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Effect of Self-Confidence and Motivation Towards the Competition Anxiety of Pencak Silat Athletes Through the Mental Toughness as Mediation Variable

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ABSTRACT: This research aims to analyze (1) the effect of self-confidence on competition anxiety of pencak silat athletes; (2) the effect of motivation on anxiety of pencak silat athletes; (3) the effect of self- confidence on mental toughness of pencak silat athletes; (4) the effect of motivation towards the mental toughness of pencak silat athletes; (5) the effect of mental toughness on competition anxiety of pencak silat athletes; (6) the effect of self-confidence towards competition anxiety of pencak silat athletes through mental toughness; and (7) the effect of motivation towards the competition anxiety of pencak silat athletes through mental toughness.

This research used an explanatory research approach. The research population was for about 149 pencak silat athletes in Banyuwangi Regency. The sampling technique used purposive sampling, with the following criteria: (1) willingness to be a sample, (2) aged over 12 years old, (3) had participated in competitions, and (4) were still actively training. Based on these criteria, 128 athletes met the criteria. The instrument used a Likert Scale questionnaire 1-4. The data analysis used Structural Equation Modeling (SEM) with the help of SMART-PLS 4.0. The research findings reveal that (1) there is no any significant effect between self-confidence and competition anxiety of pencak silat athletes, with a t-statistic of 1.544 < 1.96 and p-values of 0.164 > 0.05. (2) There is a significant effect between motivation and competition anxiety of pencak silat athletes, with a t-statistic of 5.140 > 1.96 and p-values of 0.000 < 0.05. (3) There is a significant effect between self-confidence and mental toughness of pencak silat athletes, with a t-statistic of 6.130 > 1.96 and p-values of 0.000 < 0.05. (4) There is no any significant effect between motivation and mental toughness of pencak silat athletes, with a t-statistic of 0.869 > 1.96 and p-values of 0.385 < 0.05. (5) There is a significant effect between mental toughness and competition anxiety of pencak silat athletes, with a t-statistic of 4.433 > 1.96 and pvalues of 0.000 < 0.05. (6) There is a significant effect between self-confidence and competition anxiety of pencak silat athletes through mental toughness, with a t- statistic of 3.240 > 1.96 and p-values of 0.001 < 0.05. (7) There is a significant effect between motivation and competition anxiety of pencak silat athletes through mental toughness, with a t-statistic of 3.934 > 1.96 and p-values of 0.000 < 0.05.

KEYWORDS: self-confidence, motivation, anxiety, mental toughness

INTRODUCTION

Pencak silat is a traditional Indonesian martial art that not only emphasizes physical strength, but also contains deep philosophical, spiritual, and cultural values. As a national cultural heritage, pencak silat has now developed into a competitive sport that is recognized at the national and international levels (Bakhtiar & Irawan, 2023). In the modern context, pencak silat is not only a technical combat arena, but also a platform for character building, mental training, and discipline for athletes (Asrianda et al., 2024).

Behind the achievements of athletes, there are psychological challenges in the form of competition anxiety, which is a negative emotional condition that arises due to the pressure of competition. This anxiety can interfere with concentration, lower self-confidence, and hinder the performance of athletes on the field (Hariono et al., 2024; Casali et al., 2024). According to Sangervo et al. (2022), anxiety is characterized by emotional tension and high nervous system activation, while Spielberger (2021) distinguishes anxiety into two forms, namely cognitive and somatic anxiety, both of which have a significant impact on athletic performance (Martínez-Gallego et al., 2022; Lee et al., 2022).

Effect of Self-Confidence and Motivation Towards the Competition Anxiety of Pencak Silat Athletes Through the Mental Toughness as Mediation Variable

Self-confidence is an important factor in reducing competition anxiety. Athletes who believe in their abilities tend to be able to control their emotions and perform optimally under pressure (Vealey, 2019; Purnamasari & Novian, 2021). Self-confidence is not only about technical skills, but also psychological stability in facing uncertainty (Sofyan et al., 2024; Gunes & Yetim, 2023).

