



# Relationship Between Mental Skills and Penalty Kicks Performance in the Elite Penalty Shooters in Iran's Professional Football Teams

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## Abstract

The goal of this research was to predict the elite penalty shooters performance in Iran's professional football teams, depending on the level of their mental skills. Because of this, 20 penalty shooters of professional teams including the Iran's national team and Persepolis team were chosen by patterning way as available. The mental skills that were studied in the research were evaluated by the Ottawa mental skill assessment tool questionnaire (OMSAT). For determining the operation of penalty shooters in the current research, the whole penalty shoots during the nine leagues from the side of the participating players have been considered in the study. Pearson's test of correlation index were used to analyze the data. Results showed that among the basic mental skills, psychosomatic and cognitive skills have a meaningful correlation with success in penalty operation and success in the operation of penalty shooters of professional football teams can be predicted by the mental skills. Therefore, football coaches should pay attention to the improvement of players' and specially penalty shooters' mental skills and use the practicing programs of mental skill to improve the mental preparation of players and specially penalty shooters.

**Keywords:** Performance; Penalty Shooters; Elite; Mental Skills

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## 1. Introduction

Nowadays it is believed that those athletes who have mental skills besides the physical and technical capabilities have higher change in becoming successful in sports competitions and better perform their specific tasks in solo or team sports; therefore, the role of mental skills in athletes' performance is the core of research and study in sports psychology [1,2]. Mental skills let the athlete maintain his/her best performance at all times during a competition [3]. Therefore, Grossarth et al., (1990) suggested that psychological factors are the main factors of success in Football and

Boxing [4]. The recent studies also show that there is a distinctive difference between successful elite and less successful elite athletes in terms of their mental skills [5,6]; where, successful elite athletes have more self-confidence, concentration, performance directing, anxiety control and compatibility skills compared to less successful elite ones [5-7]. Despite these findings, Williams and Reilly (2000) showed that it is difficult to determine the strong psychological and mental differences between elite and less elite athletes [8]. Nonetheless, the new studies have all underlined the recognition of specific mental skills of each sports activity, despite this difficulty. These

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researches have tendency towards studying the various mental characteristics and their effects in different sports activities and various positions.

Football players are among the group of athletes being considered by the researchers due to the nature of their sports. Each football player may need specific mental skill based on the position he/she is playing in the match. Particular factors may predict the success of each player in the field [9], but one of the key factors in success of a team in a competition is penalty shoots. Penalty shooting is like any other tactics, needs special mental and physical skills. In exercise, penalty shoots by an elite football player are most probably in goal, since the distance is not far and the width of the goal is wide. But it is seen in various occasions that a football player or even an elite football player, who has scored the penalty in normal condition, can't score during a competition. It happens while the dynamic skill of the football player during the competition and the exercise session is the same; therefore, the reason of disappointment during penalty shoot in a competition can be referred to deficiency in mental skills. This research goal is to predict the performance of the elite Iranian penalty shooters based on their mental skills. Since penalties are playing important role in victory or defeat of a team, predicting the successful penalty shooters may become an important step in victory of football teams.

## 2. Methodology

The subjects were 20 penalty shooters of Iran national football team and Persepolis football team with average age of  $27.3 \pm 4.631$  and playing experience of  $8.9 \pm 4.141$  years. The subjects have been chosen by the researcher based on their experience in shooting penalty during official matches. The OMSAT questionnaire has been distributed among them after coordination with F.F.I.R.I after providing them with the detailed information. This questionnaire was given to penalty shooter of National team of Iran during their Qatar Camp and the Persepolis penalty kickers during the Dubai camp. The time to collect the answers was on a day on which no match had been performed a day before or a day after in order the matches to have minimal effect on the answers. After categorizing and optimizing the data, the average and standard deviation of them have been calculated and then the Pearson test of correlation performed ( $P < \%5$ ) to obtain the results.

## 3. Results

The results showed that there is a positive and strong relationship ( $r=0.711$ ) between basic mental skill and shooting a penalty and this basic mental

skill, predicts the success in penalty performance. This relationship shows that the higher basic mental skill would result in a more successful penalty shoot. It is also showed that there is a positive and strong relationship ( $r=0.508$ ) between psychosomatic skills and shooting a penalty and this psychosomatic skills, predicts the success in penalty performance. There was also a strong and positive relationship ( $r=0.636$ ) between cognitive skills and shooting a penalty and it predicts the success in penalty shoot. The relationship shows that higher psychological skill may lead in success in a penalty shoot.

