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THE RELATIONSHIP BETWEEN SELF-CONFIDENCE AND ANXIETY REGARDING THE FINISHING GAME SHOT RESULTS IN WOODBALL ATHLETES

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Abstract

Background. Psychological factors play an important role in the sport of woodball, especially in determining the success of the finishing shot, as this sport requires a high level of concentration, emotional control, and self-confidence to achieve optimal shot accuracy.

Aim. This research is motivated by the important role that psychological conditions, such as Self-Confidence and anxiety, can affect the results of finishing shots in woodball athletes.

Material and methods. The method used in this study is a quantitative Cross-Sectional Design. The sample used in this study amounted to 30 woodball athletes. The measuring instruments used consisted of the Self-Confidence Questionnaire, the Sport Competition Anxiety Test, and the shot accuracy test. The analysis technique in this study consisted of several stages, including descriptive analysis, a normality test, and a Spearman's rank test. In the analysis of this study using the R Studio application tool.

Results. The results of this study indicate that self-confidence is strongly related to the ability to finish shots in woodball athletes, with an r-value of 0.891. In addition, there is a strong relationship between anxiety and the results of finishing shots in woodball athletes, with an r value of -0.892.

Conclusions. Therefore, it can be concluded that psychological conditions such as self-confidence and anxiety can be related to the results of finishing shots in woodball athletes. Therefore, coaches need to implement a structured and sustainable mental training program that addresses the importance of coaching athletes' achievements, supporting the improvement of performance abilities, and maximizing match results.

Keywords: Self-Confidence, Anxiety, Woodball.

Introduction

Woodball is a sport that is currently growing rapidly in Indonesia due to its ease of implementation in various locations, requiring minimal costs for equipment or field maintenance, and can be played by people of all ages (Fayogi, 2022). Woodball combines several aspects, such as concentration and shot control, in getting the ball into the gate with a

minimum number of shots (Chandrasegaran et al., 2020). The basic techniques in woodball consist of two, namely equipment-free techniques and equipment-based techniques. Equipment-free techniques include swinging movements, preparation and *setup*, and pressing routines that do not require equipment. Meanwhile, equipment-based techniques include pressing routines using mallets, as well as long-range, medium-range, and short-range shot techniques, and *gating techniques*, which precisely direct the ball to pass through the gate (Sugiharto & Kusuma, 2020).

In woodball, mastering basic techniques is crucial for every player to achieve maximum points during a match (Fahima et al., 2025). Accuracy is an integral part of this sport because every shot a player makes requires high accuracy to achieve a maximum score (Andriyani et al., 2024). Players with poor accuracy and basic technical skills can negatively impact their scores during a match (Maulinda & Kriswantoro, 2019). Frequent errors in their shot execution will impact their chances of winning. The direction of a shot in this sport can be influenced by several factors, one of which is the player's psychological state (Haidir et al., 2023). Dwi Pramesti et al. (2022) argue that an athlete's psychological state can influence up to 90% of their match results. Physical state, on the other hand, only contributes 10% to the outcome.

In this case, several psychological factors can reduce the chances of winning a match for athletes, including two variable factors: self-confidence and anxiety (B. Gomez et al., 2025; Sri Sagar Y. Patil, 2024). Self-confidence is a condition in which an individual has a strong sense of belief in their abilities (Coussens et al., 2025). An athlete who has a high sense of confidence in his abilities can make significant decisions in a match without any feelings of doubt in himself. Moreover, he can perform effective and excellent technical movements during matches he faces without feeling a lack of confidence (Liu et al., 2024). An athlete with high self-confidence can increase their chances of winning more than their opponent (Lochbaum et al., 2023).

In addition, anxiety often experienced by athletes is a negative response in an individual to a situation that poses a threat to them (Korkutata et al., 2024), particularly in a match atmosphere full of heated competition between players and coaches. This can increase the anxiety experienced by athletes before competing, as coaches, staff, and club administrators often place demands on the athletes they coach to achieve victory (Becerra, 2019). As a result of very high demands for achieving victory, athletes may respond as a threat to their own ego (García Pazmiño et al., 2018).

Anxiety can be divided into two types: somatic anxiety and cognitive anxiety (Islam et al., 2025). Cognitive anxiety is a type of anxiety that arises within the individual and can lead to

excessive worry in athletes. Meanwhile, somatic anxiety is anxiety that can be caused by the body's response to conditions that can cause symptoms such as muscle and bone pain, ringing in the ears, palpitations, shortness of breath, digestive disorders, and headaches.

