# The relationship of competition anxiety with the performance of the kinematic chain in the rhythmic gymnastics of the third year student's collage of physical Education and sports science at the University of Baghdad

<sup>1</sup>Tamadher Abdul aziz muhsen, <sup>2</sup>Ban Adnan Mohammed Ameen, <sup>3</sup>Wasan jasem mohammed hasan

## Abstract

The study aimed to identify the level of anxiety of female students as well as its relationship to their scores in the Kinetic Chains Exam in Rhythmic Gymnastics. The researcher used the descriptive approach to suit his research procedures and the results he wanted. The researcher used data on the third year students group at the college of Physical education and Sports Science/ university of Baghdad, and there were (87) students distributed among three groups. (6) students were excluded because they did not show up on the day of conducting the anxiety test and the exam in the movement chains in rhythmic gymnastics, Thus, the number of the sample has become (81) students, representing 93% of the research community.

The researcher has used the competition anxiety scale prepared by (Rainer Martins) and translated by (Allawi). The researchers concluded in their study that by increasing the grades that students obtain in performing motor chains using collar and rope, the degree of anxiety decreases.

They also found that there is a relationship between the grades that they got in the hoop and in the rope.

The degrees of the research sample in anxiety were at a high level by more than 50%, and this is considered a dangerous indicator that teachers and trainers must pay attention to and try to treat and reduce.

Key words: anxiety, rhythmic gymnastics, student, scale.

### Introduction

Rhythmic gymnastics is one of the most difficult individual games that needs skill to deal with the tool, as well as matching movements and timing of its performance with music. Also few people are practicing this sport due to our Muslim community that prevent them from practicing these kinds of sports due to traditions.

The Anxiety topic is an important topic in sports psychology because of its direct effects on different psychological or body functions, or both. (Allawi, 2004: 379)<sup>•</sup>.

Competition anxiety is also an important psychological sign that may have an effect in performance in rhythmic gymnastics. Therefore, anxiety among students of the College of Physical Education and Sports Science should be studied

<sup>1</sup> College of Physical Education and Sports Science, University of Baghdad. <u>tamadher.aziz@gmail.com</u>

<sup>2</sup>College of Physical Education and Sports Science, University of Baghdad. ban.ameen@cope.uobghdad.edu.iq

<sup>3</sup>College of Physical Education and Sports Science, University of Baghdad. wasan.hasan@cope.uobghdad.edu.iq

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 03, 2020 ISSN: 1475-7192

in a rhythmic gymnastics lesson. As well as studying the relationship between competition anxiety and the performance of motor chains in rhythmic gymnastics for the purpose of trying to influence this anxiety, whether by increasing or decreasing in order to obtain better results.

(Ramzi Jaber, 2008)<sup>•</sup> recommended that you pay attention to psychological preparation and use relaxation and mental relaxation techniques to overcome anxiety. Also, the main problem is the students' anxiety and the teachers' lack of knowledge of the level of this anxiety and its effect on performance in rhythmic gymnastics skills, which leads to negative results for students and the low level of their grades. A study supports the idea that the direction of anxiety should be measured with severity of anxiety (Eleftheria Avramidou, Stathis Avramidis, and Remco Pollman, 2007). Competitive anxiety is one of the most widely researched topics in sports psychology (Woodman & Hardy, 2001). One of the main components of sports training is psychological preparation for successful participation in competitions, regardless of sport. Competition results in a high level of emotions. (Manuela and others,  $2017)^{2^{\bullet}}$ . Anxiety is one of the biggest difficulties facing players before, during and after the competition, which leaves a major impact on the player's psyche and payoff, as it consists of several different physical, psychological, and psychological changes (Askar, 2019). The stressful nature of sport and the competitive environment imposes many demands on athletes (Jones, 1995). Obviously, this ideal situation is likely to cause lower levels of competitive anxiety (physical and cognitive) and higher levels of self-confidence (Hamidi and others, 2010). Previous studies and scientific evidence has shown that anxiety may be one of the reasons why athletes are not achieving their full potential. For example, research has found that fear of failure, negative social assessment, and concerns about Injuries or physical danger, and fear of unknown anxiety is triggered in ice hockey players (Dunn & Syrotuik, 2003). A Singh study (1985, singh)<sup>•</sup> indicates that female players are more anxious than male players in the competition. The study aimed to identify the level of anxiety of female students as well as its relationship to their scores in the Kinetic Chains Exam in Rhythmic Gymnastics. The researcher has assumed that there is a high degree of anxiety among students, as well as an inverse relationship between anxiety and performance in rhythmic gymnastics.

