

The Relative Contribution of Psychological Skills to Anticipate the Athletic Future Anxiety Level of Some Individualized and Collective Games Players

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Abstract

This research was conducted to identify the relative contribution of some psychological skills to anticipate the athletic future anxiety of some individualized and collective Games Players'. The psychological skills studied are (ability of perception, ability to relax, ability to focus attention, ability to cope with anxiety, self-confidence and Athletic motivation Achievement). Study participants consisted of (107) juniors representing individualized and collective games players (soccer, basketball, karate, kung fu, and wrestling) aged between (16-18) years old and they were selected from some clubs (Smouha, Al-ethad, Al-tram, and Alexandria governorate club) at Alexandria, Egypt. Two tools were used which are mental skills questionnaire and Athletic future anxiety questionnaire in order to collect the necessary data. The researcher reached to a formula to predict the level of athletic future anxiety based on significance of Some Psychological Skills depending on the percentage of their contribution.

Keywords: Athletic future anxiety- Psychological skills

Introduction

Over the last few years sport psychology has become an interest to many people including coaches, athletes at both a high school and collegiate level (Association of Applied Sport Psychology [AASP], 2007). According to the AASP, the goal of sport psychology "...is to teach Psychological skills necessary to perform consistently in training and competition" (Quinn, 2012).

The consensus of data from the reviewed literature indicates that psychological skills are related to athletic performance and that psychological skills can be taught. Prevailing theories on psychological skills training have focused on purely psychological mechanisms. That is, the possession of psychological skills is thought to reduce cognitive anxiety and/or improve attention to task relevant cues when executing motor skills (Harris & Williams, 1993). However, accuracy and sport competence can diminish as physical fatigue sets in, particularly in sports where complex cognitive processes and decision-making are involved in physical skill execution (Makker; Singh; Pramanik, 2012).

Many of the athletes are registered and dedicate their whole life for training and focus under exclusive or elite team to increase their performance to get or make

themselves as the professional level. These developing are not only a hope among athletes but to parents and coaches. Unfortunately, high hope also increases the stress on the athletes and it shows a close relationship with high anxiety (Shilpi; Singh; Kumar; 2015).

Dealing with anxiety is an important task for coaches because athletes could not perform when they are under stress, having problems in their concentration, memory and the priority they should put on in their performance. Athletes could not perform at their best like they usually could because of anxiety. Consequently, their performance is affected during the competition and they seldom achieve victory (Makker; Singh; Pramanik, 2012).

Anxiety is defined as feelings of nervousness and tension which caused by the environment or surrounding expectation that is related to 'arousal'. Those demands are usually so stressful and thus causing an imbalance between the demands and the athlete's ability to fulfill the expectation. (Gould, Greenleaf, & Krane, 2002) (Shilpi; Singh; Kumar; 2015).

Athletic future anxiety is attached to anxiety as a character. Humans are usually concerned about the future, as concerning about the future is the main and the basic component of thinking and it could be the biggest different

of behavior. Future anxiety studies started under different names; the most remarkable of which is the fear of future or the negative expectations about the future or the pessimism of the future or the unknown direction towards the future (Amira, 2013).

Ronald Molin (1990) saw that the reasons of future anxiety can be represented in the existence of differences between individual ambition and its real potentials, and also vision failure towards the future, or lack of information or distortion of ideas (Molin, 1990). Proceeding from that, Molin (1990) described who suffers from future anxiety that he feels pessimistic, have doubts, extra agitation and disorders, passivity and the feeling of insecure, lack of trust, lack of the ability to face future and the fear of expected social, and political changes and the negative expectations of what the future might bear (Molin, 1990).

Most coaches and researchers believe that 50-90% of athletic performances depend on mental skills. Thus mental skills are especially important when facing an opponent with similar physical abilities. Psychological factors can explain why athletic performance can vary from day to day, without changes in physical condition (Weinberg ; Gould, 2011). Therefore the achievements of psychology become more and more important in professional sports. Sport psychology consultants help athletes with psychological skill training in order to control their anxiety and nervousness, to keep up their motivation and self-confidence, and to be more effective in practice and competition (Hille, 2014).

In the field of sports psychology many different psychological skills are discussed for their impact on performance (Gardner & Moore, 2006; Moran, 2012). But there is no study done to predict the level of athletic future anxiety by knowing psychological skills which the junior players possess. When the sport psychologist can predict the level of future anxiety of the player, he can manage it early and reach with the players to the highest possible level of performance. For all this reasons the researcher has found that this research is very important for its profound effect on the athletic performance.

