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## The Psychological Reluctance Among Female Students when Performing Belly Crawl Swimming in Deep Areas

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### **Abstract**

*The study aimed to identify the psychological reluctance among female students in swimming courses when performing belly crawl swimming in deep areas at the Hashemite University. The study was conducted in the first semester of the 2022/2023 academic year. The descriptive approach was used, the sample of the study consisted of (88) female students of Physical Education and Sports Sciences enrolled in the Swimming Course at the Hashemite University. scales were used (Psychological reluctance, Professional competence of the trainer, General security and safety factors). The results of the study revealed that there was a medium level of psychological reluctance among the study sample when performing the skills of belly-crawling in swimming courses. Additionally, the study found an inverse relationship between psychological reluctance and professional competence. The results indicate that the Hashemite University swimming pools have a high level of security and public safety factors, and that psychological reluctance is inversely related to health and security factors, and also indicated that factors of security and public safety and trainer competence are directly related. The researchers recommended the need for calmness and the need to avoid creating chaos in the pool in order to reduce the level of stress and reluctance among the students, and taking into consideration the continuous examinations of the suitability of the pool water concerning the level of chlorine and the appropriate temperature.*

**Keywords:** belly-crawl swimming, psychological reluctance, swimming, performance, deep areas.

### **Introduction**

Psychological hesitancy is one of the psychological issues that students in general and swimming practitioners in particular deal with. This is because psychological hesitancy is thought to be a significant factor that directly affects swimming performance, which requires the student to make a decision quickly and perform at a high level of accuracy, calmness, and focus. Therefore, one of the crucial research projects in the field of sports psychology to ascertain the connection between skilled performance in swimming and psychological stress is the study of psychological reluctance as a state connected with performance (Nour, 2004).

Due to the fact that good psychological preparation helps an individual overcome many conflicts, emotions, and psychological crises that they encounter in everyday life, psychological

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reluctance is regarded as one of the crucial psychological traits that play a crucial and effective role in controlling high athletic achievement. It is also one of the fundamental components in learning motor skills in the sports context. Particularly in the sporting realm, where participants can develop abilities and thrive in a competitive environment (Rutkowska & Bergier, 2015).

Sports education experts' interest in sports psychology in general has grown as a result of recent psychological investigations. Many of the well-known mental diseases, as well as sports failures and poor sporting results, are caused by a variety of psychological elements and reasons, according to contemporary psychological research and studies. Swimming is one of the sports that can be challenging for beginners to learn because of the different environment that the watery medium represents, which can frighten and discourage newcomers, as well as some of its skills, like the ability to crawl on one's belly in a deep area, which can be challenging to learn. Although mastering swimming well in the shallow area in advance because of what it requires of self-confidence, willpower and courage (Jawad, 2008).

The skill of belly-crawling swimming in the deep area can be considered as one of the basic stages of teaching swimming skills, which is among the skills that enhance self-confidence and courage and strengthen the will and daring of the individual, many practitioners are exposed to difficulties and challenges while performing this, due to the skills it requires that must be available, among those challenges are reluctance and fear (Hussein, & Ahmed, 2000), (Al-Ayyash, 1989).

Several factors must be available in teaching swimming and training young swimmers, such as good food, a water basin or a swimming pool, self-confidence in the young swimmer, swimming teacher and coach (Alwan, 2008).

According to Al-Taleb and Lewis (2000), psychological resistance is the root of many sporting failures, and this reluctance might have both internal and external causes. The individual must constantly assert himself, and this assertion results from the positive experiences he has, which boost his self-confidence. However, building self-confidence is difficult because it depends on a positive psychological state of mind, which is what drives the individual's optimism and effort to reach the desired level.

One of the most crucial elements in improving an athlete's performance is good preparation for young athletes. This is dependent on a variety of human, intellectual, psychological, and material factors, as well as the availability of resources like sports facilities, the coach's experience and expertise in the area of specialization, and the type of training program the coach uses to develop the future generation of sports stars. Research and experiences from advanced countries in this area revealed that the psychological and physiological development of young swimmers is seriously endangered by severe instruction, which frustrates and discourages them from engaging in the sport (Mazari, 2013).

From this viewpoint, the objective of this study was to shed light on the psychological reluctance that Hashemite University students experienced when performing the belly-crawling swimming skill in a deep area during swimming lessons, to stand on the psychological, social, security, and safety factors, to show the relationship among the degree of psychological reluctance and the trainer's professional competence.

The significance of this study comes from the fact that it is one of the first investigations on students' psychological reluctance to perform belly-crawling swimming skills in the deep area during swimming classes at the Arab level, to the researchers' knowledge. Given a shortage

of studies in this area, the researchers are hopeful that the current study will open up fresh opportunities for researchers and scholars to conduct additional research regarding the challenges that coaches and trainees encounter during swimming practice, as well as to conduct training programs to sharpen the coach's skills to develop the performance of swimming practitioners and to identify strengths and weaknesses that they may have and enhance them.