#### Method:

The researcher used the descriptive approach that fit his research procedures and the results that he wants to obtain.

The researcher used data on the third year students group at the college of Physical education and Sports Science/ university of Baghdad, and there were (87) students distributed among three groups. (6) students were excluded because they did not show up on the day of conducting the anxiety test and the exam in the movement chains in rhythmic gymnastics, Thus, the number of the sample has become (81) students, representing 93% of the research community. The researcher has used the competition anxiety scale prepared by (Rainer Martins) and translated by (Allawi, 1998), the assessment includes (15) questioners for each questioner there is three answers alternative answers (rarely, sometimes, often) and the scores for these alternatives are: (3) is the highest degree and (1) is the lowest score for the purpose of measuring the degree of anxiety of sports competition. The test consists of (15) phrases, of which (10) are real phrases that measure competition anxiety, and the respondent responds to each phrase in the light of a scale included from (3) alternatives that are (rarely, sometimes, often) and puts a sign ( $\sqrt{}$ ) in the box that he sees Fit in front of every phrase. Registration: the grades range from (10) to (30) degrees, so a score of (10) means the lowest level of concern and a score of (30) is the highest level of competitive anxiety and the phrases that are not calculated are (13, 10, 7, 4, 1). Calculation of results: The score of the 10 phrases and the total score indicate the degree of concern of the mathematical competition.

The tools used: a special form to measure the degree of anxiety, sports competition, a pen, a data discharge form, a Lenovo laptop to perform statistics, extract the mean, standard deviation and degree of correlation. The research sample was tested in the kinetic chains once using the hoop and once with the rope that was in the third stage curriculum.

Design: Rainer Martens Martens Translated: Mohammad Hassan Allawi Weight: Student name : Student life: Length: Date: Dear student: Please accurately answer the following questioners mark (with X.) Under the answer comprising the three alternatives field (rarely, sometimes, often)

numbers	questions	often	sometimes	rarely
1	Competing with others is a social pleasure			
2	Before I enter the competition, I feel anxiety			
3	Before my participation in the competition, I am scare of my lack of success in playing			
4	I have a high sportsmanship when I participate in the competition			
5	When I enter the competition, I am afraid of making some mistakes			
6	Before I participate in the competition, I feel calm			
7	It is important to have a goal during the competition			
8	Before I compete, I feel upset stomach			
9	Before participating in the competition, I feel my heart beat faster than usual			
10	I love to compete in activities that require physical exertion			
11	Before I enter the competition, I feel relaxed			
12	Before I participate in the competition, I am nervous			
13	Team sports are more exciting than individual games			
14	I am nervous while waiting for the competition to start			
15	Before I compete, I feel bad			

Sports competition anxiety scale correction

- Domain numbers that measure the anxiety feature of competition are: -

(15, 14, 12, 11, 9, 8, 6, 5, 3, 2)

- The numbers of domains that do not count for scores are: -

(13, 10, 7, 4, 1)

The domains are corrected in the direction of sports competition anxiety and its numbers are:

(15, 14, 12, 9, 8, 5, 3, 2)

According to the following:

Rarely: one score

Sometimes: two scores

Mostly: 3 scores

The domains are also corrected in the opposite direction of the sporting competition anxiety feature and its numbers are (11, 6), so the score is calculated according to the following: -

Rarely: 3 scores

Sometimes: two scores

Mostly: one score

Thus, the range of grades ranges between (30 - 10) and the closer the athlete's score approaches the (30), the more characterized it is a feature of high athletic competition anxiety. 3: The scientific foundations of the tests

In order to identify the test anxiety competition, the researcher found scientific transactions (honesty, consistency, objectivity) for the scale to ensure its validity.

Honesty:

The researchers sought the assistance of a group of experts and specialists in the field of sports psychology and rhythmic gymnastics.

