

# Effectiveness of Psychological Preparation Program on Sport Performance of Futsal Girl Players: Mediating Role of Personality

Hosseini Azita<sup>1</sup>, Mohammad Vaez Mousavi<sup>2\*</sup>, Pakdaman Shahla<sup>3</sup>, Taheri Hamidreza<sup>4</sup>

<sup>1</sup>Department of Physical Education and Sport Psychology, Imamreza International University, Mashhad, Iran

<sup>2</sup>Department of Sport Psychology, Imam Hossein University, Tehran, Iran

<sup>3</sup>Department of Psychology, Shahid Beheshti University, Tehran, Iran

<sup>4</sup>Department of Physical Education and Sport Science, Ferdowsi University, Mashhad, Iran

# ABSTRACT

The purpose of this research is to determine the effectiveness of the psychological preparation program in the increase of the sport performance dimensions of girls in the field of futsal with the mediator role of personality factors. The statistical population of all players in the group of youth girls of age range including 18-22 years old was in the field of futsal in Tehran province. 68 players were selected by available sampling method and randomly assigned to experimental and control groups. The research method was semi-experimental with pre-test and post-test design as well as control group. The primary level of athletic performance and personality factors of all participants were measured by questionnaire of behavioural check list and five personality factors. The psychological preparation program was implemented in 10 sessions for participants in the experimental group as well as no program was performed for participants in the control group. The performance of all participants in the post-test phase was again measured. Data were analysed using two-way analysis of sport performance (passing the ball, ball control catching the ball) in futsal girls (p<0.01). The effect of the psychological preparation program on the dimensions of athletic performance (passing, controlling and catching the ball) depends on the moderating role of the neuroticism personality component. The results suggest that it is required to pay attention to the neuroticism personality component of girls in the field of futsal.

Key words: Futsal, Psychological skills, Athletic performance, Personality factors

**HOW TO CITE THIS ARTICLE:** Hosseini Azita, Mohammad Vaez Mousavi, Pakdaman Shahla, Taheri Hamidreza, Effectiveness of psychological preparation program on sport performance of futsal girl players: Mediating role of personality, J Res Med Dent Sci, 2019, 7(1): 92-101

Corresponding author: Mohammad Vaez Mousavi e-mail : mohammadvaezmousavi@chmail.ir Received: 12/10/2018 Accepted: 11/01/2019

## INTRODUCTION

The sport performance of the players is different according to the purpose of the exercise. player's sport performance is usually evaluated in terms of goals and results and the outcome of the game base on the winning or losing the game determines the performance of the players. Based on the resulting goals, the sport performance of football players is evaluated only by the number of goals scored [1]. Thelwell et al. [2] believed that for an accurate examination of players' athletic performance only the evaluation of goals is not sufficient and the process goals should be considered. In the process goals, the more emphasis is placed on the performance of players in performing the performance components during the game which analysts and sports coaches apply these components to evaluate the performance of a player's or a team's performance and to compare player performance. The dimensions of the players' performance in the futsal; the performance of passing the ball including the right shot to the ball, transferring the ball or accurately passing the ball [3].

