



## Relationship between Psychological skills and Competitive Anxiety in Successful and Unsuccessful teams of Iranian Men's Basketball League

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**ABSTRACT:** Determining the relationship between psychological skills and competitive anxiety in men's basketball league in 2013 (1392 in the Iranian calendar). The population in this study consists of all of men's basketball teams in the super league. Methods and procedure: data for this study were collected from a sample of 72 players (36 players from the successful teams which were ranked first to third and 36 players from the unsuccessful teams which were ranked tenth to twelfth) and these teams were selected according to last season's rankings. They were tested at the beginning of 2013/2014 season. In order to evaluate the psychological skills of the participants, the Ottawa psychological skills questionnaire (OMSAT-3) was used which evaluates 12 mental or psychological skills and includes 3 groups of basic psychological skills, psychosomatic skills and cognitive skills. The competitive state anxiety questionnaire (CSAI-2) was also used which evaluates 3 subscales of cognitive anxiety, physical anxiety and self confidence with a Likert scale. The performance of the athletes was evaluated based on their team's position in high ranking teams or low ranking teams. For analyzing the data of the study, we used SPSS V.19 software, Pearson product moment correlation coefficient, independent T-test and multiple regression analysis. The statistical significance was  $p < 0.05\%$ . Findings: there is no significant relationship between basic psychological and psychosomatic skills (with physical and cognitive anxiety and self confidence directions) and competitive anxiety of the successful teams of men's basketball league. And there is a significant difference between basic psychological, psychosomatic and cognitive-psychological skills in successful and unsuccessful teams of men's basketball league. Based on the findings of this study and other studies, coaches should consider self confidence improvement methods in order to facilitate the efficiency of the athletes' performance and the stimuli that creates anxiety.

**Keywords:** psychological skills, competitive anxiety, successful and unsuccessful teams

### INTRODUCTION

In the past few years, coaches and psychologists have increasingly used psychological skills and techniques in order to optimize athletes' performance and control and modify negative environmental and internal factors. As we know, the mentioned factors hinder the performance of athletes especially before major events. Recent studies show that professional athletes use different psychological skills in a competition in order to control competitive anxiety and facilitate good performance, but there is no accurate information on the methods of usage and how psychological skills usage is effective and to what extent they are efficient based on the nature of individual and team sports or full-contact and non-contact sports. Competitive anxiety is a state in which athletes step out of normal conditions and it is accompanied by physical and mental symptoms. Competitive anxiety is considered to have positive effects on performance, and in team sports, competitive anxiety optimizes athletes' performance (Ghotbi *et al.*, 2011).

A study that considered the relationship between psychological skills and athletes' performance showed that athletes who have a higher self confidence and use psychological skills have a better performance in "sensitive conditions" (Khodayaria *et al.*, 2011). A study on professional golfers showed that based on the special nature of Golf (compared to other sports), using psychological skills like emotional control, focusing, imagery and self talk is an inseparable part of their training program. Competitive anxiety is the main reason for inefficient performance of professional athletes. It is believed that professional athletes gain desirable motivation and self confidence by controlling competitive anxiety through psychological skills (like imagery and emotional control); but amateur athletes hinder their own performance exponentially by increasing their anxiety in competitions (Hills, 2007, Maker *et al.*, 2012). The existence of a moderate level of competitive anxiety in intense and full-contact sports (like rugby and martial arts), throwing sports and track and field leads to an exponential increase in athletes' performance.

Competitive anxiety and stress in major competitions and executing delicate skills in the presence of a lot of spectators hinder athletes' performance. Therefore, in order to optimize athlete's performance, coaches and sport experts should apply the findings of sports psychology as a fundamental and critical part of their training programs; by increasing psychological skills usage, they can optimize athlete's performance in competitions. If athletes' level of self confidence is the result of a difference in their skill level, it can be labeled as the most important variable that affects athletes' performance; therefore, coaches should teach athletes how to increase their self confidence (Sangari *et al.*, 2012, Wade and Hinton 2008, Joel *et al.*, 2009). (Most of the researches done on the effects of psychological skills on the reduction of anxiety levels and athletes' performance show that mental readiness accompanied by technical readiness, tactical readiness and physical readiness is an inseparable part of the training programs of professional teams and athletes.) Therefore, the purpose of this study is investigating the effects of psychological skills on competitive anxiety and the performance of the teams of national basketball super league, and its relationship with some effective variables that reduce competitive anxiety.