Stability:

The researcher re-tested the (4) sample Students, "The test is considered constant if it leads to the same results in the case of it being repeated, and the stability factor was found by re-testing the samples on 20/05/2018, that is, after seven days have passed and it is proven that the tests have a high degree of stability (0.765). Objectivity:

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 03, 2020 ISSN: 1475-7192

A good subjective test is "a test that casts doubt and disagreement from the testers when applying it" (Salama, 1980, 79)<sup>•</sup>. The tests in this research are clear and easy to understand by the members of the sample, so they are considered to be of good objectivity.

name	occupation	specialist	
Prof.Dr. Ameera	College of Physical Education and Sports Science -	Dynamic learning - rhythmic	
Abdulwahed,	University of Baghdad	gymnastics	
Prof.Dr. Ali Yousif	College of Physical Education and Sports Science -	Sports psychology - volleyball	
	University of Baghdad		
Prof.Dr.Abdullah	College of Physical Education and Sports Science -	Sports psychology	
hazaa,	University of Baghdad		
Prof.Dr.Khloud Laith,	College of Physical Education and Sports Science -	Kinetic Learning - Gymnastics	
	University of Baghdad		
Ass.Prof.Dr. Wasan	College of Physical Education and Sports Science -	Sports psychology - volleyball	
Jasim	University of Baghdad		

**Results:** 

After applying the competition anxiety test, the results appeared as shown in Table (2).

Table (2) shows the competition anxiety levels for three different levels of the research sample

Percentage	Repeat	Range	The level of competition anxiety
%9.87	8	14-6	Low Level
%38.2	31	20-15	Mediation
%51.8	42	30-21	High level

Descriptive Statistics			
	Mean	Std. Deviation	N
anxiety	20.1852	3.70847	81
hoop	6.1173	1.01326	81
rope	6.2802	99391.	81

				Correlations
		Anxiety	hoop	rope
Anxiety	Pearson Correlation	1	**452	**603
	(Sig. (2-tailed		000.	000.
	N	81	81	81
hoop	Pearson Correlation	**452	1	*229.
	(Sig. (2-tailed	000.		039.
	N	81	81	81
rope	Pearson Correlation	**603	*229.	1
	(Sig. (2-tailed	000.	039.	
	N	81	81	81
.(Correlation is significant at the 0.01 level (2-tailed .**				
.(Correlation is significant at the 0.05 level (2-tailed .*				

The results showed that there is an inverse relationship between the performance of the kinetic chains with rhythmic gymnastics using the hoop and the rope with competition anxiety, in addition to the correlation between the performance using the hoop and the rope.

Barron and Kenny note that one of the most important strategic considerations in deciding whether to mediate the parameter variables is when there is a strong relationship between the predictor and the parameter variable. Previously the

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 03, 2020 ISSN: 1475-7192

research has shown that the competitive anxiety relationship between characteristic and condition is one of the most robust and consistent relationships found in mathematical research (Baron and Kenny 1986)<sup>•</sup>.

Bray notes that performance appraisals (self-presentation concerns) were more related to epistemic anxiety (Bray and others, 2000)<sup>•</sup>. Future research using experimental treatments or longitudinal designs should be conducted so that causal conclusions can be explored regarding the saying that 'competitive anxiety is a manifestation of self-presentation fears' (2008)<sup>•</sup>. In the study of Hunton et al, It was found that the elite group (highly experienced) showed less severity of anxiety and greater self-confidence than elite / (low experienced) and elite / high experienced groups. (Hanton, Neil, Mellalieu, and Fletcher, 2006)<sup>•</sup>.

Participants in the Huntington study also indicated the need for a support group for inexperienced younger members of a team or team to help guide their progress through skill (Hanton and others, 2007)<sup>•</sup> In Sionk's study, the results indicated that effective anxiety reduction would improve players' confidence and thus improve their performance in remote games (Hyunwoo Kang, 2008), (Seyong Jang)<sup>•</sup>. Baron's research has shown that the competitive anxiety relationship between characteristic and condition is one of the strong and consistent relationships found in the Riyadh paper (Baron and Kenny, 1986)<sup>•</sup>.