Because one of the activities that has a lot of challenges is swimming in the water. Some swimming techniques, notably the ability to crawl on one's belly in a deep area, present difficulties for students to practice at the Hashemite University pool. In order for female students to excel at this talent, they must possess a variety of psychological traits. Researchers in this subject have observed that female students who participate in this activity exhibit negative traits like reluctance, dread, anxiety, and, in the worst cases, fainting. Therefore, the researchers considered, from this standpoint, the need to identify the reasons for psychological reluctance to go to the deep area and perform the skills of crawling on the belly there during the swimming course, and the role of the professional competence of the trainer in mitigating it, and dealing with it in the right way, based on sports psychology programs. The problem of the study was also identified by seeking to answer the following questions:

- 1- What is the level of psychological reluctance among female students of swimming courses when performing the skill of belly-crawling in the deep area?
- 2- Is there a relationship between the level of psychological reluctance among female students of swimming courses when performing the skill of belly-crawling in the deep area, the factors of general safety and security, and the professional competence of the trainer?
- 3- What is the level of availability of general security and safety factors in the Hashemite University swimming pool?
- 4- What is the level of professional competence of the trainer in swimming courses at the Hashemite University?

## **Objectives**

- 1- Identify the level of psychological reluctance among female students of swimming courses when performing the skill of belly-crawling in the deep area.
- 2- Identify the relationship between the level of psychological reluctance among female students of swimming courses when performing the skill of belly-crawling in the deep area, the factors of general safety and security, and the professional competence of the trainer.
- 3- Identify the level of availability of general security and safety factors in the Hashemite University swimming pool.
- 4- Identify the level of professional competence of the trainer in swimming courses at the Hashemite University.

## **Limitations**

This study was conducted on a sample of female Hashemite University students enrolled in swimming courses, in the first semester of the 2022/2023 academic year. The study was limited to addressing the issue of psychological reluctance among female students when performing the skill of belly-crawling swimming in the deep area.

## Methodology

The descriptive approach was used, the sample of the study consisted of (88) female students of Physical Education and Sports Sciences enrolled in the Swimming Course at the Hashemite University. The study sample was selected purposively. The study tool was presented to a group of arbitrators to ensure its validity and application, and the reliability coefficient was calculated for all areas of the study, and their total, on the total sample using the Cronbach Alpha method, table (1) illustrate it:

**Table (1).** The Reliability Coefficients of the Tool Using Cronbach Alpha Method (n = 88).

Scales	Cronbach alpha
Psychological reluctance	0.96
Professional competence of the trainer	0.87
General security and safety factors	0.84

Table (1) shows that Cronbach's alpha coefficient reached (0.96) for the total score of the psychological Reluctance scale, and (0.87) for Professional competence of the trainer, and (0.84) for general safety and security factors, which are high coefficients and indicate a high degree of stability and acceptable for the application of the study purposes.

The researchers used the five-point Likert scale to measure the opinions of the study sample and gave scores from (1-5) according to the degree of agreement for all items of the questionnaire, (5) means greatly agree, (4) agree, (3) moderately agree, (2) disagree and (1) strongly disagree. The following scale has been adopted to judge the arithmetic mean according to the following equation:  $(\text{highest value} - \text{lowest value}) / 3 = 1.33$ , which is the length of one level, and accordingly the five-point scale division is as follows: (Less than (2.33), is weak, between (2.34-3.66) average score, More than (3.66) high).

## Statistical Treatment

The following statistical methods were used:

The following statistical methods were used:

Means and standard deviations of the study sample's responses to the study's measures and the total mean for the measures.

Pearson correlation coefficient between the combined score and study measures.

## Results and Discussion

**Q1:** What is the level of psychological reluctance among female students of swimming courses when performing the skill of belly-crawling in the deep area? To answer this question, means and standard deviations were extracted for the paragraphs of the measure of the level of psychological reluctance, table (2) illustrate it:

**Table (2).** Means and Standard Deviations for the Psychological Reluctance Scale (n = 88).

No	Items	M	SD	Grade	Rank
1	I feel reluctant and afraid when approaching the deep area and the pool	2.45	1.00	moderate	8
2	I feel like I'm not brave enough to do the belly-crawling in the deep area of the pool.	2.28	0.96	Low	11
3	I feel low self-confidence when preparing to swim in the deep.	2.49	1.03	moderate	4
4	I am worried about drowning if I do the belly-crawling in the deep area	2.30	0.95	low	10
5	My will and strength weakened when approaching the profound region	1.73	0.70	low	12
6	I try to delay my turn doing the belly-crawling in the deep area	2.46	1.03	moderate	7
7	My previous negative experiences affected my daring to swim in the depths.	2.39	0.98	moderate	9
8	Having so many viewers makes me hesitate to perform the skill.	2.48	0.98	moderate	6
9	I dread the clamor and jeers from my classmates about the result of doing the deep belly crawling when I get ready to do it.	2.51	0.98	moderate	1
10	The experiences of other female students made me hesitate to perform the skill.	2.49	0.96	moderate	4
11	I don't get enough encouragement from my family to perform belly-crawling in the deep area.	2.51	0.98	moderate	1
12	My colleagues can't help ease my reluctance and anxiety about performing the belly-crawling in the deep area.	2.50	1.05	moderate	3
Total score for the psychological and social factors		2.38	0.83	moderate	