Mojtahedi *et al.* (2023) emphasized that an athlete who can effectively manage their anxiety symptoms has a greater chance of winning the match they are facing. Furthermore, research conducted by Mayangsari *et al.* (2024) on young soccer athletes showed that the higher the athlete's self-confidence, the better the match results they will achieve. Several previous studies have demonstrated that these two psychological aspects are related to match results in team handball and martial arts.

However, research examining the relationship between self-confidence and anxiety in woodball is still minimal. Woodball is a sport that requires high accuracy, reasonable motor control, and psychological stability in each player, especially during the decisive finishing stroke. Therefore, this study aims to determine the relationship between self-confidence and anxiety regarding the outcome of finishing strokes in woodball players.

Methods

Procedure

The method applied in this research employs a quantitative, cross-sectional approach that aims to determine the relationship between the variables being studied. The initial procedure in implementing this research is to obtain a permit letter to conduct research by requesting permission from the woodball coach of Semarang City, Central Java, and to include a code of ethics letter in conducting research originating from Semarang State University, with letter number B/14543/UN37.1.6/KM.07/2025. After obtaining the permit letter, the researcher should prepare the necessary tools for the research implementation, including stationery and questionnaires used to measure the variables being studied.

Participants

The sample used during the research implementation consisted of 30 woodball athletes, employing a total sampling technique.

Instrument

The instrument used to measure the self-confidence variable of woodball athletes is the Indonesian version of the Self-Confidence Questionnaire (ASQ), which consists of 13 questions with a validity value of 0.741 and a reliability of 0.841 (Nursaba et al., 2024). To measure the anxiety variables of athletes in this study, a modified Indonesian version of the Sport Competition Anxiety Test (SCAT) questionnaire was used, consisting of 10 questionnaire items

(Anira et al., 2017). Reliability was 0.714. Meanwhile, the measurement of the finishing shot results used a shot test aimed at the gate from a distance of 5 meters. The assessment was carried out using a score scale of 0–2 with the following criteria: a score of 0 indicates the shot did not hit the target, a score of 1 indicates the shot approached the target, and a score of 2 indicates the shot went right into the goal (Utomo et al., 2025).

Data Analysis

The data analysis stages in this study consisted of descriptive analysis, normality testing, and Spearman's rank testing. All data were analyzed using the R program application.

Results

This study aims to determine the relationship between self-confidence and anxiety on finishing strokes in woodball athletes. The data are presented in the form of descriptive statistical analysis, normality tests, and hypothesis testing to examine the relationships between variables.

1. Descriptive analysis of research variables

Table 1. Results of descriptive analysis on each research variable

Variables	N	Statistics				
		Min	Max	Mean ± SD	Skewness	Kurtosis
Self-Confidence	30	37	62	51.16 ± 6.93	-0.274	-0.893
Anxiety	30	18	35	25.57 ± 4.49	0.227	-0.835
The result of the blow	30	2	4	3.23 ± 0.72	-0.396	-0.957

The analysis results in Table 1 indicate that the self-confidence variable in woodball players ranges from 37 to 62, with an average of 51.16 ± 6.93. The skewness value is -0.274, and the kurtosis is -0.893. Furthermore, the anxiety variable has a range of values from 18 to 35 with an average of 25.57 ± 4.49. The skewness value is 0.227, and the kurtosis is -0.835. Meanwhile, the finishing shot variable has a range of values from 2 to 4 with an average of 3.23 ± 0.72. The skewness value is -0.396, and the kurtosis is -0.957.

2. Normality test

The Shapiro-Wilk normality test in this study uses the R program to determine whether the data are usually distributed, serving as a basis for selecting further analysis. If the data is not normally distributed, hypothesis testing is performed using nonparametric analysis, namely the Spearman Rank correlation test.