In addition to self-confidence, motivation also plays an important role in maintaining fighting spirit and consistency in training. Intrinsic and extrinsic motivation encourage athletes to set high targets and focus on achieving the best results (Ryan & Deci, 2020; Ita et al., 2022). Athletes with strong motivation will show perseverance, dedication, and high fighting spirit in every sports training process (Ryan & Reeve, 2021; Isoard-Gautheur et al., 2022; Fry et al., 2021). However, confidence and motivation alone are not enough. Mental toughness is needed as a protective component against psychological pressure. Mentally tough athletes are able to manage stress, stay focused, and think clearly even in stressful situations (Beattie et al., 2019; Madigan & Nicholls, 2017; Nisa & Jannah, 2021). Research shows that mental toughness acts as a mediator in the relationship between self-confidence, motivation, and competition anxiety (Wahid et al., 2025; Gerber et al., 2018; Widodo et al., 2022).

Field findings at several pencak silat schools in Banyuwangi Regency show that many athletes experience high anxiety before competitions, characterized by negative thoughts, muscle tension, and difficulty focusing. In addition, low selfconfidence and weak mental toughness are the main causes of decreased performance. Some athletes show symptoms of frustration after defeat and lose motivation to train again. The lack of social support from coaches, families, and teammates further exacerbates these psychological conditions.

This phenomenon shows the complex relationship between psychological and social factors on athletes' performance. Athletes who have high self-confidence, motivation, and mental toughness tend to be able to suppress competition anxiety and achieve peak performance consistently. Therefore, psychological coaching needs to be an integral part of pencak silat training programs.

This study, entitled "The Effect of Self-Confidence and Motivation on Competition Anxiety in Pencak Silat Athletes through Mental Toughness as a Mediating Variable," aims to analyze the role of mental toughness as a mediator in the relationship between self-confidence and motivation with competition anxiety. The results of this study are expected to contribute theoretically to the development of sports psychology and provide a practical basis for coaches in designing mental training strategies for pencak silat athletes in Indonesia.

METHODS

This type of research is quantitative descriptive with an explanatory research approach. According to Sugiyono (2019), explanatory research is a research method that aims to explain the position of the variables being studied and the influence of one variable on another. This research was conducted in various pencak silat schools located in the Banyuwangi Regency, East Java Province. The research was conducted from August to September 2025. The population studied was all active pencak silat athletes under the auspices of pencak silat schools in Banyuwangi Regency, East Java Province, totaling 149 athletes. The sampling technique used was purposive sampling. Based on the criteria, 128 athletes were selected.

The self-confidence instrument used in this study was adopted from the Sports Confidence Questionnaire developed by Jang et al. (2018). The athlete motivation instrument was adopted from the study by Prayoga et al. (2024). The validity of the instrument was 0.834, and the reliability of Cronbach's alpha was 0.937 and composite reliability was 0.948.

The anxiety instrument used in this study adapted the Indonesian version of the Sport Anxiety Scale-2 (SAS-2), as developed by Putra et al. (2021). Mental toughness was measured using the Indonesian version of the mental toughness instrument (MTIid). The study by Putra et al. (2024) showed that, overall, the Indonesian version of MTI (MTIid) demonstrated good model fit, with values of CFI = .967, TLI = .954, GFI = .966, SRMR = .034, and RMSEA = .069. In this study, the data analysis technique used was Partial Least Square Structural Equation Modeling (PLS-SEM), which was chosen because it was appropriate for the complexity of the research model, which included two independent variables (self-confidence and motivation), one intervening variable (mental toughness), and one dependent variable (anxiety). PLS-SEM was considered appropriate because it is capable of analyzing causal relationships between latent constructs in complex structural models involving mediating variables (Ghozali & Latan, 2020).

RESULTS Measurement Model (Outer Model)

Data analysis using PLS-SEM analysis, then for validity and reliability testing, a measurement model or often referred to as an outer model is used. The outer model measurement specifies the relationship between latent constructs and their indicators. The outer model, also known as the outer relation or measurement model, defines the characteristics of constructs with their manifest variables. The measurement model is evaluated using several indicators, including convergent validity, discriminant validity, and reliability.

