

Pre-competition anxiety and its correlation with front handspring on vault table among junior gymnasts

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ABSTRACT

The present study was conducted to identify the level of anxiety and its relationship with front handspring on vault table among junior gymnasts in Nasiriyah club. The study also aimed to identify the statistical differences in performing this skill according to the variables and training conditions. A total of 20 gymnasts were recruited from the junior club of Nasiriyah by random sampling method. The measurement of anxiety among the athletes was done by a questionnaire, developed by Allawi in 1998. The findings of the present study revealed a significant correlation between pre-competition anxiety and the performance of a front handspring on the vault table among gymnasts in Nasiriyah junior club.

KEYWORDS

Anxiety; front handspring; vault table; gymnasts.

1. INTRODUCTION

Advanced approaches in sports science aims to attain the high level performances of the athletes in their respective sport, especially in gymnastics. They are focused on their individual performance as well as their performance in the group or team games. The best way to overcome obstacles and mistakes is the application of the correct and appropriate motor skill performance in order to ensure the highest level of effort with a minimum time using the optimal use of physical exercises for strength and balance.

Gymnastics is a sport characterized by its multiplicity of devices and the complexity of their installation. Students who opt gymnastics must have special physical skills. Along with the physical skills, mental skills have equal impact on the performance of the sport. Sport psychology is one of the most important sciences in the field of physical education. Since it helps athletes to overcome

psychological obstacles encountered by them and to attain the highest levels of sports achievement. One of the important aspect of sport psychology which requires attention is multi-dimensional anxiety. It is one of the psychological manifestations that have direct impact on athletes, especially in the psychological and physical fields due to its association with the physical performance of the individual on field and off field. If left ignored, growing anxiety may decline their performance, and may lead to a loss of psychological balance and distraction. Hence, along with the physical preparation an athlete must be trained for psychological stability prior to the competition to avoid failure and attain world-class achievements in sports (Jacob et al, 2020; López et al, 2021, 2022).

To the best of the researcher's observation and knowledge regarding sports, the performance of new players in the front handspring vault is very poor. The probable reason is anxiety during the training sessions as well as the performance pressure in their final game. The possible reason behind the poor performance is lack of appropriate sports culture with respect to gymnastics, dearth of supplies and equipment for gymnastics and lack of appropriate training to the athletes in the form of physical exercises. As a consequence, player encounter difficulty and complexity, in the use of the vault table for their game. Lack of resources and appropriate training is the primary cause of pre competition anxiety amongst them. Pre competition anxiety accompanies the player when they perform handspring on a vault table. Along with this, intense fear of the potential risks of falling, injury and failure in performing the movement during the competition, is a real problem faced by players and coaches in the club. Overall these multiple factors cause unwanted pressure and anxiety which affects their game really to a bad extent.

The present study was aimed to identify the anxiety among gymnasts for Nasiriya junior club while performing the front handspring on the vault table, to identify the relationship of anxiety with the performance of the front handspring on the vault table among gymnasts for Nasiriya junior and to find out the statistical relationship between the level of anxiety and the performance of the front handspring on a vault table among gymnasts for Nasiriya junior club. The research hypothesis was that there would be a significant correlation between anxiety and the performance of the front handspring on the vault table among gymnasts from Nasiriya junior club.

2. METHODS

The present study is based on the descriptive method, in the form of survey. The survey study is concerned with the present time and designed for studying the case more deeply, providing the

researcher with detailed information and thorough analysis of what is called the study of the current situation (Mahjoub, 1993).

2.1. Participants

The research community consisted of gymnasts from Nasiriya junior club, with a total of 20 gymnasts. The researchers then chose the primary sample in a random manner, at a rate of 40%, bringing the number of research community to 16 gymnasts, which is an appropriate proportion to represent the research community.

2.2. Tools, devices, and means used in research

The tools and devices used in the present research included, hand watch, vault table, foam gymnastic mattress, beat board, whistle, electronic calculator, personal computer, and student collection form. Data was collected using method of personal interviews. Participants were asked to fill the pre-competition anxiety questionnaire and a student collection form

2.3. Demonstration experiment

Prior to the data collection a demonstration was conducted on 22/4/2012 on a sample of 4 gymnasts. They were randomly selected from the research community. The purpose of conducting the demonstration was to ensure that measurement instructions were clear, to ensure that gymnasts can understand the questionnaire easily, to define impediments and drawbacks that may occur or accompany the researcher during the course of the study.