According to the definition of the United European Football Association (UEFA) the meaning of football players' performance is to pass, catch and tackle the ball from the opponent. The results of Esfahani et al. [4] indicated that the performance of professional footballers and wrestlers is mainly the result of two categories of excellent physical and psychological performance. The results of the research of Yperen [5] and Johnson et al. [6] also indicated that the players' favourable performance is associated to their ability to compete in psychic skills. Dallaier [7], Weintroub [8] and Mike [9] concluded that learning outcomes could expand the mental skills of individuals. Learning the basic skills such as concentration, self-confidence and anxiety control increases the performance of individuals. Equipping with advanced skills enables the individuals have an attempt to achieve peak performance. In his research, Otten [10] studied the performance of 15 basketball players in a situation where they were under pressure. This researcher had an attempt to increase the athletes' level of performance by emphasizing their concentration and attention but it was indicated that high emphasis on the attention increases their physical and cognitive anxiety but emotions associated to the perceived control reported by athletes themselves, helped to raise their level of performance. In a recent study performed by Clement et al. [11] with injured athletes, it was concluded that training adult skills could increase their psychological skills. Regarding the group sports, Voight [12] concluded in a research that exercise skills training such as mental illustration, self-talk and relaxation can reduce athlete's stress during exercise. In this regard, Williams [13] in his research showed that the cognitive skills such as concentration, attention and mental illustration can facilitate exercise performance. Since, the futsal have certain requirements and conditions to perform a desirable sport performance, in addition to technical skills, players must also have a number of appropriate mental skills to meet the requirements of futsal in order to perform a good athletic performance. Generally, the players who have a great deal of passion for success are those who believe that their psychological skills training enables them to reach their goals and are likely to practice these skills [14]. Thelwell et al. [15] concluded in a research study that the effectiveness of some psychosocial skills with athletes in football has been shown that self-esteem illustration and self-control skills can enhance the performance of athletes. The results of Holliday et al. [16] also indicate that psychological training should be based on the needs of athletes. The results of this research on football, volleyball and basketball athletes indicated that the training of psychosocial skills should be conducted according to the needs of players in the sport for being more effective in improving their athletic performance. Mental illustration and self-talk skills are considered as the cognitive skills in sport that can enhance the technical skills of players by activating the psychological mechanisms. Hall et al. [17] have found in their research with athletes entitled as "Imagery and Positive Thinking" that if illustration of thoughts about negative outcomes disturbs players' performance motivation by reducing self- esteem, Brouziyane et al. [18] believed that improvement and enhancement of the implementation and performance stages and performance is regarded the most common and legitimate motive for the use of

The self-mastery is also another cognitive skill defined as an open or subtle personal conversation in which the player interprets his feelings, perceptions and beliefs. It's actually regarded as a controlling fan of emotions and thoughts. Thoughts and feelings affect both self-esteem and individual performance [19]. Therefore, with the goal

mental imagination.

of creating appropriateness between the requirements of futsal sport and the specific psychological skills of this sport, the psycho-relaxation, targeting, self-talk (cognitive and motivational) skills were chosen in the futsal players' preparation program. Today, the personality is considered as the most important factor in the desire to participate in sports activities and as an explanation of the success and failure of the sport competitions. Ingledew et al. [20] believed that attribute approach should be utilized to evaluate the personality characteristics of athletes and non-athletes. The basic assumption of this pattern is that attributes as relatively stable characteristics of players can predict their behaviours in the various situations. In this regard, Burton et al. [21] in a research on the psychological factors of players in sport and physical activity found that personality characteristic of players in psycho-social performance, controlling the emotions in sports conditions, exercise and physical activity as well as their psychological ability such as calming, creating concentration and mental illustration plays an essential role.

The results of the study associated to Jenson [22] and Barthelme et al. [23] also indicated that people having a high score in personality traits of adjustment, extraversion, openness to experience and task-related duties each with specific characteristics in cognitive. emotional and behavioural fields show a different psychological and motor function from themselves. Regarding the personality characteristic of neuroticism as they are incapable of resisting shocks, temptations and harsh behaviours, they generally show signs of anxieties, distresses and inefficiency. Therefore, considering the role of personality factors in modifying skills and abilities which usually affects the individual performance as well as due to the ethical, behavioural and sport related problems that are usually caused by weakness in players' psychological abilities and concerns about the complications of this phenomenon on the structure and sport community necessitate the conducting of present research. Therefore, the present research was performed to determine the effectiveness of psychological preparation program (Relaxation, targeting, concentration, imagination, self-talk) on the performance dimensions of futsal players (Passing the ball, ball control and catching the ball from the opponent).

In the necessity of research and why only females selected and investigated it can by say followings:

In many researches in sport filed in Iran usually both genders investigated. Since during last decade acceptance of futsal increasing in Iran's society, especially between girls and because of special progress in this sport therefore this research focuses on evaluation performance enhancing factors between girls in futsal sport.

And by considering some personal and social reason in Iran's society, experimental research in some salon sports such as futsal, to collecting data and doing experimental intervention and conclusion with higher accuracy, needs researcher to be same gender as athlete.