Table (2) shows the means and standard deviations for the area of psychological reluctance. Paragraph No. (9) and paragraph No. (11) ranked first, ( $M = 2.51$ ,  $SD = 0.98$ ) for both of them with a moderate degree, while Paragraph No. (5) ranked lastly, ( $M = 1.73$ ,  $SD = 0.70$ ) and with a low score, the mean of the scale as a whole was (2.38) with a standard deviation (0.83) and at a moderate degree. This result is due to the fact that the trainer, while training the students on the skill of belly-crawling in the deep area of swimming, relies on training programs in the field of sports psychology, and this is evident through most of the trainees having the courage, confidence and management to perform that skill. The trainer works with the students' psychological development first before going on to explain how to use the talent.

This result agrees with the result of (Lahqi & Sayd, 2019), whose results indicated that the program used led to a decrease in the degree of anxiety and an improvement in the level of performance in swimming among the students of the experimental group. While this result disagreed with the study of (Abu Al-Tayyib, 2020), whose results revealed that students of the first stage in the Faculty of Physical Education feel high degrees of psychological reluctance when performing the skill of crawl swimming on the belly in the deep area.

**Q2:** Is there a relationship between the level of psychological reluctance among female students of swimming courses when performing the skill of belly-crawling in the deep area, General security and safety factors, and the professional competence of the trainer? To answer the second question, Pearson correlation coefficient was calculated between the total score of the measure in two fields (general safety and security, and the professional competence of the trainer), table (3) illustrates it.

**Table (3).** Correlation Coefficient between the Total Score of the Measure of the Level of Psychological Reluctance Among Female Students and the Total Score of the Measure of the Level of General Security and Safety Factors, and Professional Competence (N = 88).

Scales	Psychological Reluctance		General Security and Safety Factors		Professional Competence	
	Coefficient	sign	Coefficient	sign	Coefficient	sign
Psychological Reluctance						
General security and safety factors	-0.258	0.001				
professional competence	-0.801	0.000	+0.294	0.000		

Table (3) shows, there is an inverse (negative) relationship between female students' psychological reluctance to belly-crawling while swimming in deep water and the trainer's professional competence. The lower the level of professional competence of the trainer in the swimming courses, the higher the level of psychological reluctance among the students is. Meaning that the professionally qualified trainer can ensure the provision of security and safety factors in the swimming pool, and this contributes to reducing the level of anxiety of the students while preparing to belly-crawling in the pool. As the trainer's lack of sufficient experience may contribute to raising the level of reluctance among the trainees in performing the skill.

**Q3:** What is the level of availability of general security and safety factors in the Hashemite University swimming pool? To answer this question, means and standard deviations were extracted for the paragraphs of the measure of the level of the level of availability of general security and safety factors in the Hashemite University swimming pool, table (4) illustrates it.

**Table (4).** Means and Deviations for the Level of Availability of General Security and Safety Factors in the Hashemite University Swimming Pool (n = 88).

No	Items	M	SD	Grade	Rank
1	The availability of first aid kits always ready for use by the trainer reduces my tension and reluctance.	3.84	1.33	High	2
2	The sources of lighting, ventilation and humidity are taken care of in the swimming pool in order to preserve the mental and physical health of the students.	3.83	1.38	High	1
3	I follow the rules and instructions for belly crawling in the deep area correctly.	3.76	1.37	High	3
4	The trainer has buoyancy tools to assist in rescue.	3.70	1.40	High	4
5	Calmness and lack of noise and chaos are taken into account in the pool to reduce my stress and reluctance.	3.48	1.53	moderate	6
6	A continuous examination of the suitability of the basin water for chlorine and the appropriate temperature.	3.65	1.46	moderate	5
Total score for the availability of general security factors		3.71	1.06	High	