2.4. Primary experiment

After the demonstration experiment all the obstacles were identified. Researchers applied the anxiety test on athletes on 24/4/2021 for a period of three days on the main sample of 16 gymnasts.

2.5. Instruments

The measurement of anxiety among athletes was done by a questionnaire, developed by Allawi (1998). It consisted of 20 paragraphs. In order to determine a substantive response to the measurement, a five-step scale was used. Drawing on previous studies and related literature, the

following criterion was employed: (1-1,49: never meet), (1,5-2,49: rarely meet), (2,5-3,49: sometimes meet), (3,5-4,49: often meet), (4,5-5: always meet). The test was applied to the study sample prior to the game.

Allawi (1998) established the validity of such a measurement using the construct validity. They applied the test to a sample of 82 players who fell asleep during some sports activities. Participants were divided into two groups. One group was characterized by the individuals who encountered anxiety which hindered their performance in sports competition. The other group was marked by characterized by the individuals in whom, anxiety helped in their performance in the competition. Participants were asked to answer, the question “if anxiety contributes to assisting performance in the sports competition or hindering”? The results of the questionnaire indicate the presence of statistically significant differences between the two groups in favor of the assistant anxiety group (or the defensive anxiety) in raising the level of performance in the sports competition. The researchers also verified the content validity by presenting it to a group of referees who approved the paragraphs of the questionnaire as they are.

Regarding the evaluation method of the front handspring, experts were consulted. Each player was given few number of trials. The highest score achieved by the participant was adopted by the referee. The average score was calculated by subtracting the lowest score of the participant from the highest score achieved by the participant per the Artistic Gymnastics Sport Rules. The referees agreed that the maximum score of skill should be 10. The evaluation was made ahead of the competitions.

2.6. Statistical analyses

The statistical analyses were carried out with SPSS (Statistical Package for the Social Sciences). The version of SPSS used was the 24. The statistical techniques used were arithmetic mean, standard deviation, and correlation analysis with Pearson correlation coefficient. A p-value lower than 0.05 was considered as statistically significant.

3. RESULTS AND DISCUSSION

The findings of the present study showed a significant and moderate correlation between pre-competition anxiety and the performance of a front handspring on the vault table in the participants

of the current study (Table 1). The researchers noted that correlation between skill performance and anxiety level of athletes varies according to the circumstances. Researchers concluded that gymnasts who undergo regular training, compete at various levels of game, and participate in different gymnast events had more confidence and potential to encounter anxiety and fear during their final performance in the competition (Ghadeeb, 2003). Self-confidence develops an increased sense of self-worth and this is in itself a strong and positive drive to enhance performance by overcoming all kind of anxiety and fears.

Table 1. Correlation between pre-competition anxiety and front handspring on vault table among junior gymnasts (n=16)

Measurement	Arithmetic Mean	Standard Deviation	Correlation Coefficient	Sig.
Pre-competition anxiety	81.576	16.98	0,480	<0.05
Front handspring performance	7.97	1.78		

It was also found that some junior gymnasts had fears and anxiety while performing on the vault table. Since anxiety negatively affects the level of achievement, the researchers, suggested that athletes need to relax before their participation in the competition. The researchers also believed that controlling intense anxiety would give a sense of psychological security, especially during their performance in the sport events. Therefore, the player's field experience is crucial (Khraibet, 1998).

Various studies have been conducted in which researchers stated that the state of physical anxiety occurs and persists for a short period, which immediately precedes the test, and then quickly decreases to a significant extent when the performance of the athlete begins (Abeles and Bridges, 2014; Wang, 2003; Youssef et al., 2011). The findings of the present study are in accordance with the studies conducted by Hamid (2000), Al-Din Radwan (2001), Zahran (2005) and Allawi (2006), in which these authors stated that a significant correlation was found between anxiety and the performance of the front hands jump on the jumping platform device.

In the studies conducted by Ratib (1997), Allawi and Radwan (2001) and Yazid (2014), the authors stated that, if the psychological state of the athletes is positive, it will automatically be reflected in their performance. Just prior to the start of the sport event, competition includes a stimulus that leads to the occurrence of a state of cognitive and physical anxiety. This state of physical anxiety occurs for a short time (Retab, 1999).

5. CONCLUSIONS

In conclusion, according to the results of the present study, there is a significant correlation between pre-competition anxiety and the performance of front handspring on the vault table among junior gymnasts. Considering these results, it is very important that junior gymnasts are trained not only physically but also psychologically.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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