European Journal of Physical Education and Sport Science
ISSN: 2501 - 1235
ISSN-L: 2501 - 1235
Available on-line at: www.oapub.org/edu

doi: 10.5281/zenodo.1042815 Volume 3 | Issue 11 | 2017

INVESTIGATING THE EFFECT OF MENTAL IMAGERY ON THE SUCCESS OF ATHLETE STUDENTS AT TRABZON UNIVERSITY, TURKEY

Fatih Kırkbir
Karadeniz Teknik Universitesi,
Beden Eğitimi Ve Spor Yuksekokulu,
Turkey

Abstract:
The purpose of this study was to investigate the effect of mental imagery on the success of athlete students at Trabzon University. In terms of the purpose of the research was an applied type, correlated in terms of the type of the method and survey method in terms of the method of data collection. The statistical population of this study was athlete students of Trabzon University of Turkey, in 365 people. To determine the sample size, the Cochran formula was used and according to this formula, the number of statistical samples was 188, which were selected by random sampling method and according to the ratio of players in each discipline. To collect information, Voaght mental imagery questionnaire (2010) and Mousavi's and Vaez Mousavi's (2015) sportswomen questionnaire were used. Data were analyzed by SPSS software and regression coefficient was used to analyze the hypotheses of the research. The results of the research show that mental imagery has a positive effect on athlete students' achievement and predicts 0.07% of the changes in the success of athlete students. Also, ideation and planning on the success of athlete students has a significant positive effect and 0.77 ideas and 0.50 planning predict the changes in the success of athlete students.

Keywords: illustration, mental illustration, success, students, Trabzon University

1. Introduction

Nowadays, improvement and progress in the success of athletes in various conditions, especially competitive conditions and racing, is one of the main concerns of researchers and physicians, especially motorists. Mental imaging is one of the most important

psychological practices used to learn new skills in order to succeed and win sporting events and keep track of learning. Mental imaging is the use of athlete's mental imagery to improve physical performance that is performed in the mind rather than practice in the field. Mental imaging is a very new debate, and discovering is an important development in psychology and creative personality. Mental imaging is a basic and fundamental introduction to which all personality, behavior, and even are formed the nature of the individual. Successful women and men have long enjoyed mental imagery and dramatic work to succeed. Famous and professional Bulla wrote in an article that in the golf game, having a clear idea of where you want to send the ball and what to do is more important than physical fitness (Sophian and Abdullah, 2009). In the field of physical education and exercise, the goal is whether the mental exercise of a motor skill is beneficial to physical training. It should be noted that mental training is the use of athletic mental imagery to improve physical performance, which takes place throughout the exercise in place of the field. It seems that athletes of all ages, to any extent, are capable of some kind of mental exercise (Nordin n et al., 2010).

Mental imaging Symbolic browsing is a physical activity without any clear muscular movement. Imagination can be used to learn skills and techniques (specific cognitive skills) or strategies and tactics (general cognitive) as well as motivation and emotion management (motivational). In recent decades, several studies have shown the usefulness of mental training in initial learning, implementation, and even at the stage of thinking. This effectiveness has been confirmed in improving the performance of both beginners and experienced people (Reilly, 2013). Since the performance of athletes is a reflection of their thoughts and feelings, they can also increase their skills by creating positive mental images of their own doing skills. In addition, they can think of their skills far more than they do in exercises. Also, creating successful mental images reinforces their self-esteem, as a result, mental imagery will help to function positively (Ramsey i et al., 2014).

In his mental imagery, the athlete portrays himself in the position of playing sports with all the senses (vision, hearing, smell, etc.). The images of this embodiment should include the successful performance of the athlete and his satisfaction with his performance. Mental imaging skills are cognitive skills in sport that can enhance the technical skills of athletes by activating a number of psychological mechanisms. Mental imaging techniques, positive thinking, visualization of achievement, practice of visual motor behavior, modulation of cognitive behavior in sports are some of the skills that create attitudes, such as changes in thoughts, feelings, attention, and performance.

Mental imaging is a way to practice mental activity, which is an important part of the mental fitness program for athletes (Greenlees & Weston, 2006). Athletes typically

have more training and skills in physical fields than other fields, and often have less awareness of the cognitive and psychological factors affecting their performance and exercise performance. Therefore, athletes of various disciplines, especially team sports, are not much familiar with sports-related mental skills, and less do mental exercises. Recently, mental imagery has been considered as one of the basic and essential skills needed in sport. In this study, the effect of mental imagery on the success of athletes has been evaluated. The study of Jordet (2005), which uses cognitive-public imagery as an ecological environmental intervention for three elite football players, showed that despite the increase in perceptual skills, except one improvement in the performance of work-related sports during the official tournament was not seen.