Table (4) shows that the total score for the availability of general security factors was high, ( $M = 3.71$ ,  $SD = 1.06$ ). Item No (2) ranked first with a high score ( $M = 3.83$ ,  $SD = 1.38$ ), followed by item (1) ( $M = 3.84$ ,  $SD = 1.33$ ) and with a high degree also. Item (5) ranked lastly with a moderate score ( $M = 3.48$ ,  $SD = 1.53$ ). This result is attributed to Hashemite University significant interest in providing security and safety criteria to lessen trainees' psychological hesitancy, such as taking into account the water's temperature. In order to reach the level of mastery in the sport of swimming and make the performance of some skills easier, they are also interested in taking into account the calmness and absence of noise and chaos in the pool, to lower the level of tension and reluctance during the practice. And the extent of the improvement in the performance of the trainees is monitored first-hand, in order to reach the stage of mastery in the sport of swimming and facilitate the performance of some skills. This result is consistent with the study of (Abu Zama' & Al-Halli, 2016), whose results showed that mastering the sport of swimming well facilitates learning of crawl swim on the belly in the deep area, and there is a positive effect of the feedback practiced by the coach with beginners learning of crawl swim on the belly in the deep area.

**Q4:** What is the level of professional competence of the trainer in swimming courses at the Hashemite University? To answer this question, means and standard deviations were extracted for the paragraphs of the measure of the level of professional competence of the trainer in swimming courses at the Hashemite University swimming pool. table (5) illustrates it.

**Table (5):** Means and standard deviations for the measure of the level of professional competence of the trainer in swimming courses and the total score for the measure ( $n = 88$ )

No	Items	M	SD	Grade	Rank
1	The trainer uses instructional techniques to overcome my reluctance and fear of mastering the ability of belly- crawling in the deep.	3.84	1.64	High	12
2	The swimming instructor creates objectives to motivate the swimmers to practice the skill of belly-crawling in the depths with persistence.	4.21	1.42	High	8
3	The instructor helps students overcome their worries by talking about any personal issues they may have with mastering the skill.	4.26	1.43	High	6
4	The coach considers the unique characteristics of each athlete.	4.07	1.63	High	11
5	Before performing the talent, the instructor gets the students ready psychologically, morally, and technically.	4.77	0.74	High	1
6	Even if the player botched the execution of the talent, the trainer strives to increase her self-esteem and build her self-confidence.	4.66	0.86	High	2
7	When a student is anxious about using the talent, the trainer handles the situation quietly and wisely.	4.21	1.25	High	8
8	The trainer demonstrates the skill multiple times before presenting all of its aspects, the degree of difficulty, and how to handle it.	4.37	1.19	High	4
9	The instructor takes into account the students' physiological characteristics, such as (weight, age, height)	4.30	1.24	High	5
10	The trainer's training program, like swimming instruction in the sports world, is based on precise scientific criteria.	4.61	0.95	High	3
11	The coach determines each player's level and implements the best treatment options.	4.26	1.27	High	6
12	Depending on the pupils' skill level, the trainer employs a variety of training techniques.	4.13	1.32	High	10
	Total score for the level of trainer's professional competence	4.31	0.82	High	

Table (5) shows that all the items of the field of the level of trainer's professional competence got high scoring. The Total score for the level of trainer's professional competence was of a

high score ( $M=4.31$ ,  $SD=0.82$ ). Item No (5) ranked first with the highest mean ( $M=4.77$ ,  $SD=0.74$ ), followed by item No (6), ( $M=4.66$ ,  $SD=0.86$ ). Even though that Item No (1) ranked lastly with the least mean in this field, but it was of a high score ( $M=3.84$ ,  $SD=1.64$ ). The reason for this is attributed to the fact that Hashemite University provided the trainer with proper professional training and hired qualified trainers. Swimming is a delicate sport and requires the instructor to be well-versed in it. The instructor must first prepare the students technically, psychologically, and morally before they perform the skill. Then, the instructor must assess each player's level and determine the best course of action. Finally, the instructor must use guiding techniques to deal with the students' reluctance and anxiety about performing the skill of belly-crawling swimming in the deep. This outcome was in line with (Thannoon, 2012), whose findings showed that the program in use led to a decrease in the degree of anxiety and an improvement in the level of performance in swimming among the students of the experimental group, this is consistent with (Al-Hamdani, 2016), (Shayal & Minati, 2014), that feedback has a positive effect on beginners in reducing their psychological fears while teaching them the skill of belly crawling and belly swimming in deep areas.

## Conclusions

Observing calmness and lack of noise in the swimming pool contributes to reducing the level of reluctance among female students while performing belly crawl swimming in deep areas.

The presence of lifeguards in the swimming pool contributes to reducing the level of reluctance among female students while performing belly crawl swimming in deep areas.

The professional competence of the trainers contributes to reducing the level of reluctance among female students while performing belly crawl swimming in deep areas.

## Recommendations

The necessity to take into account the calmness and lack of noise and in the swimming pool to reduce the level of stress among the students.

The necessity of the presence of lifeguards in swimming pool to follow up the students.

Conducting more similar research to the current study, on some other physical variables.

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