## METHODOLOGY

This study is a descriptive research with survey methods which uses correlation. The population in this study consists of all of men's basketball teams in the super league. Data for the study were collected from a sample of 72 players (36 players from the successful teams which were ranked first to third and 36 players from the unsuccessful teams which were ranked tenth to twelfth) and these teams were selected according to last season's rankings.

### A. Instruments

The data of this study were collected by two questionnaires:

1. Ottawa psychological skills questionnaire (OMSAT-3) was used and its third edition was designed by Bush and Salma in 2001 based on Orlik's mathematical model (1992). This questionnaire was validated in

2007. The internal validity of Ottawa psychological questionnaire (OMSAT-3) ranged from 0.37 to 0.71 based on alpha test and its reliability ranged from 0.64 to 0.91 based on test-retest method. In the original questionnaire, the internal validity ranged from 0.68 to 0.88 and the reliability ranged from 0.78 to 0.96. This questionnaire evaluates 12 mental or psychological skills and includes 3 groups of basic psychological skills, psychosomatic skills and cognitive skills.

2. Competitive state anxiety questionnaire (CSAI-2) was used. The reliability of this questionnaire was reported 0.80 based on Krenbach alpha test.

### B. Procedure

In order to determine the effects of psychological skills on competitive anxiety and basketball players' performance, the players of successful and unsuccessful teams were tested before the competition. First, both teams (successful and unsuccessful) were given the Ottawa psychological skills questionnaire, one hour before the competition. But in order to evaluate competitive anxiety, the competitive anxiety questionnaire should be taken 10 to 15 minutes before the beginning of physical activity; therefore, the competitive state anxiety questionnaire was given to both teams (successful and unsuccessful) 30 minutes before the competition (15 minutes before warm up). And to prevent any kind of bias, the athletes were asked not to consult with each other while filling out the questionnaire. The questionnaires were collected after being filled out.

## FINDINGS

The results of data analysis: competitive anxiety (somatic and cognitive anxiety and self confidence), basic psychological skills (goal setting, self confidence and commitment), psychosomatic skills (reaction to stress, fear control, relaxation, stress control and activation) and cognitive skills (focusing, refocusing, imagery, mental practice and competition planning) are described using mean and standard deviation.

The results show that the variables in successful teams are not normally distributed, but they are normally distributed in unsuccessful teams.

**Table 1: Shapiro-Wilk test Anxiety.**

Variable	Group	Statistics	P value
Cognitive anxiety	Successful	0.934	0.122
	Unsuccessful	0.967	0.360
Physical anxiety	Successful	0.922	0.056
	Unsuccessful	0.967	0.355
Self confidence	Successful	0.920	0.012
	Unsuccessful	0.972	0.949

Table 2: Shapiro-Wilk test mental skills.

Variable	Group	Statistics	P value
Reaction to stress	Successful	0.982	0.811
	Unsuccessful	0.967	0.957
Control fear	Successful	0.933	0.031
	Unsuccessful	0.968	0.363
Relaxation	Successful	0.975	0.584
	Unsuccessful	0.955	0.150
Refreshment	Successful	0.938	0.056
	Unsuccessful	0.961	0.232
Centralization	Successful	0.949	0.097
	Unsuccessful	0.975	0.584
Recycle focus	Successful	0.963	0.271
	Unsuccessful	0.969	0.409
Illustration	Successful	0.950	0.265
	Unsuccessful	0.970	0.422
Mental practice	Successful	0.909	0.006
	Unsuccessful	0.972	0.486
Design Competition	Successful	0.941	0.054
	Unsuccessful	0.982	0.808