#### METHODOLOGY

The statistical population of all players in the category one of youth-adults ranging from 18 to 22 years old in the field of futsal in Tehran province. The total number of players in these teams was 186 individuals. 68 female futsal players were randomly selected using random sampling method in Tehran. Then 34 individuals out of 68 people were randomly assigned to the experimental group and 34 individuals out of them were selected as the control group. The following items were considered as criteria for the elimination and selection of subjects was considered in the research: A constant member or reserving a group of second-class teams in Tehran province, having normal mental and physical health. This criterion was monitored in the initial interview with the players. According to the information in the players' file, provided that if they had particular mental and physical illnesses they could not participate in this research. The research method was a semi experimental and pretestposttest test with control group. Initially, the dimensions of athletic performance and personality factors of players were measured. In the next phase, the psychological preparation program was conducted in 10 sessions for the players in the experimental group and no program was implemented for the players in the control group. After completing the sessions, the dimensions of the athletic performance of all players were measured (posttest) (Table 1).

#### Tools

**Performance checklist:** In this research, the purpose of physical activity is the physical and psychological endeavour of players to pass, keep and control the ball and get the ball from the opponent player in a legal manner; which was measured in a checklist using normal observation and recording the player 's performance during the competition by specialist in futsal. So that they entered the correct sport performance (passing, retaining and controlling the ball and successfully catching the ball from the opponent) for each player in the "Special

Observations Recording Form"; and finally the desirable performance ratio for each sub-component separately calculated for each player using these data. Therefore, by counting the number of passes, maintaining and controlling the ball and successfully tackling the ball from the opponent and dividing it by the total number of passes, controls and catching the ball multiplied by 100, the overall performance of a futsal athlete was measured in each sub-component. In other words, the performance of each player is calculated individually in this section. For example, if a player has a 15 passing the ball activity position and the player can have a correct passing activity in just 8 positions, the number of successful performances (8 correct passing the ball activity) is divided over the total position (15) and multiplied by 100 then the player's performance was calculated in the sport performance. In order to obtain the reliability of this tool, the researcher asked two specialists (coach and coach assistant) to focus on the film with two evaluations of the components of the players' performance.

Then using these two categories of score, the reliability coefficient was achieved for the components of passing, controlling , retaining and catching the ball from the opponent 0.75, 0.70 and 0.70 respectively [24].

**The great five personality factors questionnaire:** To assess personality factors, a questionnaire of 60 items by McCrae et al. [25], quoted by Khormayi [26] was applied that 5 personality features of adaptability, extraversion, openness to experience, commitment to duty and neuroticism.

The grading of these features is based on the five-point Likert scale which is assigned to positive items by choosing the perfectly accurate score 5 and by choosing the perfectly incorrect option for the score 1 as well as the negative items are scored in reverse order. McCrae et al. [25] reported an alpha coefficient 0.68 for adaptability, 0.86 for neuroticism, 0.84 for openness to experience and 0.83 for neuroticism. In the present study, the reliability coefficient of this questionnaire was calculated applying Cronbach's alpha coefficient for adaptability 0.82, neuroticism 0.84, openness to experience 0.83, extraversion 0.83, deontology 0.85.

Table 1: Summary of the psychological prepare	ration program
---	----------------

Psychological skill	Description of the skill	Sub-components of skill	Performance and Skill efficiency	Implementation and stages of training skill	
The targeting in the			1. Planning the stage of meeting with team members		
	The targeting in the		The activation (power training) of the players, the creation of a linear relationship between the	2. Evaluation stage	
Targeting	sport is to permit the	Result Goals, Functional goals, Process	difficulty level of the target and the level of performance, that is the more difficult goal requires higher performance, Motivating the players, making the necessary efforts, creating incentives for moving towards the final result, determining the finer and subtle movements for performing technical skills	s Functional goals Process performance, that is the more difficult goal	3. Using the targeting tab
Targetting	own skills in a specific assignment within a specified time frame.	goals		4. Selecting a technical skill associated to the football sport performance	
				5. Skill assessment is either true or false	

