

Positive Psychology on Controlling Stress of Professional Boys' Volleyball Players

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Abstract

The aim of this study was to determine the effect of positive psychology training on controlling stress of professional boys' volleyball players. The method was semi- experimental design. For this purpose, thirty professional volleyball players of the country in 2024-2025, who volunteered to cooperate with the project and were eligible for inclusion in the study were selected voluntarily and then randomly placed in 2 groups of 15 participants (positive psychology training and control group). The experimental group received positive psychology training and the control group did not receive any training. All subjects completed the Stress Scale (DASS-14) before and after training. Analysis of covariance was used to get the data. The results showed that positive psychology training has a significant positive effect on reducing stress of professional volleyball players.

Keywords: Positive Psychology, Stress, Good health and well-being, Gender equality, Professional boys' Volleyball players.

Introduction

In recent years, sports psychologists are increasingly interested in helping each sports participant reach his or her potential as an athlete (KS & Sathya, 2015). The importance of emotional and personality factors in sports competitions has been recognized for years (Spielberger, 2021). Athletes, whether beginners or elite, whether young or old, often feel stress, in this scenario, even if an athlete has worked hard, practiced and planned a mature technique, the athlete will not perform optimally (Salehian et al., 2023). In these circumstances, emphasizing physical fitness and proper technique will not be enough to motivate an athlete for optimal success. Coaches and athletes should be aware that psychological factors may have a significant impact on the success of athletes. Psychology is considered as one of the most important aspects in achieving the peak of success and well-being in all people, especially athletes (Sopa, 2021).

Athletes, especially volleyball players, are often exposed to severe physical stress during training or competitions (Hosseinzadeh et al., 2022). The intense mental and physical stress faced by professional athletes stimulates adaptive mechanisms, including the activation of the hypothalamus-pituitary-adrenal (HPA) axis (Golabchi & Salehian, 2021). Stress is overlapping concepts. Stress is the response of an organism when faced with a situation with one of the following characteristics: novelty, unpredictability, threat to survival or ego, and/or a sense of low control (Kovacs & Baggish, 2016). During a stress response, the SNS triggers the fight-or-flight response. The second response energizes the body when faced with a stressful factor, for example, it increases the heart rate, blood pressure, and sweating, and allows it to perform better in cognitive and physical tasks. When the stressful factor is eliminated, stress recovery occurs. Reducing the level of arousal allows the body to relax and replenish the expended energy (Khezri et al., 2023). But studies show that increased stress can negatively affect a person's movement in many sports, which shows that stress not only affects mental performance, but also physical performance. For this reason, it is important to consider both components in order to have a better understanding of stress as a whole in sports performance (Harrison et al., 2021). They don't tolerate heavy, high pressure and have weak coping mechanisms, which causes poor adaptation to stress. Therefore, the negative reaction to stress interferes with movement coordination, reduces flexibility and increases cognitive and physical stress, gradually over time and without applying appropriate and effective intervention, professional athletes are very susceptible to psychological problems, including stress and depression (Zhang et al., 2021).

One of the problems facing to therapists is the lack of determination regarding the effectiveness of the therapeutic methods for selection. Nowadays, some researchers have put forward the idea of thoughtful care and the need to examine treatment from different aspects. Up to them, choosing the treatment, the economic costs, the side effects of application and the response rate to the treatment should be evaluated (Plessen et al., 2022). Based on this, since swimming is a fresh, refreshing, youth-friendly sport, the world is inclusive and people-friendly, and swimming athletes are national capitals, and the problem of their psychological problems (stress) should be paid attention in the best way. Therefore, researchers believe that positive psychology training according to the considerations of therapists (Karr et al., 2021) is one of the interventions that can control the stress of professional swimming athletes.