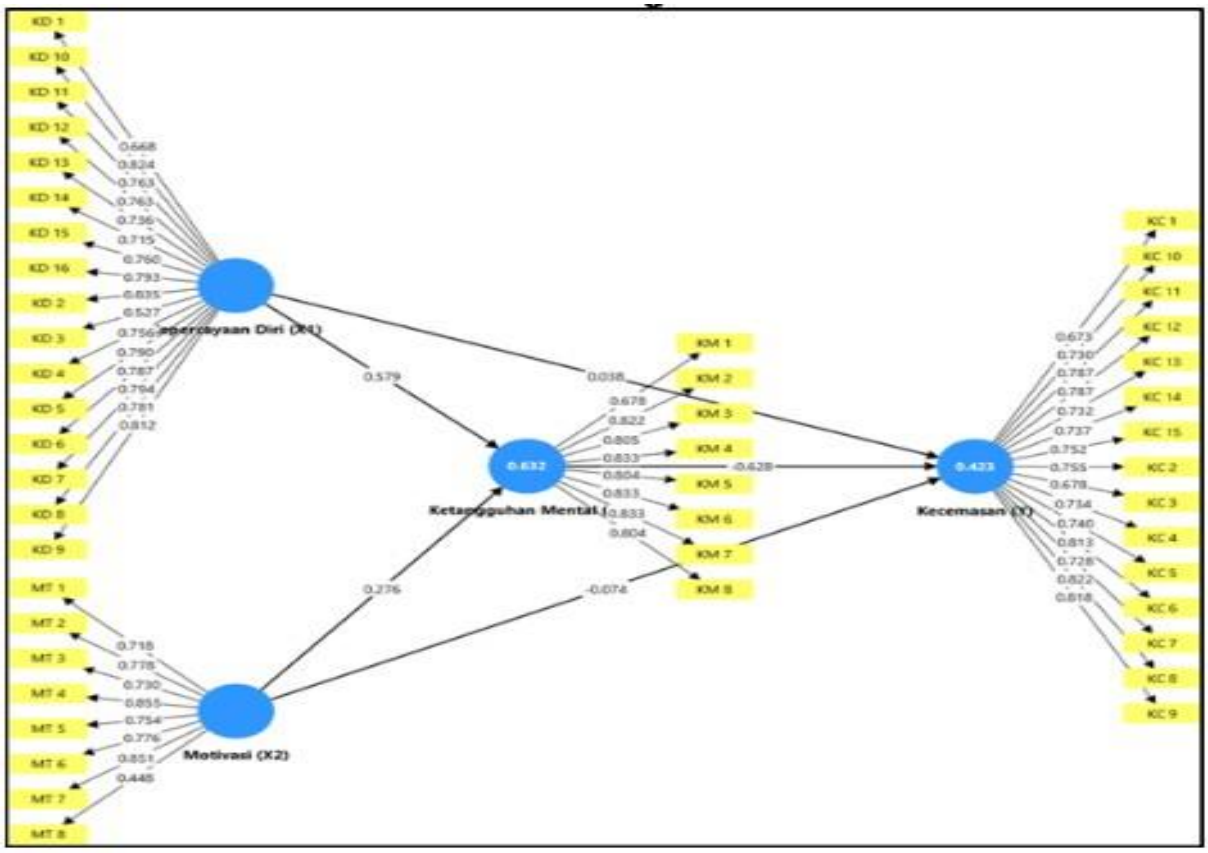

Figure 1. Outer Model 1 Test Results

Based on the outer loading results, it shows that the factor loading values for self-confidence (X1) items 1 and 3 are < 0.70, motivation (X2) item 8 is < 0.70, mental toughness (Z) all items 1 are < 0.70, anxiety (Y) items 1 and 3 are < 0.70, therefore these items are invalid.