Dallaire (2006) concluded that psychosocial skills could be expanded with the help of training. Learning basic psychosocial skills, such as concentration, self-confidence and anxiety control, increases the performance of athletes.

In a research study with footballers, Voaght (2010) concluded that the training of mental skills, such as mental imagery, relaxation and self-control, reduces athletic stress during exercise and strengthens their performance. Hall et al. (2013) conducted by athletes with the title "Illustration and Positive Thinking"; found that illustrating of negative thoughts, interrupt athletes' performance due to reduced self-esteem and motivation.

Ghaffari (2015) investigated the ability to control arousal with two methods of mental imagery and biofeedback in athlete boys and girls. The results showed that there was a significant difference between the mean scores of the two groups of male and female athletes in the score of all three heart rate, temperature and galvanic response in the final test. The findings show that boys are more able to control their arousal than girls. Seif Barghi (2013) did a research on the effect of mental imagery on the Performance of elite soccer athletes in young adults. The results showed a remarkable change in the behavior of young footballers after intervention, compared to the control group.

2. Materials and Methods

In terms of the purpose of the research, this is an applied type and correlated one in terms of the type of method. In terms of the method of data collection, the survey method is the research one.

2.1 Statistical population, sample size and sampling method

The statistical population of this study consisted of athlete students of Trabzon University, in number of 365 people. To determine the sample size, Cochran formula was used and according to this formula, the number of statistical samples was 188, which were selected by random sampling method and according to the ratio of players in each discipline.

2.2 Method and tool for collecting information

Collection of information required for research was carried out on a field trip by referring to the training venue of Trabzon University sports teams. For collecting information, the Voagh mental imagery questionnaire (2010), which includes 14 questions, includes 2 dimensions of planning and design, and Mousavi's and Vaez Mousavi's (2015) sports performance questionnaire includes 29 items of 6 components (mental performance, attention, Technique, error sensitivity, commitment, progress).

.

2.3 Validity and reliability of the questionnaire

To assess the validity of the questionnaire, content validity was used, so that the questionnaires were presented to the professors and their views on whether the questionnaires were a good tool for measuring the variables were asked to be confirmed by them. Cronbach's alpha coefficient was used to measure the reliability of questionnaires. Cronbach's alpha coefficient was 0.81 for the mental imagery questionnaire and 0.77 for the sports success questionnaire.

2.4 Information analysis method

Data were analyzed by SPSS software and regression coefficient was used to analyze the data of the research.

3. Results

Table 1: The effect of mental imagery on the success of athlete students

Correlation Coefficient	Coefficient Determination	Modified coefficient	Watson's Camera
0.798	0.636	0.629	1.91

According to the results of Table 1, the correlation coefficient between mental imagery with the success of athlete students is 0.79, and the coefficient of determination is 0.63. However, if the camera-Watson statistic is within the acceptable range of 1.5 to 2.5, a lack of correlation between errors is accepted. Given that the Watson camera's stature is 1.91, it can be said that the lack of correlation between the errors is accepted.

Table 2: The Effect of Mental Illustration on the Success of Athlete Students

The predicted variables	Non-standard coefficients		Standard coefficients	T	P
	B	SE	BETA		
Fixed value	2.152	SE		17.222	.000
Imagery practice	.755	.125	.798	11.008	.000

According to the results of Table 2 and considering that the significance level of the test error is less than 0.05, it can be said that mental imagery has a positive effect on the success of athlete students. Also, the beta coefficient shows that mental imagery predicts 0.75 percent of the changes in athlete students' success.

Table 3: The effect of design and planning on the success of athlete students

Correlation Coefficient	Coefficient Determination	Modified coefficient	Watson's Camera
.840	.705	.702	1.69

According to the results of Table 3 the coefficient of correlation between designing and planning successfully with athlete students is equal to 0.84, and the coefficient of determination is equal to 0.70. However, if the camera-Watson statistic is within the acceptable range of 1.5 to 2.5, a lack of correlation between errors is accepted. Given that the Watson camera statistic is 1.69, it can be said that there is a lack of correlation between the errors.

Table 4: The effect of designing and planning on the success of athlete students

The predicted variables	Non-standard coefficients		Standard coefficients	T	P
	B	SE	BETA		
Fixed value	.133	.250		.532	.595
Idea	.844	.046	.762	11.343	.000
Scheduled	.546	.073	.496	9.362	.000

According to the results of Table 4 and considering that the significance level of the test error is less than 0.05, it can be said that the ideas and planning on the success of athlete students have a positive effect. Also, beta coefficient shows that the idea of 0.77 and planning 0.49 predict the changes in the success of athlete students.

