG. 0.969	D4	0.06	1	0.06	0.11	0.74
	D5					
		0.01	1	0.01	0.06	0.81
	D1	1.19	3	0.40	1.17	0.33
Experience WILKS' LAMBDA VALUE: 0.870	D2	2.65	3	0.89	2.62	0.054

SIG. 0.383						
	D3	1.53	3	0.51	1.57	0.20
	D4	1.75	3	0.58	1.06	0.37
	D5	0.21	3	0.07	0.31	0.82
	D1	0.00	1	0.00	0.01	0.94
Specialization HOTELLING'S TRACE VALUE: 0.012 SIG. 0.927	D2	0.04	1	0.04	0.11	0.74
	D3	0.06	1	0.06	0.17	0.68
	D4	0.37	1	0.37	0.68	0.41
	D5	0.00	1	0.00	0.01	0.92
	D1	39.48	116	0.34		
	D2	39.24	116	0.34		
Error	D3	37.78	116	0.33		
	D4	63.92	116	0.55		
	D5	25.90	116	0.22		
	D1	40.83	121			
	D2	41.92	121			
Total	D3	39.52	121			
	D4	65.96	121			
	D5	26.15	121			

Table 12. Multiple Analysis MANOVA of the Sources of Anxiety

(D1: Self-threatening, D2: Potentials and facilities, D3: colleagues, D4: Ambiguity and the unknown, D5: Social assessment)

Discussion

It is clear from Table (3) the level of anxiety in general is medium. The mean of the responses of the study sample members was (2.96) and with a standard deviation (0.25). The researchers attribute this result to the nature of physical fitness, which are practiced in a completely different environment from what the students are accustomed to in terms of the water medium and the horizontal position of the body, and this is what constitutes a danger and threat to their lives and negatively affects the speed of their learning of physical fitness skills, as (Muhammad & Abed 2019, Brais, 2013) indicated that fear of water affects students' learning of physical fitness skills, The result of this study is with agreement with the studies of (Al-Qaisi, 2015; Al-Wodyan, 2004).

from Table (4) the mean of the items in the domain of self-threatening as a whole was (4.09), with a standard deviation of (0.58), with a high degree of agreement, The researchers attribute this result by referring to the questionnaire's paragraphs related to this field, where the coaches feels suffocated when his head is immersed in water, even if the water level is low, which increases his fear for his life and makes him feel unsafe during the practice of physical fitness activity, which affects the student's response to this area and the degree of his anxiety of the water is high, which affects the student's response to this area and the degree of his anxiety of the water is high. This result agrees with the results of (Mohammed and Abed, 2019; Brais,

2013; Al Qaisi, 2015; and Al Wodyan, 2004).

from Table (5) the mean of the items in the field of capabilities and facilities as a whole was (2.79) with a standard deviation of (0.59), with a medium degree of agreement, The researchers attribute this result to the health conditions required by physical fitness lectures related to capabilities and facilities and related to providing security and safety factors during the physical fitness lectures so that students feel safe during the application of the skills required of them, as indicated by Abdul Moneim et al (2009). This result agrees with the study of (Al-Qaisi, 2015).

Regarding to Table (6) the mean of the paragraphs of the domain of students was (2.95) with a standard deviation of (0.57), with a medium degree of agreement, and the means of the paragraphs of the field ranged between (2.55-3.48), all the paragraphs were of medium degree of agreement. The researchers attribute this result to the coaches feeling of mistrust and anxiety resulting from the close relationship between the teacher and some students in physical fitness courses, which negatively affects the credibility of the assessment that students obtain and the degree they obtain in the tests. Individual differences among coaches are one of the factors that affect the degree of anxiety about physical fitness courses to a small degree, according to the coaches belief.

Based on Table (7) the mean of the paragraphs of the domain of ambiguity and unknown was (2.79) with a standard deviation of (0.74), with a medium degree of agreement. The researchers attribute this result to the students' increased anxiety about physical fitness due to their feeling of insecurity when placing their head in the water in which they cannot see the bottom, or even once they enter the physical fitness pool, which affects the degree of their performance and their ability in the lecture. This agrees with the studies of (Mohammad and Abed, 2019; Brais, 2013; Al-Qaisi, 2015; and Al-Wodyan, 2004).

It is clear from Table (8) that the mean of the items in the field of social assessment as a whole was (1.71) with a standard deviation (0.46), with a low degree of agreement, and the arithmetic averages of the domain items ranged between (1.39-2.37), and the degree of agreement of all the paragraphs of the domain was low. The researchers attribute this result to the fear of water arising from the negative experiences that coaches obtained, whether from parents or teachers, during school trips that they undertook in childhood.

The results related to the second question shown as in table (12), that there are no statistically significant differences at the level ($\alpha = 0.05$) in all fields of sources of anxiety among physical fitness coaches, according to the study variables (gender, experience, and specialization). based on the calculated p-values, with a significance level greater than (0.05) for all of them. The researchers attribute this result to the fact that all students were exposed to the same conditions and received the same education during physical fitness courses, regardless of gender or academic level, so their results were in agreement and their responses to the study tool were the similar, which indicates that there are no statistically significant differences between the coaches responses to the tool of the study and between the variables under study (gender and educational level). This agrees with the studies of (Al-Qaisi, 2015 and Al-Wodyan, 2004), while the results are in contradiction with the results of (Brais, 2013 and Abed and Muhammad, 2019).

Conclusions

After presenting and discussing the results, the researchers conclude the following:

- The level of anxiety among physical fitness coaches in general is average.

-The field of self-threat got the highest arithmetic average, and the colleagues field came second, and thirdly came the fields of potentials and facilities, Ambiguity and the unknown, and finally the field of social assessment.

The researchers recommend generalizing the results of this study to the workers in the field of physical fitness coaching and training to find out the sources of anxiety and fear of water and try to avoid them during physical fitness lectures. The researchers also recommend conducting more studies to find out the sources of anxiety among coaches in general.

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