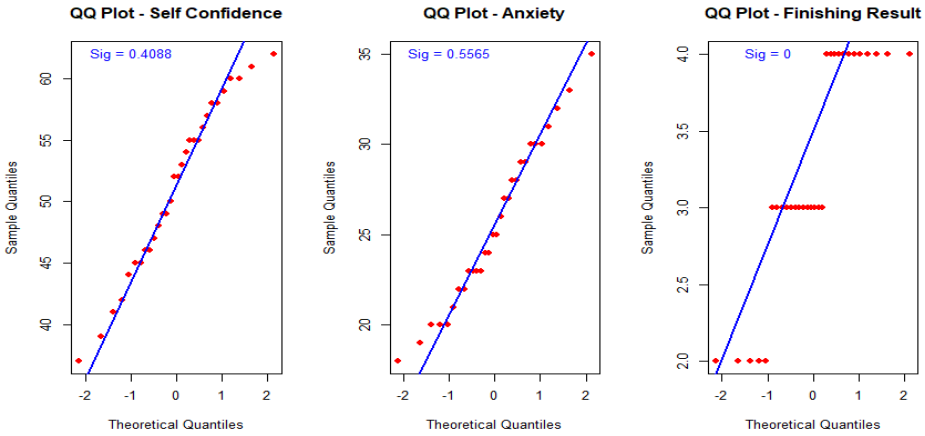

Figure 2. Results of the normality test analysis for each variable using the R program

Figure 2 shows the results of the normality test using the Shapiro-Wilk test with the R Studio application program. The *self-confidence variable* has a sig value of 0.408, and the anxiety variable has a sig value of 0.556. Both values are greater than 0.05, indicating that both variables are normally distributed. Meanwhile, the punching results variable shows a significant value of 0.00 < 0.05, so it is not normally distributed. Therefore, there are research variables that are not normally distributed; therefore, the correlation analysis used in this study employs nonparametric analysis through the Spearman Rank correlation test.

3. Hypothesis testing

Hypothesis testing in this study was conducted using the Spearman Rank nonparametric analysis technique using the R Studio application program. This method is used to determine the degree of relationship between research variables based on non-normally distributed data, making it suitable for analyzing correlations between the variables examined in this study.

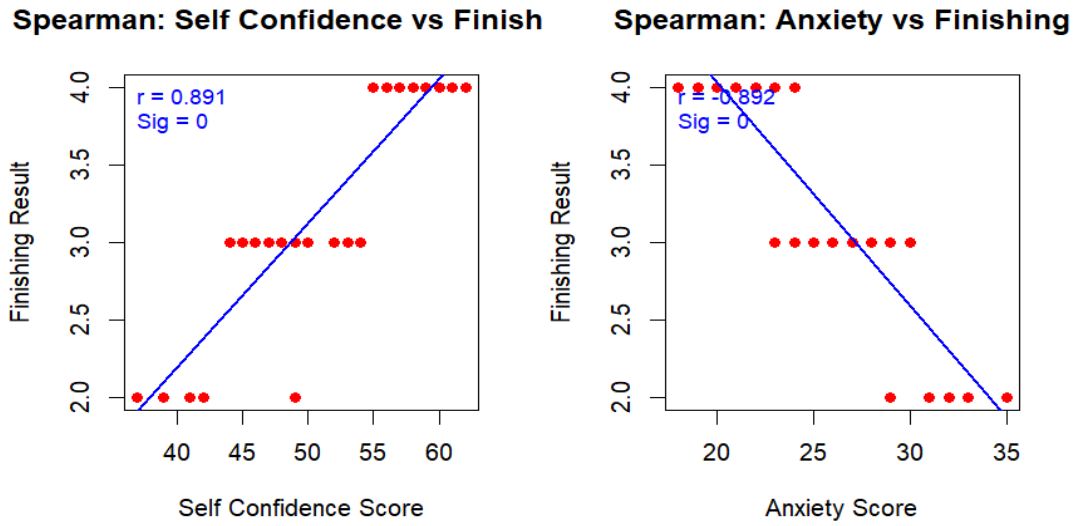

Figure 2: Results of Spearman's rank test analysis using the R program

The results of the analysis in Figure 2 using the Spearman correlation test using the r application program show that the self-confidence variable has a powerful positive direction relationship with the results of finishing shots in woodball players with a value of (r = 0.891, Sig < .005), so the higher the self-confidence of the woodball player, the better the results of the finishing shots obtained.

Meanwhile, the analysis of the anxiety variable reveals a strong negative relationship with the results of finishing strokes, with a correlation coefficient of r = -0.892 (Sig < .005). This indicates that the lower the anxiety a woodball player experiences, the better their results on finishing strokes.