4. Conclusion

The results of the research showed that mental imagery has a significant positive effect on the athlete's athletic success. Also, the beta coefficient shows that mental imagery predicts 0.75 percent of the changes in athlete students' success. In explaining the result

of the research, it can be said that if the level of mental imagery of athlete students at Trabzon University increases by 1 unit, the student sports success rate is 0.79, which indicates direct and strong impact of mental imagery on the success of athlete students at Trabzon University.

Also, on the impact of mental imagery on the success of athlete students, the results show that ideation and planning have a significant positive effect on the success of athlete students. Also, beta coefficient shows that the idea of 0.77 and planning 0.49 predict the changes in the success of athlete students. In the final conclusion of the research, it can be said that athletes' performance is a reflection of their thoughts and feelings, so athletic students can develop their skills by creating positive mental images of their own doing skills, which increases their success in the field of sports. In addition, they can think of their skills far more than they do in exercises. Also, creating successful mental images reinforces their self-esteem; as a result, mental imagery will help to function with a positive outcome.

The research findings are consistent with the findings of Dalier (2006), Voaght (2010), Hall et al (2013) and Seif Barghi (2013). Dalier (2006) concluded in a research that psychosocial skills could be expanded with the help of training. Learning basic psychosocial skills, such as concentration, self-confidence and anxiety control, increases the performance of athletes.

In a research with footballers, Voaght (2010) concluded that teaching psychosocial skills, such as mental imagery, relaxation, and self-help, reduces athletic stress during exercise and strengthens their performance. Hall et al. (2013), in a research conducted with athletes in the name of illustration and positive thinking, found that illustrating thoughts about negative outcomes, due to reduced self-esteem and motivation, disrupted the performance of athletes.

Finally, Seif Barghi (2013) conducted a research titled "The Effectiveness of Mental Imagery on the Performance of Elite Football Athletes in Young Adults." The results showed a remarkable change in the behavior of young footballers after intervention, compared to the control group. According to the results of the research to improve the sports performance of athlete students at Trabzon University, the following are suggested:

4.1 Suggestions

- Athletes' managers and coaches by reviewing the achievements of athletes earlier, improve their mental image of athletic skills to achieve success.
- Instructors use psychologists to help athletic students use their educational imagery packages to put an end to their fears of holding big tournaments.

- Instructors from athletic students get ideas for sports exercises and apply their ideas at sports events.
- In order to improve the athletic performance of sports students, it is suggested that the training programs provided to students be based on their psychological characteristics, and their ability to visualize both mental and motor skills.

References

1. Ghaffari, B. Comparison of ability to control arousal with two methods of mental imagery and biofeedback in athlete's boys and girls, growth and motor-exercise learning, 2015.
2. Seif Barghi, T. The Effectiveness of Mental Imagery on the Performance of Elite Football Athletes in Youth and Adults: A Clinical Trial, Journal of Faculty of Medicine, Tehran University of Medical Sciences, 2013; 71(3): 171- 178.
3. Milne, Marcia, Craig Hall and Lorie Forwell. Self-Efficacy, Imagery Use, and Adherence to Rehabilitation by Injured Athletes. J Sport Rehabil 2015; 150-67.
4. Reilly T. Science and football: a review of applied research in the football codes. J Sports Sci 2013;21(9):693-705.
5. Greenlees, IA, Weston N. Using psychological skills training to develop soccer performance. J Appl Sport Psychol 2006; 18:254-270.
6. Ramsey R, Cumming JL, Brunning C, Williams S. A PETTLEP based imagery intervention with university soccer players. J Sport Exerc Psychol 2014; 29: S196.
7. Nordin S, Cumming J, Vincent J, Mcgrory S. Mental practice or spontaneous play? Examining which types of imagery constitute deliberate practice in sport. J Appl Sport Psychol 2010; 18: 345- 362.
8. Sofian OF, Abdullah R. The Effectiveness of Imagery and Coping Strategies in Sport Performance. Eur J Soc Sci 2009; 1(9): 97-108
9. Dallaire, J. (2006). Develop your mental skills by training to improve personal performance. Performance prime.
10. Voaght. M. (2010). Sources of stress and coping strategies of us soccer officials. The journal of the stress and health, 25(6). 91-101.
11. Hall, C. R., Munroe-Chandler, K. J., Cumming, J., Law, B., Ramsey, R. (2013). Imagery and observational learning use and their relationship to sport confidence. Journal of sport sciences, 4(2), 327-337.
12. Jordet G. Perceptual Training in Soccer: An Imagery Intervention Study with Elite Players. J Appl Sport Psychol 2005; 17(2):140- 156.