Positive psychology is a relatively new discipline proposed by Martin Seligman et al. that focuses on increasing well-being and optimal functioning rather than improving symptoms, and complements rather than replaces traditional psychology. In fact, Seligman encouraged a more holistic approach to the treatment of psychopathology - he emphasized the importance of focusing on the positive aspects of life such as gratitude, kindness, fostering positive relationships, humor, empowerment, resilience, and hope, and finding meaning and Emphasized purpose in life (Pan et al., 2022). Recent studies (Kwok et al., 2022; Ahangarzadeh Rezaei et al., 2017) indicate the usefulness of positive psychology on quality of life and reducing depression, stress, in different clinical populations. The issue of positive thinking among athletes and young athletes is of particular importance; So that during the periods when an athlete is engaged in professional sports, he needs high morale and high self-confidence, therefore, by practicing positive thinking and creating positive spirits in himself, he will improve mentally and physically. and achieve many successes (Tabrizi et al., 2021). Athletes experience stress thoughts just before crucial games and competitions because of themselves, coaches and team management; these reflections may have a positive or negative effect on the performance on the field depending on the attitude of the athletes and their background (Sopa, 2021). In the study of positive psychology, the first essential step to change a negative view to a positive one is to identify and differentiate between feelings, thoughts and beliefs. Beliefs and convictions of each person and the type of perception of life and life events are what lead him towards optimism and pessimism. Positive thinking people mostly use problem-oriented coping mechanisms that play a major role in optimism, and in the absence of a coping method focused on problem solving, adaptive strategies based on emotion-oriented such as acceptance, they use jokes and positive review of the situation (Mirkamali et al., 2021). With positive thoughts, a person overcomes negative feelings and ineffective thoughts that lead to stress, by reducing stress and increasing the level of optimism, a person has a positive view of him and focuses more on his capabilities and abilities. He observes opportunities more and looks for success in various fields of life and sports competitions (Sharifinia and Rezaei, 2019). The goal of positive thinking training is for the stress person to find a realistic view of him and his sports life and judge his real problems correctly. With this perception, they recognize their positive experiences and apply them in critical situations and overcome their stress (Khamesan et al., 2017).

Since the previous researches only examined the psychological consequences (depression, anxiety) among the athletes of other sports fields and less attention has been paid to the athletes of the swimming field and their psychological problems, and no research has been done in this field in Iran and with Paying attention to the research gap and the lack of experimental research in the field of effective educational interventions to control the stress of professional athletes, therefore the present research is the first research that examines the impact of positive psychology education on controlling the stress of professional male volleyball players, which shows the importance of the current research. Conducting this research, in addition to the knowledge of swimming

athletes about taking quick psychological measures when they meet stress during competitions can be a guide for future researchers. Also, these results from the authorities and sports psychologists would be used to control the stress of athletes.

Materials and Methods

The method was semi-experimental design (pre-test-post-test) by two experimental and control groups. The subjects were selected voluntarily and after the test (stress scale - pre-test) and before the intervention of the independent variable, they were randomly assigned to one control and two experimental groups.

Sociostatistics, sampling and sampling method

The participants of this research included all the female professional volleyball players in the northwest of the country going to national competitions in 2024-2025. Among the male professional volleyball players, 30 of them who volunteered to cooperate with the project and had the conditions to enter the study were selected as available and then divided into 2 groups of 15 participants (positive psychology training and control group) were randomly replaced.

Data collection tool

In order to collect the required information related to the subject of the research, the stress scale (DASS-14) and the intervention method (positive psychology training) were used in this research.

Stress scale (ASS-14)

The standard questionnaire for measuring stress (DASS-14) was first presented by Laviband (1995) which includes 21 questions with a Likert scale, 7 of which are related to stress. In this research, only the stress scale (ASS-14) which includes 14 questions; is executed. Each question is scored from zero (does not apply to me at all) to three (completely applies to me). The subject's score in each of the two subscales is obtained by summing the expressions belonging to all the expressions of that subscale (Zareipour et al., 2018). The test-retest validity in the two subscales of stress was 0.90, the reliability of this scale was reported by Cronbach's alpha 0.89 for stress (Asad Zandi et al., 2018).

Intervention method:

Teaching positive psychology

For the experimental group, positive psychology education was taught in 11 sessions and two sessions each week for one hour. This treatment method was created by Siligman (2005) and has been studied in various researches, the results of which indicate the effectiveness of this treatment method on stress and psychological well-being (Mirkamali et al., 2021; Nik Menesh and Zandokil, 2015).

How to collect data

The subjects of the experimental group received positive psychology training (11 sessions; 2 one-hour sessions per week) by a psychologist, and the control group did not receive any training. All educational materials in the training group were presented in PowerPoint format with pictures. After the completion of the training sessions, the post-test (stress scale) was measured in both groups (experimental and control groups).

Methods of data analysis

According to the hypotheses, ANCOVA test was used by SPSS-20 statistical software at level of 0.05%.

Results

Table 1. The results of difference in stress in the post-test in two groups

The source	Sum of the squares	df	Mean of the squares	F	Sig.	Eta
Pre-test effect	148.934	1	148.934	184.954	0.001	0.877
group effect	33.133	1	33.133	57.739	0.001	0.767
Error	18.313	27	0.815			
Total	4426	30				

Table 1 shows the group effect is significant at the 95% probability level ($p = 0.001$, eta square = 0.66, $F = 57.73$). After adjusting the pre-test scores, the amount of stress in the post-test in two groups has a significant difference.

Table 2. The adjusted mean of stress in two groups

Group	N	Adjusted mean	Standard error
Teaching positivity	15	11.738	0.118
Control	15	14.775	0.118

Table 2 shows the amount of stress in the experimental group ($m = 11.73$) is significantly lower than the control group ($m = 14.78$). Therefore, positive psychology training has a significant positive effect on reducing the stress of professional female volleyball players.