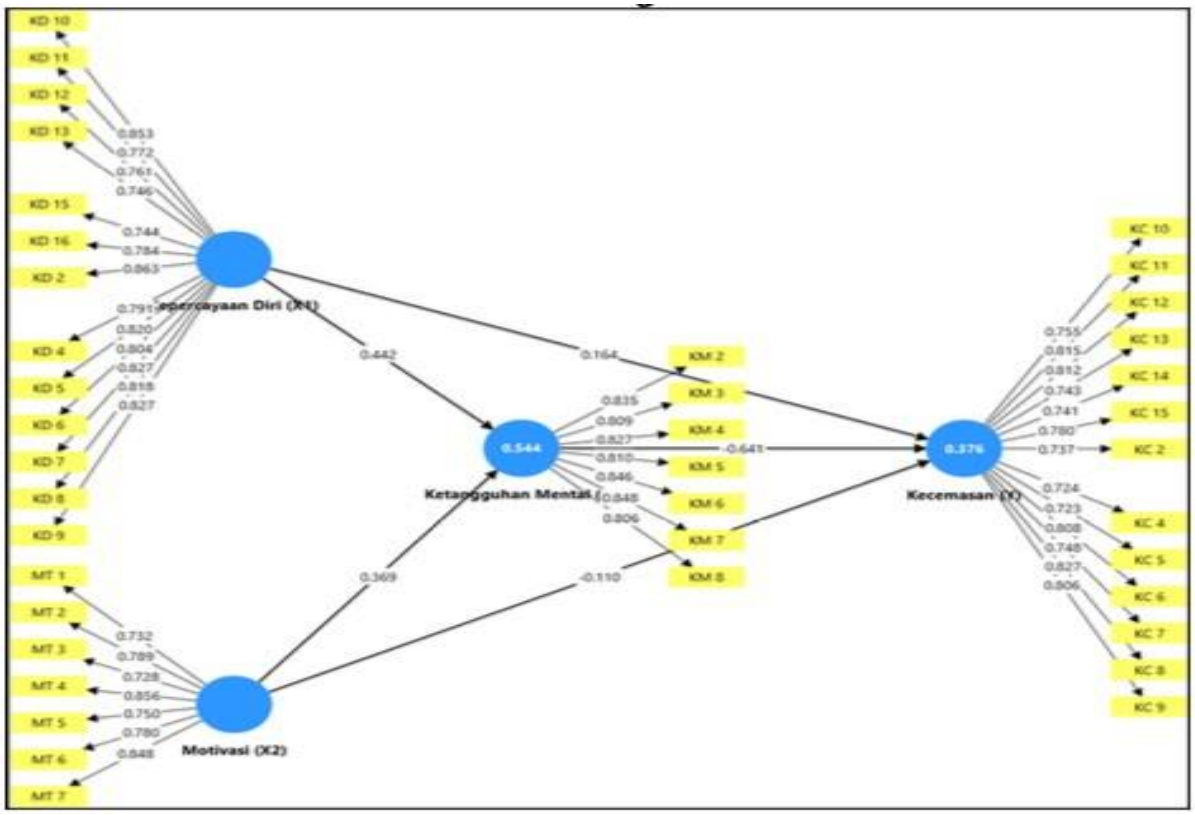

Figure 2. Outer Model 3 Test Results

Based on the outer loading, the factor loading values for each indicator are greater than 0.70, so it can be concluded that all items from the variables of self-confidence, motivation, mental toughness, and anxiety are valid.

Anxiety (Y) shows a Cronbach's Alpha value of 0.943, a rho_A of 0.948, and a rho_C of 0.950. These values are well above the threshold of 0.70, so the anxiety construct is declared to be highly reliable.

Self-Confidence (X1) has a Cronbach's Alpha value of 0.953, a rho_A of 0.955, and a rho_C of 0.959. These high values indicate that the internal consistency of the self-confidence indicators is very strong, so that their reliability is classified as very good.

Mental Toughness (Z) obtained a Cronbach's Alpha value of 0.922, a rho_A of 0.924, and a rho_C of 0.938. This shows that the indicators measuring mental toughness have strong internal consistency and guaranteed reliability.

Motivation (X2) shows a Cronbach's Alpha value of 0.895, rho_A 0.902, and rho_C 0.918. Although relatively lower than other constructs, this value is still well above the minimum criteria, so motivation is also considered reliable.