Research Aim

This study aimed to:

- Identify the relationship between some psychological Skills and the athletic future anxiety level of the individualized and collective Games Players'.
- Determine the relative contribution of some psychological Skills in the athletic future anxiety level among the individualized and collective Games Players'.

- Predict the level of athletic future anxiety among the individualized and collective Games Players' based on significance of some Psychological skills depending on the percentage of their contribution.

Research hypotheses

- There is a statistically significant correlation between the psychological skills and the athletic future anxiety level among the individualized and collective Games Players'.
- Some psychological skills contribute in different proportions in the athletic future anxiety level among the individualized and collective Games Players'.
- It can reach a formula to predict the level of athletic future anxiety among Collective Games Players based on significance of Some Psychological Skills depending on the percentage of their contribution.

Material and Methods

Research design:

This research followed a descriptive research design as it suits the nature of this research.

Setting:

The researcher selected the study subjects from the sport clubs (Smouha, Al-ethad, Al-tram, and Alexandria governorate club) at Alexandria, Egypt.

Subjects:

Total sample of (126) juniors representing individualized and collective games players' (soccer, basketball, karate, kung fu, wrestling) aged between (16-18 years) who attended the previous clubs in the period of 13 January till 6 February 2016. The pilot study was conducted on (19) players while the remaining (107) players were used as a basic study subjects.

Study tools:

Tool I: Mental skills questionnaire (Allawy, 1998):

This questionnaire was designed by Bull, Albinson, and Shambrook 1996. This tool was modified by Allawy 1998; the modified version of this tool was used by the researcher in order to assess the required data. This tool is consisted of six dimensions which are ability of perception, ability to relax, ability to focus attention, ability to cope with anxiety, self-confidence and Athletic motivation Achievement.

Tool II: Athletic future anxiety questionnaire (Abd-Elmegid, Amira, & Badr, 2007):

This tool was designed by Abd-Elaziz Abd-Elmegid and others 2007 to assess athletic future anxiety level and it is consisted of three dimensions which are athletic Personality properties, sports environment, and the results of the competition.

Scientific interactions of tools:

Scientific interactions of Mental skills questionnaire:

For testing the validity, the researcher used internal consistency method and its result ranged between (0.572-0.809) which indicated that it has high stability interaction. The reliability tested by using test re test method, its result ranged between (0.75-0.216), also the alpha Kronbak coefficient result was (0.731).

Scientific interactions of athletic future anxiety questionnaire:

For testing the validity, the researcher used internal consistency method and its result ranged between (0.641-0.727) which indicated that it has high stability interaction. The reliability tested by using test re test method, its result ranged between (0.173-0.255), also the alpha Kronbak coefficient result was (0.776).

Statistical analysis:

The IBM SPSS Statistics v22 was used for the statistical analysis of the data. (Percentage, Standard deviation, Mean, Simple correlation coefficient, Kurtosis, Analysis of variance (ANOVA), t test).were used in statistical analysis of the data. Researcher adopted 0.05 significance level while analyzing data.

Results

Table (1)
Correlation coefficients between the dimensions of mental skills questionnaire and dimensions of athletic future anxiety questionnaire (n = 107)

The dimensions of athletic future anxiety			The dimensions of psychological skills tool					
			The ability of perception	The ability of relax	The ability to focus attention	The ability to cope with anxiety	Self confidence	Athletic motivation achievement
dimensions of athletic future anxiety tool	first: Athletic Personality properties	Susceptibility to provoke	-0.639	-0.661	-0.265	-0.751	-0.770	-0.589
		Pessimistic trend	-0.555	-0.381	-0.453	-0.526	-0.268	-0.734
		Self confidence	-0.671	-0.731	-0.390	-0.652	-0.345	-0.572
		first: Athletic Personality properties	-0.760	-0.567	-0.455	-0.782	-0.552	-0.772
	second: sports environment	Technical and administrative staff	-0.643	-0.677	-0.206	-0.661	-0.722	-0.573
		Team members	-0.409	-0.371	-0.595	-0.544	-0.343	-0.502
		The Family	-0.685	-0.465	-0.516	-0.752	-0.464	-0.627
		The public	-0.226	-0.069	-0.118	-0.146	-0.094	-0.275
		The media	-0.366	-0.235	-0.437	-0.525	-0.237	-0.490
		Sports requirements	-0.430	-0.278	-0.675	-0.459	-0.251	-0.663
		second: sports environment	-0.680	-0.487	-0.631	-0.767	-0.480	-0.768
	Third: the results of the competition	The Injury	-0.666	-0.487	-0.255	-0.712	-0.433	-0.436
		Production of professionalism	-0.435	-0.781	-0.069	-0.502	-0.817	-0.292
		Negative experiences	-0.712	-0.458	-0.522	-0.761	-0.449	-0.673
		Third: the results of competition	-0.732	-0.687	-0.355	-0.797	-0.677	-0.576
	The total score of the scale			-0.759	-0.600	-0.537	-0.827	-0.590	-0.757

It is shown from the table (1) that there is a negative correlation between all dimensions of psychological skills tool and athletic future anxiety tool. This means that the more possession of the player of psychological skills (the

ability of perception and ability to relax and the ability to focus attention and the ability to cope with anxiety and self-confidence and Athletic motivation Achievement) the lower level of future anxiety.

