

The Effect Of Progressive Relaxation And Concentration Training On Penalty Kick Success In Dangar Putra Fc Football Club

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Abstract

Objectives: This study aimed to determine the effect of progressive relaxation and concentration training on penalty kick success among Dangar Putra FC football players in 2022.

Materials and Methods: This study used an experimental method with a two-group pretest–posttest design. The participants were 20 football players from Dangar Putra FC, selected using a population study technique. The players were divided into two groups: 10 players received progressive relaxation training and 10 players received concentration training. The instrument used was a penalty kick test adapted from Sukatamsi. Data were analyzed using the t-test formula to compare pretest and posttest results.

Results: The results showed that progressive relaxation training improved penalty kick performance, with t-count = 6.006, which was higher than t-table = 1.833. Concentration training also improved penalty kick performance, with t-count = 5.013, which was higher than t-table = 1.833. These findings indicate that both training methods had a significant effect on penalty kick success.

Conclusions: Progressive relaxation and concentration training significantly improved penalty kick success among Dangar Putra FC players. Progressive relaxation showed a slightly higher effect than concentration training. Therefore, both mental training methods can be used by coaches to improve players' psychological readiness and technical execution during penalty kicks.

Keywords: progressive relaxation, concentration, penalty kick, football, mental training

Introduction

Football is one of the most popular sports in Indonesia and is played by people from various age groups and social backgrounds (Kuswoyo, 2020; Kuswoyo et al., 2020). To perform well in football, players must master several basic techniques, including passing, controlling, dribbling, shooting, heading, and tackling (Badmus, 2019; Raya-Castellano & Uriondo., 2015; Wang et al., 2022). Among these skills, shooting plays an important role because it directly determines the opportunity to score goals.

One important form of shooting in football is the penalty kick. A penalty kick is awarded when a defending team commits a serious foul inside the penalty area. In many matches, penalty kicks become decisive moments that can determine the final result of the game. Therefore, a player must not only have good kicking technique but also strong mental control.

In penalty situations, psychological pressure is often high. Players may experience tension,



anxiety, reduced focus, and loss of confidence (Kuswoyo et al., 2017; Martínez-Gregorio et al., 2023; Soriano-Pascual et al., 2022). These psychological factors can reduce shooting accuracy and increase the possibility of failure. emphasized that psychological readiness is an important part of sport performance because athletes must be able to control emotion, pressure, and concentration during competition (David J. Smith, 2003; Raya-Castellano & Uriondo., 2015; Vealey, 2024).

Progressive relaxation is one form of mental training that can help athletes reduce muscle tension and psychological pressure (Anggraini, 2020; MINAWATI DEWI, 2024). This technique was introduced by Jacobson and focuses on relaxing the muscles systematically to reduce physical and emotional tension. In sport settings, progressive relaxation can help athletes become calmer before performing technical skills under pressure.

Concentration is also essential in football, especially during penalty kicks. According to Nasution (Draper et al., 2008; Malhi et al., 2020; Sharma, 2025), concentration is the ability to direct awareness toward a particular object or task within a certain period. Weinberg and Gould also explained that concentration involves focusing attention on relevant cues and maintaining that focus during performance. In penalty kicks, concentration helps players focus on the target, ignore distractions, and execute the kick more accurately.

Based on observations at Dangar Putra FC, many players showed tension and lack of concentration when performing penalty kicks. As a result, several penalty attempts failed. Therefore, this study was conducted to determine the effect of progressive relaxation and concentration training on penalty kick success among Dangar Putra FC football players in 2022.

Materials and Methods

Study Participants

(Sugiyono, 2012) The participants of this study were 20 football players from Dangar Putra FC in 2022. Because the population was relatively small, all players were used as research participants. The participants were divided into two groups. Group A consisted of 10 players who received progressive relaxation training, while Group B consisted of 10 players who received concentration training.

Study Organization

This study used an experimental method with a two-group pretest–posttest design. Before treatment, all participants completed a penalty kick pretest. After the treatment period, the players completed a posttest using the same penalty kick test.

The progressive relaxation group received training aimed at reducing physical and mental tension before executing penalty kicks. The concentration group received exercises aimed at improving focus,



attention control, and target orientation during penalty kick performance.