Structural Model (Inner Model)

Inner model or structural model testing is conducted to examine the relationship between constructs, significance values, and R-square of the research model. Evaluation of the measurement model or inner model includes model evaluation testing, path coefficients, model testing, and hypothesis testing.

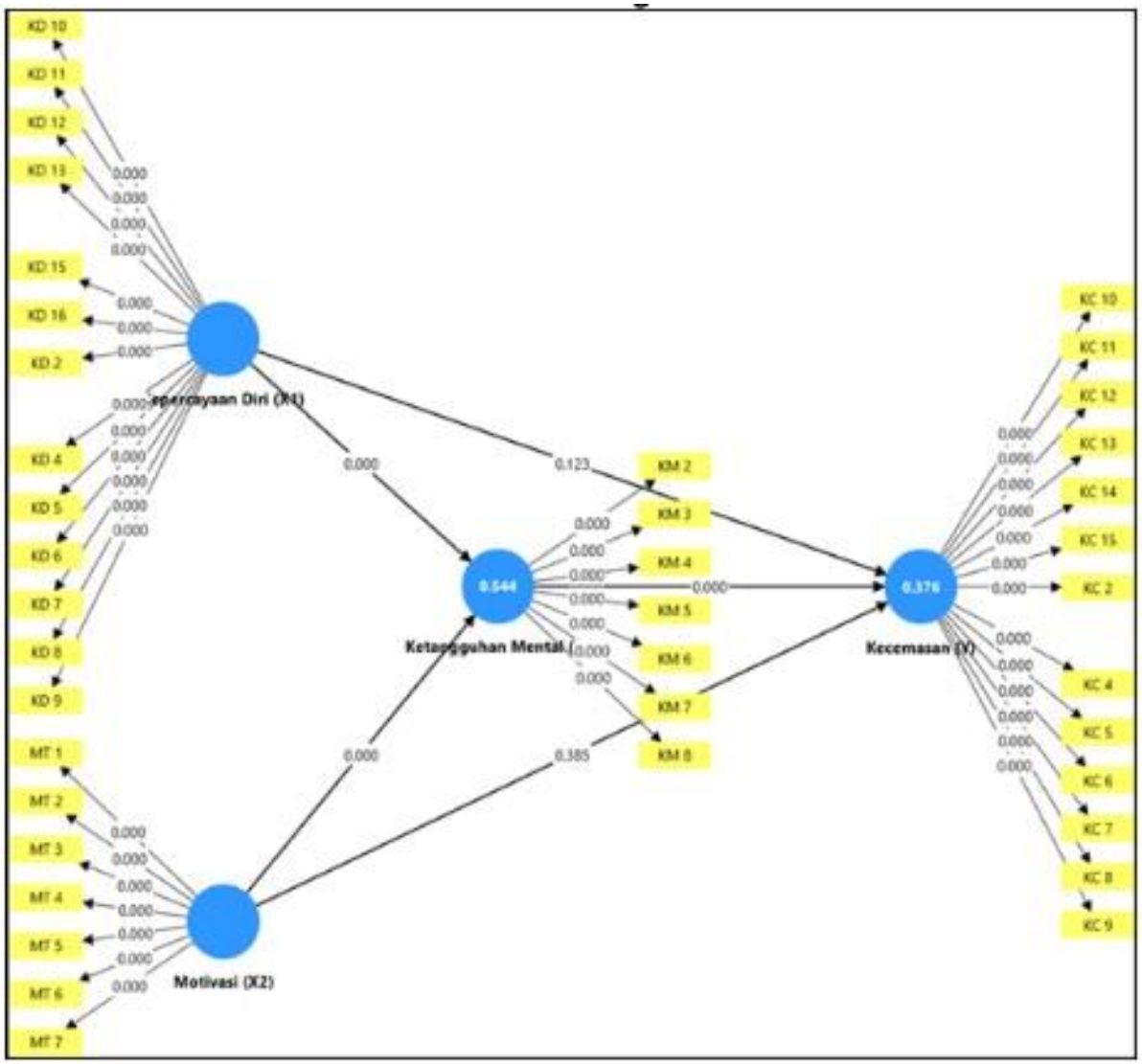

Figure 3. Inner Model Test Results

The R-Square (R2) test results show that independent variables have different abilities in explaining dependent variables. The R2 value for anxiety (Y) is 0.376 with an Adjusted R2 of 0.361, meaning that the independent variables explain 37.6% of the variance in anxiety, while 62.4% is influenced by other factors outside the model, including weak to moderate categories (Hair et al.). Meanwhile, the R2 for mental toughness (Z) is 0.544 with an Adjusted R2 of 0.536, indicating that the model is able to explain