				6. In the case of improper doing the skill: Performing specific and required activities to strengthen the skill.
				7. Determining the specific goal to achieve the desired level
	A skill that a player can put in a very relaxed	Relaxing the body from the central		1. Implementation and training of students by psychologist
Muscle relaxation	state of his body. By this skill the player can gradually release parts of his body and experience a comfortable state.	parts, relaxing the body from the central parts, relaxing the body from the peripheral parts, relaxing the body with the help of others, relaxing with a tape or CD self-relaxation (visualization)	Preventing physical anxiety before playing and during playing, Reducing fatigue and relaxing the body, Reducing the negative cognition while playing	2. Performing a relaxation skill using a CD: After the player has been trained in tennis skills, he/she can record the relaxation skill and give it to the players to use it later.
				1. Identifying the player's in-game conversations
		Extensive in-depth attention: An		2. Identifying the negative internal conversations that prevent players from concentration
	The ability to focus the consciousness on a	analytical style applied for planning and analyzing the past performance, Extensive outer attention: it is required when the player needs to get a lot of information, Narrow-Inward Attention:	Motional learning, Performance and motional	3. Identifying the positive and useful thoughts and talks according to player's position
Concentration	limited range of It is applied for the subjective mental being ar	performance skills, Increasing the motivation, being an option, keeping the attention, changing the attention, Awareness of the situation	4. the conversion of negative conversations into positive internal discussions	
		ball or targets such as archery and knocking the ball		5. Methods of retaining the concentration against disruptive factors
				6. Methods of retaining concentration against external disruptive factors
				1.Implementing the relaxation technique
	The illustration is		Coping with pain and injury, overcoming poor	2. Mental illustration and result
	regarded as a multi- sensory experience that	Internal illustration in which the player imagines himself/herself performing an		3. Stages :
Illustration	re-imagines mental images or events that are projected in the future and images are	athletic assignment from the sight of his/her own, Exterior illustration is so unnatural. In this kind of imagination,	performance controlling movement and increasing performance, energy, concentration, self-confidence and self-efficacy, controlling the emotional responses, learning and practicing	a) Being familiar with how to visualize and implement a relaxation technique
	created without the need for the external	the player imagines himself/herself out of his body	strategies and game maps	b) Victory-based illustration
	stimuli.	stimuli.		c) Illustration based on the failure of the victory
				d) failure-victory-based illustration
An open or hidden inner conversation in which the player interprets and	In positive self-talk, it supports self- esteem and positive self-concept. In negative self-talk Removes attention	Creating and self-efficacy, acquiring skills, creating and changing mood, effort control, focusing the attention and concentration	1 <sup>st</sup> stage: At this stage, the construction and application of positive and proper self-talk is emphasized using keywords and confirmation of the competition.	
Self-talk	interprets his or her feelings, perceptions and beliefs and gives instructions and		2 <sup>nd</sup> stage: This stage emphasizes the negative reactions of the players.	
	reinforcements to himself.	performance.	performance.	3 <sup>rd</sup> stage: This stage is recognized when an instructional self-talk is appropriate for the whole function.

# RESULTS

Participants in the study were 68 female futsal students that 34 individuals categorized in the experimental group and 34 in the control group as well as their average age ranged from 18 to 22 years old.

Table 2 shows the mean and standard deviation of the sports performance scores of the participants in the control and experimental group and Table 3 shows the mean and standard deviation of the personality characteristics of the participants in the control and experiment group.

Table 2: The mean and standard deviation of sport performance of participants in the control and experimental group

		Pre test	Post test	
Variable	Group	Standard deviation ± average	Standard deviation ± average	
	Experimental	027.0 ± 50.0	051.0 ± 67.0	
Passing performance	Control	035.0 ± 56.0	032.0 ± 61.0	
	Experimental	036.0 ± 56.0	047.0 ± 67.0	
Retaining and controlling the ball performance	Control	037.0 ± 56.0	034.0 ± 56.0	
	Experimental	041.0 ± 49.0	040.0 ± 69.0	
Catching the ball performance	Control	037.0 ± 49.0	037.0 ± 49.0	

Table 3: Mean and standard deviation of personality characteristics of participants in the control and experimental group

Compatibility	Group	Standard deviation ± average
	Experimental	38.5 ± 69.25
Neuroticism	Control	99.5 ± 18.27
	Experimental	41.4 ± 72.26
Extraversion	Control	80.4 ± 70.26
	Experimental	29.6 ± 77.26
Compatibility	Control	42.4 ± 64.27
	Experimental	90.5 ± 24.26
Openness to experience	Control	55.5 ± 43.26
	Experimental	29.6 ± 93.26
Deontology	Control	01.5 ± 90.27

Before the regression analysis, the assumption of the normal distribution of scores of athletic performance scores applying the Kalmogorov-Smirnov test as well as homogeneous assumptions of variances was studied utilizing Leven test. The results indicated that these two assumptions about the distribution of data associated to this research are established. The two-way variance analysis test was applied for determining the impact of the psychological preparation program on increasing the sport performance of futsal girls taking into account the moderating role of personality factors (Table 4).