Instrument

The instrument used in this study was a penalty kick test adapted from Sukatamsi. The test was used to measure the players' penalty kick success before and after the training program.

Statistical Analysis

The data were analyzed using the t-test formula. The t-count value was compared with the t-table value at the 5% significance level. If the t-count was higher than the t-table, the treatment was considered to have a significant effect.

Results

Progressive Relaxation Training Group

The pretest total score of the progressive relaxation group was 475, while the posttest total score increased to 515. The total improvement was 40 points. The t-test result showed that t-count = 6.006, which was higher than t-table = 1.833.

Table 1. Pretest and Posttest Result of Progressive Relaxation Training

Group	Pretest Total	Posttest Total	Improvement	t-count	t-table	Interpretation
Progressive Relaxation	475	515	40	6.006	1.833	Significant

This result shows that progressive relaxation training had a significant effect on penalty kick success.

Concentration Training Group

The pretest total score of the concentration training group was 485, while the posttest total score increased to 530. The total improvement was 45 points. The t-test result showed that t-count = 5.013, which was higher than t-table = 1.833.

Table 2. Pretest and Posttest Result of Concentration Training

Group	Pretest Total	Posttest Total	Improvement	t-count	t-table	Interpretation
Concentration Training	485	530	45	5.013	1.833	Significant

This result shows that concentration training had a significant effect on penalty kick success.

Comparison Between Training Methods

Both progressive relaxation and concentration training significantly improved penalty kick success. However, based on the t-count value, progressive relaxation training showed a slightly stronger



statistical effect than concentration training.

Table 3. Comparison of Training Effects

Training Method	t-count	t-table	Interpretation
Progressive Relaxation	6.006	1.833	Significant
Concentration Training	5.013	1.833	Significant

Discussion

The results of this study showed that progressive relaxation training significantly improved penalty kick success among Dangar Putra FC players. This finding indicates that reducing muscle tension and psychological pressure can help players perform penalty kicks more calmly and accurately. Progressive relaxation allows athletes to control physical tension before executing a skill, which is important in pressure situations such as penalty kicks. This is consistent with Jacobson's relaxation principle, which explains that reducing muscle tension can help decrease emotional tension and improve performance readiness.

The finding is also supported by sport psychology theory. Gunarsa (2006) stated that psychological factors influence sport performance because athletes must be able to manage pressure, confidence, and emotional control. In penalty kicks, excessive tension can interfere with movement coordination, kicking accuracy, and decision-making. Therefore, relaxation training can help players maintain composure before performing the kick.

The concentration training group also showed a significant improvement. This result suggests that focused attention is highly important in penalty kick performance. Concentration helps players direct attention to the target, maintain confidence, and avoid distractions from the goalkeeper, spectators, or match pressure. Weinberg and Gould explained that concentration is the ability to focus on relevant cues and maintain attention during performance. In football, this ability is essential because penalty kicks require precision, timing, and emotional control.

This result is in line with Maksum (2008), who explained that mental factors such as attention, confidence, and emotional control are important components in sport achievement. Players who have good concentration are more likely to execute technical skills effectively because they can focus on the task rather than external pressure.

The comparison between the two methods showed that progressive relaxation had a slightly higher t-count than concentration training. This suggests that relaxation may provide a stronger immediate effect in reducing tension before penalty kicks. However, both methods remain effective and useful.



Progressive relaxation helps players become physically and emotionally calm, while concentration training helps players maintain focus on the target and execution process.

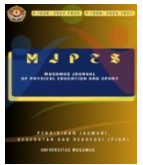
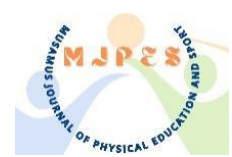
These findings support the idea that penalty kick success is not only determined by technical ability but also by mental readiness. As stated by Lutan et al., sport performance is influenced by physical, technical, tactical, and mental training. Therefore, coaches should not only train kicking technique but also include mental training programs such as relaxation and concentration exercises.

Conclusions

Progressive relaxation training significantly improved penalty kick success among Dangar Putra FC football players. Concentration training also significantly improved penalty kick success. Both training methods had a positive effect, but progressive relaxation showed a slightly stronger statistical effect based on the t-count value. Therefore, progressive relaxation and concentration training can be used as mental training strategies to improve penalty kick performance in football players.