## DISCUSSION

In this study, the relationship between psychological skills and competitive anxiety in successful and unsuccessful teams of men's basketball league was considered. The results show that there is no significant relationship between basic psychological skills (goal setting, self confidence and commitment) with physical anxiety and cognitive anxiety and self confidence directions and competitive anxiety in the successful teams of men's basketball league. These findings are consistent with the results of (Hills, 2007) and are not consistent with (Maker *et al.*, 2012). The difference in the age of participants, the type questionnaire and the type of sport can be the possible reasons of these inconsistencies. Based on these findings, we should say that psychological skills are abilities which help you reach your goals. In this state, with self confidence and necessary knowledge, a person can prepare his mind and body for optimized performance. These skills are an inseparable part of sports training and competitions and they are acquired by professional and amateur athletes in all levels and intensities, and professional athletes apply these skills more than amateur athletes (Cox, 2002). Generally, famous champions have a higher self confidence and their self confidence is increased through time which is a direct result of effective thinking and repetitive successful experiences. But some athletes have excess self confidence. Unnaturally, they overestimate their own abilities. Self confidence is in a continuum and its most optimum level is in the middle of the continuum (Williams, 2001). There is no significant relationship between psychosomatic skills (stress reaction, stress control, relaxation and activation) with physical anxiety and cognitive anxiety and self confidence directions and

competitive anxiety in the successful teams of men's basketball league. This finding is inconsistent with the results of (Ghotbi *et al.*, 2011, Maker *et al.*, 2012, Sangari *et al.*, 2012).

Psychosomatic skills make changes in physiological as well as mental and physical excitement and can be used to adjust them. Stress is an inherent element of training and competition; studies show that negative reaction to stress can hinder performance and positive reaction to stress can optimize performance. On the other hand, fear is a state which is accompanied by immediate and real danger. This state is usually observable with a person's unhappy experience and excitement and it is also accompanied by sympathetic physiological responses like secretion of adrenaline (Wadey and Hinton 2008).

There is no significant relationship between psychological-cognitive skills (focusing, refocusing, imagery, mental image and competition planning) with physical anxiety and cognitive anxiety and self confidence directions and competitive anxiety in the successful teams of men's basketball league. Our findings are consistent with the results of (Hills, 2007) and they were inconsistent with the results of (Ghotbi *et al.*, 2011, Maker *et al.*, 2012, Sangari *et al.*, 2012).

The existence of cognitive skills is necessary and critical to superior characteristics. Mental imagery can be defined as using all senses to create or recreate an experience in the mind. Mental practice is another cognitive skill that optimizes athletes' performance (Williams, 2001).

Based on these findings, we should say that psychological skills are abilities which help you reach your goals. In this state, with self confidence and necessary knowledge, a person can prepare his mind and body for optimized performance.

These skills are an inseparable part of sports training and competitions and they are acquired by professional and amateur athletes in all levels and intensities, and professional athletes apply these skills more than amateur athletes. In other words, focusing which means paying attention and being able to focus on important parts is integral to successful performance. Athletes who have weak performance say that in the middle of a competition, instead of focusing on their assignments, they focus on not losing, spectators cheering and the scores. Psychological skills are aiding factors that lead to success or defeat of any team or athlete. In unsuccessful teams, probably because of the critical conditions of the team, players don't place enough focus on their performance and even in some competitions we witness that player are easily irritated and become aggressive. These players have lower levels of self confidence because of the team's condition and fear of falling into a lower rank; this even leads to reduced physical fitness and weak decision making and the sum of all these factors lead to anxiety. Therefore these findings are logical based on the mentioned reasons.

The results show that there is a significant difference between basic psychological, psychosomatic and psychological-cognitive skills in successful and unsuccessful teams of men's basketball league and another finding shows that there is a significant difference between competitive anxiety (physical, cognitive and self confidence) in successful and unsuccessful teams of men's basketball league. These findings are consistent with studies which say professional athletes gain more experience because they participate in different competitions with different conditions (which leads to better performance compared to amateur athletes). Factors like experiencing various tournaments, insisting on hyperactivity or little activity and optimum energy consumption in different conditions leads to efficient athletes' performance (Cox, 2002).

## CONCLUSION

One of the possible reasons for these differences might be the presence of many former or current players of the national team in high ranking teams of the league. We should also consider the fact that the coaches and technical staff of high ranking teams of the Iranian basketball super league include experts and coaches who have passed international training courses; they are

completely familiar with training science and training psychology and based on the experiences gained in their life, they apply these skills in order to optimize players' performance and they have a positive attitude toward reaching their goals. It seems that using different psychological skills, in addition to having positive effects on athletes' performance, leads to adjustment and reduction of anxiety. On the other hand, various factors like athlete's personality characteristics (type A and B) and the extent of controlling personal emotions may lead to competitive anxiety. These factors may also be the possible reason for the findings of this study; the players of high ranking teams probably have a better emotional control because of experiencing different training conditions.

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