Table (2)
Significance of multiple regression equation by (stepwise) to some psychological skills in the first dimension: Athletic Personality properties (n = 107)

Variables	Correlation R)(	R Square	The percentage of the contribution	Unstandardized Coefficients B)(	t	ANOVA	Std. Error
The ability to cope with anxiety	0.782	0.611	61.149	-0.608	*3.178	*165.262	0.191
Athletic motivation Achievement	0.895	0.801	18.904	-1.077	*6.312	*135.071	0.171
The ability of perception	0.946	0.895	9.453	-0.675	*4.489	*113.344	0.150
Constant	60.306						

* significant

It is shown from the table (2) that, the ability to cope with anxiety contributed by 61.149%, athletic motivation Achievement contributed by 18.904%, the ability to perception contributed by 9.453%. The three Psychological skills contributed to the (first dimension: athletic personality characteristics) by 89.5% therefore it confirms the effectiveness of the following equation to predict.

Equation of athletic future anxiety prediction (first dimension: athletic personality characteristics) = 60.306+ (The ability to cope with anxiety × -0.608) + (Athletic motivation Achievement × -1.077) + (the ability to perception × -0.675).

Table (3)
Significance of multiple regression equation by (stepwise) to some psychological skills in the second dimension: sports environment (n = 107)

Variables	Correlation R)(	R Square	The percentage of the contribution	Unstandardized Coefficients B)(	t	ANOVA	Std. Error
Athletic motivation Achievement	0.768	0.589	58.944	-1.292	*3.635	*150.748	0.355
The ability to cope with anxiety	0.889	0.790	20.066	-1.204	*3.450	*123.504	0.349
The ability to focus attention	0.938	0.879	8.913	-0.896	*4.120	*95.521	0.217
the ability to perception	0.969	0.940	6.032	-0.798	*2.896	*78.876	0.275
Constant	114.527						

* significant

It is shown from the table (3) that, athletic motivation achievement contributed by 58.94%, the ability to cope with anxiety contributed by 20.06%, the ability to focus attention contributed by 8.913 %, the ability to perception contributed by 6.032%. The four Psychological skills contributed to the (the second dimension: sports environment) by 94 %, therefore it confirms the effectiveness of the following equation to predict.

Equation of Athletic future anxiety prediction Second dimension: sports environment = 114.527+ (Athletic motivation Achievement × -1.292) + (The ability to cope with anxiety × -1.204)+ (The ability to focus attention × -0.896) + (the ability to perception × -0.798).

Table (4)
Significance of multiple regression equation by (stepwise) to some psychological skills in the third dimension: results of the competition (n = 107)

Variables	Correlation R)(	R Square	The percentage of the contribution	Unstandardized Coefficients B)(	t	ANOVA	Std. Error
The ability to cope with anxiety	0.797	0.636	63.571	-1.113	*5.093	*183.232	0.219
The ability of relax	0.882	0.779	14.286	-0.775	*4.954	*127.053	0.156
the ability to perception	0.929	0.862	8.387	-0.588	*3.298	*96.374	0.178
Constant	72.856						

* significant

It is shown from the table (4) that the ability to cope with anxiety contributed by 63.57%, the ability of relax contributed by 14.28 %, the ability to perception contributed by 8.38%. The three Psychological skills contributed to the (third dimension: results of the competition) by 94 %, therefore it confirms the effectiveness of the following equation to predict.

Equation of athletic future anxiety prediction (the third dimension: results of the competition) = 72.856+ (The ability to cope with anxiety × -1.113) + (The ability of relax × -0.775) + (the ability to perception × -0.588).