Discussion

The results of this study indicate a relationship between self-confidence and the Pearson correlation value of 0.891. When facing a match, every athlete must possess high self-confidence to maximize their abilities (Wulandari & Yuwono, 2023). In this case, if a woodball athlete has high self-confidence, it will have a positive impact on their finishing strokes and enable them to score maximum points for both the team and themselves (Dewi et al., 2024).

Self-confidence is one of the key benchmarks in assessing an athlete's confidence in their abilities and their lack of self-doubt (Lochbaum et al., 2022). An athlete with good self-confidence will experience several positive impacts, including being able to perform optimally, being less easily provoked by opponents, and not giving up easily when the opponent is superior (Jekauc et al., 2025; Widya Putri et al., 2024). However, on the other hand, if an athlete has low self-confidence, it can harm them, such as giving rise to negative thoughts, easily giving up in

certain circumstances, and reducing concentration during the match (González-Hernández et al., 2024).

However, an athlete's self-confidence must be at an optimal level. Overconfidence occurs when an athlete overestimates their own abilities beyond those of their opponent (Wulandari & Yuwono, 2023). This situation often leads to an attitude of underestimating the opponent, taking them lightly. So that when the opponent turns out to be better, the athlete does not have the proper psychological alertness, and they can be defeated by an opponent who is of a lower class (Thomas & Thrower, 2022). In this case, an athlete with an overconfident nature can underestimate their opponent, often ignoring procedures before competing, such as failing to warm up and regulate their breathing patterns to avoid tension. This can harm the athlete, such as easily injuring themselves when facing their opponent (Islam, 2024; Valcarce-Merayo & Latella, 2023). This factor is what often causes failure for overconfident athletes when facing athletes who are lower in class. For this reason, athletes should develop the attitude that, regardless of their opponent, every stage of the procedures typically carried out during a match must still be performed optimally, so that the results achieved will be optimal.

Furthermore, the analysis results show that anxiety has a firm negative relationship with the results of finishing shots, with an r value of -0.891. Anxiety is a state that is different from ordinary fear in individuals. Fear can be felt when the threat is something objective, specific, and centralized (Islam et al., 2025; Wulandari & Yuwono, 2023). Meanwhile, anxiety is caused by a threat that is more general and subjective. Anxiety is a normal reaction or something that occurs normally, for example, in facing a match (Tomé-Lourido et al., 2023).

Anxiety experienced by athletes, if not adequately controlled, can have negative consequences, such as hasty and inconsistent decision-making during matches (Freire et al., 2020), difficulty controlling the game's rhythm, and performance during the match being dominated by momentary emotions. This can also result in every movement made during the match being made without careful thought, immediately (Sapto et al., 2023).

Widya Putri et al. (2024) emphasized that any symptoms of anxiety experienced by athletes that cannot be appropriately controlled will have a negative impact, such as disrupting concentration and affecting shooting movements towards the target, resulting in poor performance.

Anxiety symptoms experienced by athletes before competing can stem from several factors, including opponents, officials, teammates, and even supporters on the field. These factors can exacerbate anxiety symptoms experienced by athletes before competing (Abdollahi Dehkordi

& Chtourou, 2023). An athlete who has high anxiety symptoms and is unable to control them well will produce less than optimal match results.

Athletes often experience anxiety, which is a psychological problem that requires serious attention and treatment, considering its significant impact on the athlete's physical condition and competition results (Yang et al., 2024).

Mojtahedi et al. (2023) stated that athletes who are unable to manage anxiety before competing tend to have difficulty displaying optimal performance. High levels of anxiety can also have negative impacts, such as decreased concentration, weakened emotional control, and ultimately reducing the athlete's chances of achieving the best results during the competition (Mojtahedi et al., 2023).

Therefore, coaches, officials, and club staff need to integrate psychological aspects into training programs, such as emotional management training, techniques, relaxation, visualization and strengthening athlete self-confidence, the application of these strategies can be an alternative solution for athletes in facing match pressure, maintaining mental stability, increasing the opportunity to produce maximum finishing shots both in training and match situations. Researchers also recognize that implementing this research has several limitations and obstacles, including the exclusion of moderator variables such as gender and athlete competition experience, as well as a relatively small sample size.

Therefore, further research is recommended to involve a larger number of athlete respondents and to include moderator variables in the research analysis to obtain richer and more detailed research results in the future.