## **Conclusions:**

The researchers concluded through this study that, with the increase in the scores obtained by female students in the performance of kinetic chains using hoop and rope, the degree of anxiety decreases. Also, there is a relationship between the degrees they got in the hoop and in the rope. The degrees of the research sample in anxiety were the most at a high level by more than 50%, and this is considered a dangerous indicator that teachers and trainers must pay attention to and try to treat and reduce it.

## **Resources:**

Allawi, Mohamed, 2004, Introduction to Sports Psychology, The Book Center for Publishing, Fourth Edition, Cairo, Egypt.

Jaber, Ramzi, 2008, a study of the reality of the trait of sports competition anxiety among middle distance runners in Palestine, Al-Azhar University Journal - Gaza (Humanities), Al-Azhar University, Gaza, Palestine.

Eleftheria Avramidou, Stathis Avramidis, and Remco Pollman(2007), Avramidou and Avramidis are with the European Lifeguard Academy and the Carnegie Faculty of Sport and Education, Leeds Metropolitan University, Headingley Leeds LS63QS UK. Pollman is with the Dept. of Sport, Health and Exercise Science, University of Hull, UK International Journal of Aquatic Research and Education, 1, 108-117.

Woodman, T & ,.Hardy, L. (2001). Stress and anxiety. In R.N. Singer, H.A. Hausenblas & , C.M. Janelle (Eds.), Handbook of sport psychology, New York, NY: Wiley, (2nd ed., pp. 290–318).

Petreanu Manuela ,Petreanu Adrian Ghe, Buţu Ioana Maria, Mezei Mariana,(2017), ANALYSIS OF THE COMPETITIVE ANXIETY LEVEL IN BASKETBALL AND AEROBIC GYMNASTICS, International Conference on Sport, Education & Psychology, The European Proceedings of Social & Behavioural Sciences, Future Academy ISSN: 2357-1330.

Mohamed El-Sayed Askar, Psychological Skills in Sports Psychology, Master for Publishing and Distribution, 2019, p. 56.

Jones, G. (1995). More than just a game: research developments and issues in competitive anxiety in sport. British Journal of Psychology, 86,478-449.

Shabnam Hamidia, Mohammad Ali Besharat ,(2010), Perfectionism and competitive anxiety in athletes, Procedia Social and Behavioral Sciences, Published by Elsevier Ltd . doi:10.1016/j.sbspro.190

Dunn, J.G.H & "Syrotuik, D.G. (2003). An investigation of multidimensional worry disposition in a high contact sport. Psychology of Sport and Exercise, 4, 265-282.

Singh, A. (1985). Sport competitive anxiety of lindian a fanction of their age ,playing experience and sex. Paper Presented to the world Congress in Spore. Mohamed Hassan Allawi: Encyclopedia of Psychological Examinations for Athletes, 1st Edition, Cairo, The Book Publishing Center, 1998.

Ibrahim Ahmed Salama, Examinations and Measurement in Physical Education, Cairo, Giza Press, 1980.

Baron, R. M & ,.Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173–1182.

Bray, S. R., Martin, K. A & ,.Widmeyer, W. N. (2000). The relationship between evaluative concerns and sport competition state anxiety among youth skiers. Journal of Sports Sciences, 18, 353–361.

Erin McGowan, Harry Prapavessis, and Natascha Wesch, Self-Presentational Concerns and Competitive Anxiety, Journal of Sport & Exercise Psychology, 30, 383-400.

Mellalieu, S. D., Hanton, S & "Fletcher, D. (2006). A competitive anxiety review: Recent directions in sport psychology research. In S. Hanton & S. D. Mellalieu (Eds.), Literature reviews in sport psychology (pp.1-45). Hauppauge, NY: Nova Science.

Sheldon Hanton, Brendan Cropley, Richard Neil, Stephen D. Mellalieu & Andrew Miles (2007) Experience in sport and its relationship with competitive anxiety, International Journal of Sport and Exercise Psychology, 5:1, 28-53, DOI:

1612197/10.1080X.2008.9671811

Hyunwoo Kang, Seyong Jang, (2018), EFFECTS OF COMPETITION ANXIETY ON SELF-CONFIDENCE IN SOCCER PLAYERS: MODULATION EFFECTS OF HOME AND AWAY GAMES, J Mens Health Vol 14(3):e62-e68;

Baron, R. M & ,.Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173–1182