Discussion

The results showed that positive psychology training has a significant positive effect on reducing the anxiety of professional female volleyball players in the northwest of the country going to national competitions. The result is alongside with the results of Cook et al.'s studies (2022); Hendriks et al. (2020); Ahangarzadeh Rezaei et al. (2017) and Moslamipour Lalami and Javadi Siahkolorudi (2016) that positive psychology programs have a positive effect on reducing depression, stress, physical and cognitive state anxiety, increasing self-confidence, perceived performance of athletes, and increasing well-being. It has a positive effect on people's psychological and happiness and also, with the results of Taminen et al. (2021) and Yang et al. as a positive challenge instead of a negative sense of control, and the use of emotion regulation strategies among teammates has a significant role in reducing anxiety and increasing the performance of athletes. In addition, it is consistent with the results of Sabahi's research (2018) which indicated that the stress management training program can be a suitable approach to reduce anxiety and increase self-control and mental vitality.

One of the main topics of interest in sports psychology that can affect athletes' performance, especially in championships, is the level of anxiety before the competition and its effect on the movement skills, spirit and mood of athletes. Generally, athletes are anxious for many different reasons, such as the importance of sports success or the difference between the capabilities and abilities required by their sport, and these factors can negatively affect their performance. One of the main causes of anxiety in athletes is social factors. The constant pressure on a young athlete from the expectations of parents, coaches and teammates can cause a lot of anxiety. Coaches can have the most influential role in this field in youth athletes (Ezzati Arbat and Hosseinzadeh, 2023). In fact, how to use psychological measures, including the components of positive psychology (resilience, positive thinking, self-efficacy, strictness, and a sense of control and purposefulness) by volleyball players plays a significant role in controlling their anxiety during competitions (Mann & Narula, 2017). Based on the positivist approach, creating positive emotions, being busy, having meaning in life, and improving people's capabilities causes the disappearance and reduction of emotional and psychological problems (Rashid, 2020). In this research, teaching positive psychology to volleyball players by creating positive emotions will open the limited scope of thinking and allow athletes to see more possibilities and possibilities and think more optimistically about the future. Athletes who experience positive emotions are likely to experience upward cycles of improvement more and more regularly, which is enjoyable in itself, and this treatment at the mental level is related to positive mental states such as satisfaction and happiness in success, purposefulness and control. It leads to anxiety-inducing conditions in competitions and seeks to make them stronger and more capable, to develop their talents and reduce their anxiety during competitions.

The results showed positive psychology training has a significant positive effect on the stress control of professional female volleyball players in the northwest of the country going to national competitions. There has been no report about this research finding in the research literature; But the result obtained with the results of Kar et al.'s studies (2021); Hendricks et al. (2020); Ahangarzadeh Rezaei et al. (2017), Rashidalmasi et al. (2017) and Moslamipour Lalami and Javadi Siahkolorudi (2016) that positive psychology interventions had a significant impact on mental health, depression, stress and psychological well-being are consistent. It is also in line with the research results of Nik Menesh and Zandukili (2013), who stated that programs based on positivity training are effective in reducing depression, stress, anxiety and increasing the quality of life of teenagers.

Athletes participating athletic competition regularly experience physiological and specific emotional responses as a result of anticipated psychological and physical stress. Specifically, cortisol, the indicator of the activation of the hypothalamus-pituitary-adrenal axis, prepares the athlete for the physiological and psychological demands of competition. Stress is one of the important factors affecting the performance of athletes. But if stress increases in volleyball players going to sports competitions, it has a side effect on athletes' performance in competitions (Harzandi & Salehian, 2022). The approach of positive psychology, considering capabilities and human talents (instead of dealing with abnormalities and disorders), has attracted the attention of psychologists in recent years. Researchers and positivist psychologists have been looking for ways to empower people to deal with stress and its consequences in order to improve health by training methods to direct their attention towards positive emotions and create positive resources (Bahadri, 2018). In this study, teaching positive psychology to volleyball players caused them not to consider only the negative aspects in

sports competitions, but to focus on their abilities, virtues and positive points in sports and solve the problem from See other aspects. In fact, positive thinking, hope, internal change and self-confidence can save a person from disintegration and mental breakdowns in sensitive sports conditions; And in such a situation, having such positive thinking, athletes going to national competitions can overcome negative emotions and ineffective thoughts that lead to stress and be associated with the high success of professional volleyball players in national and world championships.

Conclusion

In order to reduce the stress and anxiety of professional athletes going to national and international competitions in various sports, especially swimming, positivist psychology training is recommended as an effective program by all coaches and sports psychologists.

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