Conclusion

The conclusion of this study reveals that psychological factors, such as self-confidence and anxiety, have a strong relationship with the finishing strokes of woodball athletes. Every club coach needs to monitor the psychological state of their athletes and incorporate psychology-based training programs into their training regimens to help them reach their maximum competitive potential and achieve higher performance.

Generative AI Use Statement

Artificial Intelligence (AI), specifically ChatGPT (OpenAI), was used in this study to analyze clinical reasoning narrative texts to identify linguistic patterns associated with specific logical fallacies and to assist in improving the academic English of the manuscript, including grammar, writing style, and clarity of presentation. The use of AI was assistive and under the authors'

supervision, and did not influence the scientific substance, data analysis, interpretation of results, or conclusions of the study.

Author Contributions

Conceptualisation, S.I. and F.A.A.P.; methodology, S.I.; software, S.I.; validation, S.I. and F.A.A.P.; formal analysis, F.A.A.P.; investigation, S.I.; resources, F.A.A.P.; data curation, S.I.; writing—original draft preparation, F.A.A.P.; writing—review and editing, F.A.A.P.; visualization, S.I.; supervision, F.A.A.P.; project administration, S.I.; funding acquisition, S.I.

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Institutional Review Board Statement

Code of Ethics Letter in Conducting Research Originating from Semarang State University, with letter number B/ B/14543/UN37.1.6/KM.07/2025

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Conflicts of Interest

The authors declare no conflict of interest

References

Abdollahi Dehkordi, A. M., & Chtourou, H. (2023). Managing Athlete Anxiety: A Comprehensive Review of Psychological Interventions in Sports Psychology. *Health Nexus* , *1* (4), 48–53. https://doi.org/10.61838/kman.hn.1.4.6

Andriyani, R., Zahraini, DA, Wibisana, MIN, & Trinanda, A. (2024). The Relationship between Arm Power and Leg Power and Gatting Accuracy in Woodball Athletes. *Jurnal Penjakora* , *11* (1), 67–75. https://doi.org/10.23887/jurnalpenjakora.v11i1.77072

Anira, , Damayanti, I., & Rahayu, NI (2017). Athletes' Anxiety Levels Before, During Rest, and After the Match. *Journal of Applied Sports Science* , *2* (2), 85.

https://doi.org/10.17509/jtikor.v2i2.4948

B Gomez, CC, Tapanan Jr, DML, C Raganas, J., Y Obando, JH, A Abella, TM, P Pepito, SV, C Alicaya, RAB, & B Vence, AJ (2025). The Psychological Factors Influencing Athletes' Sports Performance. *International Journal of Advanced Multidisciplinary Research and Studies* , *5* (4), 1326–1331. https://doi.org/10.62225/2583049x.2025.5.4.4762

Becerra, B. A. (2019). Competitive Anxiety in Professional Soccer Players: An Interdisciplinary Work. *Psychology and Psychotherapy Research Study* . https://doi.org/10.31031/pprs.2019.02.000542

Chandrasegaran, J., Azani Mustafa, W., Aminudin Jamlos, M., & Zulkarnain Syed Idrus, S. (2020). Design of Woodball Line Detection and Monitoring System: A Preliminary Study. *IOP Conference Series: Materials Science and Engineering* , *917* (1), 12069. https://doi.org/10.1088/1757-899X/917/1/012069

Coussens, A.H., Stone, M.J., & Donachie, T.C. (2025). Coach–athlete relationships, self-confidence, and psychological well-being: The role of perceived and received coach support. *European Journal of Sport Science* , *25* (1). https://doi.org/10.1002/ejsc.12226

Dewi, IS, Saputri, D., Islam, S., Rahman, A., & Irawan, R. (2024). Psychological Foundations of Education and Learning and Their Implications for Woodball Sport. *Proceedings of the International Conference on Physical Education, Health, and Sports* , *4* , 409–416.