Table 4: The summary of the results of two-way variance analysis; the effect of the psychological preparation program and the moderating variable on personality characteristics in passive performance

Passing performance in futsal sport				
Variable	Degrees of freedom	Average squared	F	Significance level
Group	1	.2360	126.535	0.001*
Extraversion	1	.0030	1.755	0.19
Extraversion*Group	1	.0020	1.097	0.299
Group	1	.2490	137.076	0.001*
Neuroticism	1	.0020	1.256	0.267
Neuroticism*Group	1	.0060	3.417	0.049*
Group	1	.2350	122.272	0.001*
Compatibility	1	.0010	436.0	0.511
Compatibility*Group	1	.0010	0.2341	0.63
Group	1	.2490	768.137	001.0*
Deontology	1	.0060	442.3	048.0*

Deontology*Group	1	.0030	518.1	0.222
	I	.0030	510.1	0.222
Group	1	.2330	121.964	001.0*
Openness To Experience	1	.6682	0.1400	906
Group*Openness To Experience	1	.0020	0.1051	0.297

The results of Table 4 indicate that without regard to the personality traits of the players, the psychological preparation program significantly increases the sport performance of "passing the ball" in the players of futsal. Only by introducing the moderating role of neuroticism, the results indicated that the effect of the psychological preparation program on the athletic performance of the "passing the ball" depends on the level of personality characteristics of neuroticism (p<0.05, F=3.41).

Table 5: The summary of two-way variance analysis results; the effect of the psychological preparation program and the modifying variable of personality characteristics in the "ball control and retaining"

Ball control and retaining function in futsal sport				
Variable	Freedom degree	Average squared	F	Significance leve
Group	1	2130	10878	0.72
Extraversion	1	0.002	9040	0.516
Extraversion * group	1	30	616.1	0.208
Group	1	2050	34.3995	010.0*
Neuroticism	1	20	301.44	0.95
Neuroticism*group	1	20	300	0.864
Group	1	2050	3.135	048.0*
Compatibility	1	20	1261	0.481
Compatibility*group	1	20	8850	0.885
Group	1	2120	0.716219	.0430*
Deontology	1	10	110	0.936
Deontology*group	1	20	5510	0.461
Group	1	2140	58748	.0230*
Openness to experience	1	40	64215	0.158
Group*openness to experience	1	10	1690	0.682

Table 6: The summary of two-way variance analysis results; the impact of the psychological preparation program and the modifying variable of personality characteristics in the "catching the ball"

Catching the ball performance in the futsal				
Variable	Degrees of freedom	Average squared	F	Significance level
Group	1	6520	536.413	001.0*
Extraversion	1	0	0.237	6280
Extraversion*group	1	0	219	6410
Group	1	6380	33.427	001.0*
Neuroticism	1	10	8680	3550
Neuroticism*group	1	50	70.3	0380.*
Group	1	652	42.427	.0010*
Compatibility	1	0	1000	7530
Compatibility*group	1	40	563.2	114
Group	1	6490	18.446	.0010*

Deontology	1	0	0.4905	022.0*
Deontology*group	1	10	0.319	5740
Group	1	0.602	0.307386	001.0*
Openness to the experience	1	0.002	0.999	0.321
Group*Openness to the experience	1	0	1620	6890

The results of Table 5 show that without regard to the personality characteristics of players except in the extraversion characteristics, the psychological preparation program significantly increases the performance of "catching and controlling the ball" in futsal players.

By entering the moderating role of personality characteristics, the results indicated that the effect of the psychological preparation program on the performance of "ball control and retaining" does not depend on the level of players' personality characteristics.