## 4. Discussion and Conclusion

This research was aimed to predict the success in penalty shooting performance of professional football players based on their mental skills and the results of this research showed that this performance can be predicted by their basic mental, psychosomatic and cognitive skills. The relationship between basic skills and penalty performance was stronger than the other two skills. The relationship between cognitive skill and penalty performance was also stronger than the psychosomatic skill. In other words, the basic skills such as targeting, self-confidence and commitment were among the strongest factors in predicting a penalty shoot success. The findings of this research were same as the study of Thelwell (2001) which had been conducted on gymnasium triathlon performance [7]. In this research, the basic, cognitive and psychosomatic skills have been identified as the most important predictors which were the same as the Junior results. The current research results also were similar to the findings of Morgan and Pollock (1977) regarding the effects of mental preparation program in the elite distance runner [10]. Since this research and previous studies show that the success in sports performances can be predicted by the level of mental preparation, therefore high mental preparation can predict the success in sports performances. The results of this study shows that success in penalty shooting can be predicted based on the mental preparation of the professional football players.

Since the basic mental skills such as targeting, commitment and self-confidence are among the most effective mental skills during an important match and are the most import factors in predicting the level of performance in this research, and it is being noted that a team without self-confidence and concentration is not able to win the match, the coaches and players must pay more attention to this skills and implement special programs to develop them as well as other mental skills and

utilize programs to increase the mental preparation of players and specially the penalty shooters.

It is obvious that in a high level tournament, the sensitivity and importance is also higher and high mentally prepared athlete and teams are more successful. A good coach has the capability to utilize special programs to increase the mental preparation of the players specially the penalty shooters. There is no doubt that defeating the fear and bypassing the anxiety in order to reach the self-confidence is one of the goals of coaches. A coach can solve the mental problems of players and the team if he/she can be able to understand the mental skills of the players and choose the most capable and mentally prepared players to shoot the penalty. It is suggested that the football coaches and sport psychologist pay attention to the mental skills of their players specially the penalty shooters and choose the most capable and mentally prepared players to shoot the penalty during the matches. Coaches are advised to utilize the special programs to increase the mental skills of their players and penalty shooters. They can choose the best players based on the physical, technical and mental capabilities in order to reach to their goals. It is also suggested that sports psychologists are being hired for national and club teams.

#### References

1. Ericsson, K. A., T. K. Krampe, C. Tesch-Romer. 1993. The role of deliberate practice in the acquisition of expert performance. *Psychological Review* 100(3): 363-406.
2. Nyklicek, I. 2011. *Mindfulness, Emotion Regulation, and Well-Being*. Springer New-York.
3. Weinberg, R. S., D. Gould. 2011. *Foundations of sport and exercise psychology*. 6rd Edn. Champaign, IL: Human Kinetics.
4. Grossarth-Maticek, R., Eysenck HJ, Rieder H, Rakic L, 1990. Psychological factors as determinants of success in football and boxing: the effects of behaviour therapy. *International Journal of Sport Psychology* 21: 237-255.
5. Gauron, E. F. 1984. *Mental training for peak performance*. New York: Sport Science Associates.
6. Laguna, P. L., K. Ravizza. 2003. Collegiate athletes' mental skill use and perceptions of success: An exploration of the practice and competition settings. *Journal of Applied Sports Psychology* 15: 115-128.
7. Thelwell, R. C., A. I. Greenhous. 2001. The effect of a mental skills training package on gymnasium triathlon performance. *The Sport Psychology* 15 (2): 127-141.
8. Williams, A., T. Reilly. 2000. Editorial: Searching for the stars. *Journal of Sports Sciences* 18: 655-656.
9. Goudas, M. T., Y. Heodorakis, G. Karamouslidis. 1998. Psychological skills in basketball preliminary study for development of a Greek from of the athletic coping skills inventory. *Perceptual and Motor skills* 86: 59-65.
10. Morgan, W. P., M. L. Pollock. 1977. Psychologic characterization of the elite distance runner. *Annals of the New York Academy Sciences* 301: 382-403.