Dwi Pramesti, A., Hermahayu, H., & Faizah, R. (2022). Study of identifying factors for the development of a measuring instrument on the psychological readiness of athletic athletes. *Jurnal SPORTIF: Jurnal Penelitian Belajar* , *8* (3), 17–36. https://doi.org/10.29407/js_unpgri.v8i3.18807

Fahima, DF, Razali, R., Amiruddin, A., Syamsulrizal, S., Zulfikar, Z., & Abdurrahaman, A. (2025). Analysis of Concentration Levels, Anxiety and Gating Strokes in Aceh-North Sumatra Pon Athletes in Aceh Province Woodball Sports in 2024. *Path of Science* , *11* (1), 9001. https://doi.org/10.22178/pos.113-31

Fayogi, N. 'Urizka. (2022). Study of the Correlation between Arm Muscle Power, Arm Length, Hand-Eye Coordination, and Concentration on Gate-In Results in Woodball. In *International Journal of Multidisciplinary Research and Analysis* (Vol. 05, Issue 03). Retrieved. https://doi.org/10.47191/ijmra/v5-i3-04

Freire, GLM, Ferraz, JC, Lima-Junior, D. de, Granja, CTL, Oliveira, DV de, & Nascimento Junior, JRA do. (2020). Anxiety in Jiu-Jitsu athletes: differences according to age and competitive level. *Research, Society and Development* , *9* (8), e743986488. https://doi.org/10.33448/rsd-v9i8.6488

García Pazmiño, MA, Ucha, FG, Arévalo García, NA, & García Pazmiño, ST (2018). Sports pressures and optimal combative disposition. *Retos* , *35* (35), 335–340. https://doi.org/10.47197/RETOS.V0I35.61911

González-Hernández, J., Barrera-Vázquez, D., & Gómez-López, M. (2024). Self -Confidence in Young Athletes: A Protective Factor Against Perfectionism and Anxiety in Competitive Grassroots Sport. *Perceptual and Motor Skills* , *131* (6), 2324–2345. https://doi.org/10.1177/00315125241290563

Haidir, MYM, Samsudin, S., Ismail, S., Abdullah, B., Yakoob, SSN, & Farizan, NH (2023). The Influences of Self-Efficacy on Intrinsic Motivation Among Woodball Players in Malaysia. *ACPES Journal of Physical Education, Sport, and Health (AJPESH)* , *3* (1), 34–43. https://doi.org/10.15294/ajpesh.v3i1.70212

Islam, S. (2024). What is the relationship between body mass index and reaction speed in PPLOP boxing athletes in Central Java? *Tanjungpura Journal of Coaching Research , 2* (2), 88–96. https://doi.org/10.26418/tajor.v2i2.79361

Islam, S., Husein, M., Hasan, B., Muti, GG, Muti, NS, Lembang, MT, Nubatonis, JD, Kristiono, AA, Taiar, R., & Salacup, VLD (2025). The Relationship between Mental Toughness and Anxiety in Athletes: A Meta-Analysis Study. *JSES Journal of Sport and Exercise Science* , *8* (2), 161–177. https://doi.org/10.26740/jses.v8n2.p161-177

Jekauc, D., Fiedler, J., Wunsch, K., Mülberger, L., Burkart, D., Kilgus, A., & Fritsch, J. (2025). The effect of self-confidence on performance in sports: a meta-analysis and narrative review. *International Review of Sport and Exercise Psychology* , *18* (1), 345–371. https://doi.org/10.1080/1750984X.2023.2222376

Korkutata, A., Halis, M., & Bolel, B. (2024). The Impact of Anxiety Experienced in Competition on Decision-Making: A Study on Individual Sports Competitions. *International Journal of Sport, Exercise & Training Sciences* . https://doi.org/10.18826/useeabd.1532962

Liu, M., Kong, A., Lau, N., Feng, Z., & Liu, X. (2024). Basketball self-evaluation matrix: discrepancy between self-confidence and decision-making performance on psychological profiling of players. *Frontiers in Sports and Active Living* , *6* . https://doi.org/10.3389/fspor.2024.1404701

Lochbaum, M., Sherburn, M., Sisneros, C., Cooper, S., Lane, A.M., & Terry, P.C. (2022). Revisiting the Self-Confidence and Sport Performance Relationship: A Systematic Review with Meta-Analysis. *International Journal of Environmental Research and Public Health* , *19* (11), 6381. https://doi.org/10.3390/ijerph19116381

Lochbaum, M., Sisneros, C., Cooper, S., & Terry, P. C. (2023). Pre-Event Self-Efficacy and Sports Performance: A Systematic Review with Meta-Analysis. *Sports* , *11* (11), 222. https://doi.org/10.3390/sports11110222

Maulinda, R., & Kriswantoro, K. (2019). The Relationship between Motor Ability and the Accuracy of Hits to the Gate in Male Athletes of the UNNES Woodball UKM in 2018. *Journal of Sport Coaching and Physical Education* , *4* (1), 48–54.