Table (4)
Significance of multiple regression equation by (stepwise) to some psychological skills in the total score of athletic future anxiety anticipation tool (n = 107)

Variables	Correlation R)(	R Square	The percentage of the contribution	Unstandardized Coefficients B)(	t	ANOVA	Std. Error
The ability to cope with anxiety	0.827	0.684	68.434	-2.682	*3.932	*227.638	0.282
Athletic motivation Achievement	0.911	0.829	14.469	-2.190	*3.276	*162.693	0.268
the ability to perception	0.947	0.896	6.716	-2.048	*4.002	*126.249	0.112
The ability of relax	0.968	0.937	4.101	-1.205	*2.691	*99.398	0.148
The ability to focus attention	0.979	0.959	2.188	-1.072	*2.617	*85.448	0.110
Constant	251.157						

* significant

It is shown from the table (4) that, the ability to cope with anxiety contributed by 68.43%, Athletic motivation Achievement contributed by 14.46%, the ability to perception contributed by 6.71%, The ability of relax contributed by 4.10 %, The ability to focus attention contributed by 2.18 %. The five Psychological skills contributed to the (the total score of athletic future anxiety anticipation scale) by 95.9 %, therefore it confirms the effectiveness of the following equation to predict.

× -2.190) + (the ability to perception × -2.048) + (The ability of relax × -1.205) + (The ability to focus attention × -1.072).

Discussion

As regard the relation between the psychological skills and atheletic future anxiety level table (1) showed that there is a negative relation between the psychological skills and atheletic future anxiety level, and this means that the more possession of the player of psychological skills (the ability of perception and ability to relax and the ability to focus attention and the ability to cope with anxiety and self-confidence and Athletic motivation Achievement) the

Equation of athletic future anxiety prediction (The total score of athletic future anxiety anticipation) by knowing some psychological skills =251.157+ (The ability to cope with anxiety × -2.682) + (Athletic motivation Achievemen

lower level of future anxiety. This result is in line with findings of (Azimkhani; Gürsoy; Torbati, 2015) who revealed that there was significantly negative relationship between Mental skills and Competitive anxiety components. (Sangari; Fotrousi ;Masrour,2012) also showed that there was a significant relationship between mental skill and Competitive anxiety in female national football player. This results also agreement with (Makker; Singh; Pramanik, 2012) who reported that There was a significant relationship between Anxiety and Mental Skills of successful teams.

Table (2) showed that, the ability to cope with anxiety contributed by 61.149%, athletic motivation Achievement contributed by 18.904%, the ability to perception contributed by 9.453%. The three Psychological skills contributed to the (first dimension: athletic personality characteristics) by 89.5%.

table (3) showed that, athletic motivation achievement contributed by 58.94%, the ability to cope with anxiety contributed by 20.06%, the ability to focus attention contributed by 8.913 %, the ability to perception contributed by 6.032%. The four Psychological skills contributed to the (the second dimension: sports environment) by 94 %. This result means that the psychological skills contribute in different proportions in the athletic future anxiety level among the individualized and collective Games Players'. this result is in line with (Quinn, 2012; Espejel, Walle, Rodríguez, Villanueva, and Gurrola ,2011; Vadoa, Hall , Moritz,1997, and Aufenanger ,2005) who's reported that significant relation between the psychological skills and competitive anxiety.

Anxiety level have always played an important role in athletic performance (Sadeghi; Sofian; Fauzee; Jamalis ; Abd-Latif ; and Cheric ,2010). Table (4) showed that, the ability to cope with anxiety contributed by 68.43%, Athletic motivation Achievement contributed by 14.46%, the ability to perception contributed by 6.71%, The ability of relax contributed by 4.10 %, The ability to focus attention contributed by 2.18 %. The five Psychological skills contributed to the (the total score of athletic future anxiety anticipation scale) by 95.9 %. the researcher reached an equation to predict the future anxiety level of the player based on their psychological skills they have. Equation of athletic future anxiety prediction (The total score of athletic future anxiety anticipation) by knowing some psychological skills = $251.157 + (\text{The ability to cope with anxiety} \times -2.682) + (\text{Athletic motivation Achievement} \times -2.190) + (\text{the ability to perception} \times -2.048) + (\text{The ability of relax} \times -1.205) + (\text{The ability to focus attention} \times -1.072)$. this equation will help the sport psychologists to predict and then control the higher anxiety level among

the individualized and collective Games Players' to ensure the higher performance.

Conclusion

There is a statistically significant negative correlation between the psychological skills and the athletic future anxiety among the individualized and collective Games Players'. Some psychological skills contribute in different proportions in the athletic future anxiety level among the individualized and collective games Players'. The researcher reached to a formula to predict the level of athletic future anxiety among collective games players based on significance of some Psychological Skills depending on the percentage of their contribution.

Recommendation

- Applying the predictive equations of the athletic future anxiety by knowing the psychological skills of the athletes to control the higher anxiety level and ensure the higher performance level.
- Mental skills program should be developed by Sports psychologist to improve the mental skills of the athletes to reduce the level of athletic future anxiety.
- Carry out similar studies of current research on other sports samples in various sports activities.

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