The results of Table 6 indicate that without regard to the personality characteristics of the players except for the extraversion, the psychological preparation program significantly increases the performance of "catching the ball" in the players of the field of futsal. Only by introducing the moderating role of neurotic personality characteristic, the results indicated that the impact of the psychological preparation program on the performance of "catching the ball" depends on the level of personality characteristics of neuroticism (p<0.05, f=3.07). Generally, the results of the study indicated that only the neuroticism personality component could have a moderating role in the impact of the psychological preparation program on the dimensions of athletic performance (passing, retaining and controlling and catching the ball).

## DISCUSSION

The results indicated that the psychological preparation program can increase the Sports Performance Dimensions (passing the ball ,retaining and controlling, catching the ball) in futsal players and only Neurotcism personality traits in the effect of the psychological preparation program has a moderating role on the dimensions of sport performance.

This result is consistent with the results of Macnamara et al. [27], Zakrajsek et al. [28], Pain et al. [29] and Anderson et al. [30].

The results of these studies have indicated that psychosocial targeting skills, relaxation mental illustration, anxiety reduction and motivation greatly increase athletic performance. As mentioned earlier in this research, the performance of the players in the futsal consists of three basic activities of retaining, controlling and catching the ball from the opponent. Although, these three activities are in the same direction and a player may perform all three activities at a moment but any activity in a specific situation can happen correctly. Johnson et al. [6] believed that the specific requirements of each role in the sport must exist in order for players to be able to succeed that activity. Approximately, all the players playing in the middle of the field perform these three activities. The correct passing skills of the ball is one of the key skills in futsal sport which requires intermediate psychological skills such as trust, high accuracy and The ability to change attention, mental and physical relaxation, fast decision-making power and high motivation [31].

Since, the psychological preparation program applied in this research on the performance of the players includes the appropriate psychological skills of futsal exercise (targeting, relaxation, concentration mental illustration). Presumably, training these skills via the promotion of intermediate psychological skills can raise the "passing" activity in players' athletic performance. The studies associated to Vealey [32] and Williams et al. [33], also indicated that the psychological skills such as targeting, mental illustration, relaxation and self-talk are important in sport psychology. They also expressed that targeting as "achieving a certain standard in a homework or mission" and "usually within a specified time frame" could increase the individual performance too. Rattanakoses et al. [34] believed that the mental illustration as a "skill of using all senses" creates or recreates experience in the minds of players that helps them to work better and increase their self-esteem. Also, Howland [35] and Vealey [32] in a study indicated that the skill of technical selfesteem releases muscles from disturbing stress and helps calm the mind and body. Teaching this skill to futsal players can likely increase the confidence of players in reducing the effects of unpleasant thoughts and feelings.

Other studies such as the research of Thelwell et al. [15] have also been conducted and the results are consistent with the results of this study. The results of this study indicated that the use of psychological skills for futsal players may affect the players' ability to decide on the variable levels of an activity. Also, the results of the research by Rogerson et al. [36] and Johnson et al. [6] matched the results of the present research. The results of these researches indicated that the optimal exercise needs specific amplifiers and psychosocial support. The results of this study which were conducted on futsal indicated that having a good performance in the skills of passing the ball in futsal requires that players have high level of self-confidence, motivation, focus and attention. Since, the mental skills of targeting, relaxation, mental imagination and focused on players in this research, it was possible that each of these skills via the strengthening of psychological readiness mechanisms could raise the performance of "passing the ball" in the players.

Accordingly the researcher provided separately explanations for each of the trained skills. In the training of target selection skills, the researcher asked the players to consider a technical skill as a goal for themselves and set time for that purpose after they were asked to perform the technical activities required for that technical skill. It's possible that these exercises would place the player in a position that would have a high stimulant to do the work and because of training the small technical activities and technical skills, they would likely their self-esteem to be increased for performing the athletic performance. Furthermore, this conclusion can be explained by the Bloom's mastery or mastery of learning [37,38]. Learning to the extent of mastering points to the effectiveness of the learning process in the creation of the favourable learning. Learning is close to mastering the concepts of adequacy and skill and the mental element is adequacy. The adequacy in addition to mastering involves the gaining of confidence or the sense of coping with the problem. This self-confidence is an affective element of adequacy. Since, the domination is regarded as a prerequisite of sufficiency and skill, the positive emotional outcomes associated with dominance cause the individual to be successful and change from practicing to a skilled level. In the present study, as players were focused on learning process and infrastructure activity of football when learning the targeting skill, they were mastered earlier in learning that skill. This research is also probably to be because of the enhancement of skill adequacy and self-confidence of players. The use of psychic skill of relaxation was carried out as a slowly process of deep breathing and its abandonment with a high concentration on the various parts of the body. During this process, the disruptive stresses and tensions caused by the competition and the anxiety of the competition and particularly the inefficient stressful cognitions related to the goals of outcome reduced the level of players' arousal.