Referencess

- Anggraini, Y. (2020). Efektifitas teknik relaksasi nafas dalam terhadap tekanan darah pada pasien hipertensi di jakarta. *Jurnal JKFT*, 5(1), 41. <https://doi.org/10.31000/jkft.v1i1.2806>
- Badmus, S. O. (2019). *An assessment of performance and efficiency of team-based organizations: Empirical evidence of English premier league (EPL) using data envelopment analysis (DEA) and naturalistic approach (NA), 2005 to 2016* [Doctoral, London Metropolitan University]. <https://repository.londonmet.ac.uk/7303/>
- David J. Smith. (2003). *A Framework for Understanding the Training Process Leading to Elite Performance* | *Sports Medicine*. <https://link.springer.com/article/10.2165/00007256-200333150-00003>
- Draper, N., Jones, G. A., Fryer, S., Hodgson, C., & Blackwell, G. (2008). Effect of an On-Sight Lead on the Physiological and Psychological Responses to Rock Climbing. *Journal of Sports Science & Medicine*, 7(4), 492–498. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3761930/>
- Kuswoyo, D. D. (2020). *Buku Ajar Sepak Bola*. Penerbit NEM.
- Kuswoyo, D. D., Pramono, H., & Rifai, A. (2017). Kontribusi Percaya Diri, Konsentrasi dan Motivasi terhadap Kinerja Wasit Persatuan Sepak Bola Seluruh Indonesia Provinsi Sumatera Selatan. *Journal of Physical Education and Sports*, 6(3), 241–247. <http://journal.unnes.ac.id/sju/index.php/jpes>
- Kuswoyo, D. D., Wasa, C., & Dongoran, M. F. (2020). Back-up training effects to the students' ability in heading the ball. *Edu Sportivo Indonesian Journal of Physical Education*, 1(1), 25–32. [https://doi.org/10.25299/es:ijope.2020.vol1\(1\).5190%0AHow](https://doi.org/10.25299/es:ijope.2020.vol1(1).5190%0AHow)
- Malhi, Y., Franklin, J., Seddon, N., Solan, M., Turner, M. G., Field, C. B., & Knowlton, N. (2020). Climate change and ecosystems: Threats, opportunities and solutions. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 375(1794), 20190104.



- <https://doi.org/10.1098/rstb.2019.0104>
- Martínez-Gregorio, S., Tomás, J. M., & Oliver, A. (2023). A Psychometric Study of the Prosocial Behavior Scale: Differential Item Functioning by Gender. *Behavioral Sciences*, 13(3), 259. <https://doi.org/10.3390/bs13030259>
- MINAWATI DEWI. (2024). *Pengaruh Latihan Relaksasi Dan Imagery Terhadap Kepercayaan Diri Atlet Tenis Meja Usia 14-18 Tahun Dki Jakarta* [Doctoral, Universitas Negeri Jakarta]. <http://repository.unj.ac.id/43481/>
- Raya-Castellano, E. P., & Uriondo., L. F. (2015). A review of the multidisciplinary approach to develop elite players at professional football academies: Applying science to a professional context. *International Journal of Performance Analysis in Sport*, 15(1), 1–19. <https://doi.org/10.1080/24748668.2015.11868773>
- Sharma, A. K. (2025). Cognitive and Psychological Aspects of Physics Learning. *Physics Journal | Farhangian University*, 2(1), 28–39. <https://doi.org/10.48310/esip.2025.18642.1011>
- Soriano-Pascual, M., Ferriz-Valero, A., García-Martínez, S., & Baena-Morales, S. (2022). Gamification as a Pedagogical Model to Increase Motivation and Decrease Disruptive Behaviour in Physical Education. *Children*, 9(12), 1931. <https://doi.org/10.3390/children9121931>
- Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. CV. Alfabeta.
- Vealey, R. S. (2024). A framework for mental training in sport: Enhancing mental skills, wellbeing, and performance. *Journal of Applied Sport Psychology*, 36(2), 365–384. <https://doi.org/10.1080/10413200.2023.2274459>
- Wang, S. H., Qin, Y., Jia, Y., & Igor, K. E. (2022). A systematic review about the performance indicators related to ball possession. *PLOS ONE*, 17(3), e0265540. <https://doi.org/10.1371/journal.pone.0265540>