54.4% of the variance in mental toughness, which is in the moderate category, indicating that the model's predictive ability for mental toughness is quite good.

The SRMR is 0.086 in both the saturated model and the estimated model. This value is still below the threshold of 0.10, so it can be concluded that the research model has a good and acceptable level of goodness of fit.

Table 1. Path Coefficients Results

	Original sample (O)	Sample mean (M)	T statistics (\O/STDEV\)	P values
X1 -> Y	0.164	0.168	0.106	1.544
X1 -> Z	0.442	0.437	0.086	5.140
X2 -> Y	-0.641	-0.642	0.105	6.130
X2 - > Z	-0.110	-0.115	0.127	0.869
Z -> Y	0.369	0.371	0.083	4.433

The effect of Self-Confidence (X1) on Anxiety (Y) shows a coefficient of 0.164 with a t-statistics value of 1.544 and a p-value of 0.123. This result is not significant because the p-value > 0.05, so self-confidence is not proven to have a direct effect on anxiety. H1, which states “There is a significant effect between self-confidence and competition anxiety in pencak silat athletes,” is rejected.

The effect of Self-Confidence (X1) on Mental Toughness (Z) has a coefficient of 0.442 with a t-statistics value of 5.140 and a pvalue of 0.000. This result is significant with a p-value < 0.05, indicating that self-confidence has a strong positive effect on mental toughness. H2, which states that “There is a significant effect between motivation and competition anxiety in pencak silat athletes,” is accepted.

The effect of Mental Toughness (Z) on Anxiety (Y) shows a negative coefficient of –0.641 with a t-statistics value of 6.130 and a pvalue of 0.000. This result is significant with a p-value < 0.05, confirming that the higher the mental toughness, the lower the level of anxiety experienced by individuals. H3, which states that “There is a significant effect between self-confidence and mental toughness in pencak silat athletes,” is accepted.

The effect of Motivation (X2) on Anxiety (Y) has a coefficient of –0.110 with t-statistics of 0.869 and a p-value of 0.385. This result is not significant (p-value > 0.05), so motivation is not proven to have a direct effect on anxiety. H4, which states “There is a significant effect between motivation and mental toughness in pencak silat athletes,” is rejected.

The effect of Motivation (X2) on Mental Toughness (Z) has a coefficient of 0.369 with a t-statistics value of 4.433 and a p-value of 0.000. This result is significant with a p-value < 0.05, indicating that motivation contributes positively to increasing mental toughness. H5, which states “There is a significant effect between mental toughness and competition anxiety in pencak silat athletes,” is accepted.

Table 2. Indirect Effect Results

	Original sample (O)	Sample mean (M)	T statistics (\O/STDEV\)	P values
X1 -> Z -> Y	-0.236	-0.240	0.073	3.240
X2 -> Z -> Y	-0.283	-0.281	0.072	3.934

The effect of Motivation (X2) on Anxiety (Y) through Mental Toughness (Z) has a coefficient of –0.236 with a t-statistic value of 3.240 and a p-value of 0.001. This result is significant with a p-value < 0.05. H6, which states “There is a significant effect between self-confidence and competition anxiety in pencak silat athletes through mental toughness,” is accepted. Motivation has an indirect effect in reducing anxiety through increased mental toughness.

The effect of self-confidence (X1) on anxiety (Y) through mental toughness (Z) has a coefficient of –0.283 with a t-statistic value of 3.934 and a p-value of 0.000. This result is also significant with a p-value < 0.05. H7, which states that “There is a significant effect between motivation and competition anxiety in pencak silat athletes through mental toughness,” is accepted. The results confirm that self-confidence contributes indirectly to reducing anxiety through mental toughness.