As a result, the increased level of player concentration will make them perform smoother. In this study, both internal and external visual imaging skills were utilized. The players were asked to portray scenes from the playground, other players and the audiences' noise (exterior imaging). When teaching and implementing the internal and external visual illustration skills, the researcher concluded that by exercising this skill the level of motivation, self-esteem and self-efficacy of players to play is likely to be increased and the illustration of the scenes associated to the technical skills, helps to the learning of those techniques. Regarding the implementation of the skill of illustration during the implementation of this skill, the players were asked to illustrate the stages of performing the "passing the ball" activity during the game's practice.

Therefore, the researcher concluded that improving exercise performance of "passing the ball" is likely due to positive changes caused by mental illustration in this research. These changes helped the players to be able to "passing the ball" in a more favourable and smoother manner later in the race. The mediating role of neuroticism personality characteristic was consistent with the impact of psychological skills on sport performance with the results of Sha'bani et al. [39]. The result of this study indicated that there is a relationship between personality traits and the degree of aggression of football players participating in leagues one and two. The results showed that there was positive and significant correlation between extroversion personality characteristics; consistency, openness to experience, and conscientiousness with aggression have a negative and significant correlation, and neuroticism with aggression have a positive and significant correlation.

The neuroticism component had the ability to predict aggression at all levels. After the explanation of this result, it can be said that because the nature of football and futsal sports needs aggression and the aggressiveness feature is along with these sports, the player's neuroticism personality component can affect the impact of psychological training on the futsal female players.

## CONCLUSION

In this research, it was concluded that the program of psychological preparation for increasing the level of athletic performance (passing the ball, retaining and controlling the ball, catching the ball) in futsal girls is a good and desirable program. Therefore, in order to increase the level of exercise performance in addition to strengthening the level of players' psychological skills, it is recommended to consider their personality characteristics.

#### FUNDING

The authors declare did not receive any specific grant from funding agencies in the public.

## ACKNOWLEDGEMENTS

We specially thank all the athletes who participated in this study.

## **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest regarding the publication of this manuscript.

## REFERENCES

- 1. Gould D. Goal setting for peak performance. New York: Mc Graw- Hill 2006;
- 2. Thelwell RC, Weston NJ, Lane AM, et al. Relation of game location and experience on mood states. Percept Mot Skills 2006; 102:157-62.
- 3. Hughes MD, Bartlett RM. The use of performance indicators in performance analysis. Sports Sci 2002; 20:739-54.
- 4. Esfahani N, Qezel Soflu. The comparison of the psychological skills of the champions of Karate and non-champions Karatemen and its

relationship with their performance in sport competition. Psychological Stud 2013; 11:109-20.

- 5. Yperen NWV. Why some make it and others do not: Identifying psychological factors that predict career success in professional adult soccer. Sport Psychol 2009; 23:317-29.
- 6. Johnson JJ, Hrycaiko DW, Johnson GV, et al. Selftalk and female youth soccer performance. Sport Psychol 2004; 18:44-59.
- 7. Dallaire J. Develop your mental skills by training to improve personal performance. Performance Prime 2006.
- 8. Weintroub A. Finding your peak performance with mental skills training. Sport Psychol 2006; 16:35-48.
- 9. Mike S. The role of Mindfulness in peak performance. J Sports Sci 2005; 46:67-79.
- 10. Otten M. Choking vs. clutch performance: A study of sport performance under pressure. Psychol Sport Exerc 2009; 31:583-601.
- 11. Clement D, Shannon V. The impact of a workshop on athletic training students' sport psychology behaviors. Sport Psychol 2009; 23:504-22.
- 12. Voight M. Sources of stress and coping strategies of US soccer officials. Stress Health 2009; 25:91-101.
- 13. Williams JM. Applied sport psychology: Personal growth to peak performance. Mayfield Publishing Co 1993.
- 14. Gallucci NT. Sport psychology: Performance enhancement, performance inhibition, individuals, and teams. Psychology Press 2013.
- 15. Thelwell R, Weston N, Greenlees I. Examining the use of psychological skills throughout soccer performance. J Sport Behav 2010; 33:109-27.
- 16. Holliday B, Burton D, Sun G, et al. Building the better mental training mousetrap: Is periodization a more systematic approach to promoting performance excellence? J Appl Sport Psychol 2008; 20:199-219.
- 17. Hall CR, Munroe-Chandler KJ, Cumming J, et al. Imagery and observational learning use and their relationship to sport confidence. J Sports Sci 2009; 27:327-37.
- 18. Brouziyane M, Molinaro C. Mental imagery combined with physical practice of approach shots for golf beginners. Percept Mot Skills 2005; 101:203-11.
- 19. Cox R H. Sport psychology: Concepts and applications. New York: McGraw Hill; 2007.
- 20. Ingledew DK, Markland D, Sheppard KE. Personality and self-determination of exercise behavior. Pers Individ Dif 2004; 36:1921-32.
- 21. Burton D, Raedeke TD. Sport psychology for coaches. Human Kinetics 2008.