Mayangsari, S., Komarudin, K., Saputra, MY, & Novian, G. (2024). Self-Confidence and Peak Performance: A Descriptive Study on Young Basketball Athletes. *Jorpres (Journal of Sports Achievement)* , *20* (1), 80–85. https://doi.org/10.21831/jorpres.v20i1.72866

Mojtahedi, D., Dagnall, N., Denovan, A., Clough, P., Dewhurst, S., Hillier, M., Papageorgiou, K., & Perry, J. (2023). Competition Anxiety in Combat Sports and the Importance of Mental Toughness. *Behavioral Sciences* , *13* (9), 713. https://doi.org/10.3390/bs13090713

Nursaba, S., Komarudin, K., Saputra, MY, & Novian, G. (2024). Athlete Self-Confidence Questionnaire (ASQ): A Valid and Reliable Instrument for Measuring Athlete Self-Confidence. *Jorpres (Journal of Achievement Sports)* , *20* (2), 10–15.

Sapto, A., Aliriad, H., Wira Yudha Kusuma, D., Arbanisa, W., & Winoto, A. (2023). Athletes' Stress and Anxiety Before the Match. *Indonesian Journal of Physical Education and Sport Science* , *4* (1 SE-), 11–21. https://doi.org/10.52188/ijpess.v4i1.535

Sri Sagar Y Patil, SSYP (2024). A Study on the Impact of Psychological Factors on Sports Training. *International Journal of Physical Education & Sports Sciences* , *18* (2), 6–9. https://doi.org/10.29070/th663g31

Sugiharto, S., & Kusuma, DWY (2020). The Correlation of Arm Muscle Strength, Grip Strength, and Body Flexibility to the Results of Long Distance Shots on Woodball. *Journal of Physical Education and Sports* , *9* (1), 69–75.

Thomas, O., & Thrower, S. N. (2022). Developing and Maintaining Sport-Confidence: Learning From Elite Athletes. *Frontiers for Young Minds* , *10* . https://doi.org/10.3389/frym.2022.675054

Tomé-Lourido, D., Ponte, D., Sampedro, M. J., & Arce, C. (2023). Pandemic Impacts on Athlete Competitive Anxiety and Its Relationship with Sex, Competitive Level and Emotional Self-Control: A Cohort Study before and after COVID-19. *Sustainability* , *15* (12), 9315. https://doi.org/10.3390/su15129315

Utomo, GM, Pelamonia, SP, Harmono, BA, & Kusuma, AI (2025). Interrelationship of Heart Rate with Finishing Shot Accuracy in Woodball. *Journal of Recreational Health Education* , *11* (1), 9–17. https://doi.org/10.59672/jpkr.v11i1.4237

Valcarce-Merayo, E., & Latella, C. (2023). Precompetition Strategies to Improve Performance in Endurance or Repeated Intermittent Activity: Evidence and Practical Suggestions. *Strength and Conditioning Journal* , *45* (4), 450–461. https://doi.org/10.1519/SSC.0000000000000753

Widya Putri, M., Panggraita, GN, Proboyekti, D., Shidiq, AAP, Wahyu Utomo, A., Rozi, F., Agafian Dhuha, A., Sembaba Tarigan, B., & Setiawan, E. (2024). The Relationship Between Self-Confidence and Anxiety of Petanque Athletes in Facing Matches in Central Java. *International Journal of Disabilities Sports and Health Sciences* , *7* (6), 1313–1321. https://doi.org/10.33438/ijdshs.1525377

Wulandari, ASH, & Yuwono, ES (2023). Confidence and Anxiety Facing the Competition of Kyourugi Taekwondo Athletes Salatiga: a Correlation Study. *Journal of Community Mental Health and Public Policy* , *6* (1), 1–8. https://doi.org/10.51602/cmhp.v6i1.115

Yang, L., Zhang, Z., Zhang, J., & Veloo, A. (2024). The relationship between competitive anxiety and athlete burnout in college athletes: the mediating roles of competence and autonomy: [Author]. *BMC Psychology* , *12* (1), 396. https://doi.org/10.1186/s40359-024-01888-2