- 22. Jensen L A. Do big five personality traits associated with self-control influence the regulation of anger and aggression? J Res Pers 2006; 41:403-24.
- 23. Barthelme JJ, Lounsbury JW. The relationship between aggression and the big five personality factors in predicting academic success. J Hum Behav Soc Environ 2009; 19:159-70.
- 24. Jafari A, Pakdaman SH, Fath Abadi J, et al. The relationship between perfectionism and coping with stress and burnout in athletes, football. J Motor Behav 2012; 11:147-62.
- 25. McCrae RR, Costa PT. Validation of the fivefactor model of personality across instruments and observers. J Pers Soc Psychol 1987; 52:81.
- 26. Khormayi F. Studying the causal model of personality traits, motivational orientations and cognitive styles in learning. Shiraz University Faculty of Education and Psychology, Doctoral dissertation, PhD thesis 2006.
- 27. Macnamara A, Button A, Collins D. The role of psychological characteristics in facilitating the pathway to elite performance part 1: Identifying mental skills and behaviors. Sport Psychol 2010; 24:52-73.
- 28. Zakrajsek RA, Zizzi SJ. Factors influencing track and swimming coaches' intentions to use sporpsychology services. Athl Insight 2007; 9:1-21.
- 29. Pain MA, Harwood CG. Knowledge and perceptions of sport psychology within English soccer. J Sports Sci 2004; 22:813-26.
- Anderson AG, Hodge KP, Lavallee D, et al. New Zealand athletes' attitudes towards seeking sport psychology consultation. NZ J Psychol 2004; 33:129-36.
- 31. Gucciardi DF, Gordon S, Dimmock JA. Development and preliminary validation of a mental toughness inventory for Australian football. Psychol Sport Exerc 2009; 10:201-9.
- 32. Vealey RS. Mental skills training in sport. Handbook of sport psychology 2007; 285-309.
- Williams JM, Harris DV. Relaxation and energizing techniques for regulation of arousal. Applied sport psychology: Personal growth to peak performance 2006; 5:285-305.
- 34. Rattanakoses R, Omar-Fauzee MS, Geok SK, et al. Evaluating the relationship of imagery and self-confidence in female and male athletes. EJSS 2009; 10:129-42.
- 35. Howland J M. Mental skills training for coaches to help athletes focus their attention, manage arousal, and improve performance in sport. Education 2006; 187:49-66.
- 36. Rogerson LJ, Hrycaiko DW. Enhancing competitive performance of ice hockey goaltenders using centering and self-talk. J Appl Sport Psychol 2002; 14:14-26.

- 37. Bloom BS. Learning for mastery. Instruction and curriculum. Regional education laboratory for the Carolinas and Virginia, Topical papers and reprints, Number 1. Evaluation comment 1968; 1:n2.
- Seif A. Learning process, product, and assessment: Old and new methods. Doran 2006; 45.
- 39. Sha'bani B, Gholamreza, Erfani N, et al. The comparison and investigation of the relationship between personality characteristics and aggression in male athletes chosen by sport in Hamadan. Sport Sci Res 2007; 14.