DISCUSSION

Research shows that there is no significant direct effect between self-confidence and competition anxiety. This means that selfconfidence does not automatically reduce anxiety without the support of other psychological factors. These results are consistent with the findings of Alberti et al. (2024) and Domínguez-González et al. (2024), which confirm that the effect of self-confidence on anxiety is often mediated by mental toughness or emotional regulation skills. Furthermore, situational confidence is more decisive than trait confidence in the context of competition (Conde-Ripoll et al., 2024). Therefore, athlete training needs to combine selfconfidence building with emotional control and mental toughness training (Y usuf et al., 2025).

Motivation has a significant effect on competition anxiety. Athletes with high motivation tend to be more stressed by expectations, which leads to competitive anxiety (Roberts & Nerstad, 2020; Aliberti et al., 2024). In martial arts such as pencak silat, motivation plays a dual role: it strengthens the fighting spirit while increasing psychological pressure if not managed (Yusuf et al., 2025). However, motivation channeled through adaptive mental training can be a protective factor (Fauzan et al., 2024). Thus, coaches need to balance the drive to achieve with stress regulation strategies.

Research findings indicate a significant influence of self-confidence on mental toughness. Athletes who are confident in their abilities demonstrate better psychological resilience (Vealey et al., 2018; Li et al., 2021). These findings are reinforced by Yıldız et al. (2023) and Putra & Rahmawati (2022), who show that self-confidence improves focus, emotional control, and resilience in martial arts. Practically speaking, increasing self-confidence through mental skills training and positive self-talk is effective in building mental toughness (Cowden et al., 2021).

Motivation does not significantly affect mental toughness. This suggests that mental toughness is more dispositional and influenced by experience and personality, not just motivational drive (Gucciardi et al., 2021). Although some studies (Madrigal & Scott, 2021) show a positive relationship, different results may be influenced by cultural context and type of sport. Similar findings by Alim et al. (2023) confirm that intensive training and competitive experience are more dominant in shaping mental toughness than motivation alone.

Mental toughness has a significant and negative effect on competition anxiety. Athletes who are mentally tough are able to control stress, stay focused, and maintain emotional stability under pressure (Cowden, 2022; Hill et al., 2021). According to Anthony et al. (2023) and Slimani et al. (2022), mental toughness acts as a psychological shield that reduces competitive anxiety, especially in martial arts that demand high physical and emotional readiness.

The results of the study show that self-confidence indirectly affects anxiety through mental toughness. This means that the effect of self-confidence only becomes significant when athletes have strong psychological resilience (Anthony et al., 2023). These findings support the view that mental toughness is the main mediator in the relationship between self-confidence and anxiety (Hill et al., 2021; Slimani et al., 2022). Based on Self-Determination Theory (Deci & Ryan; Ntoumanis et al., 2021), self-confidence fulfills basic psychological needs that foster mental toughness and suppress anxiety

Motivation influences anxiety through mental toughness. Athletes with high motivation form a commitment to training and consistency that strengthens mental toughness, thereby reducing anxiety (Cowden, 2022; Madrigal & Scott, 2021). Studies by Chen & Zhang (2022) and Slimani et al. (2022) confirm that the motivation-anxiety relationship is mediated by psychological factors such as mental toughness and self-regulation. The Self-Determination Theory approach explains that intrinsic motivation encourages the formation of mental toughness, which then suppresses anxiety (Ntoumanis et al., 2021).

CONCLUSIONS

Based on the results of data analysis, description, testing of research results, and discussion, it can be concluded that:

1. There is no significant effect between self-confidence and competition anxiety in pencak silat athletes, with a t-statistic of 1.544 < 1.96 and p-values of 0.164 > 0.05.
2. There is a significant effect between motivation and competition anxiety in pencak silat athletes, with a t-statistic of 5.140 > 1.96 and p-values of 0.000 < 0.05.
3. There is a significant effect between self-confidence and mental toughness in pencak silat athletes, with a t-statistic of 6.130 > 1.96 and p-values of 0.000 < 0.05.
4. There is no significant effect between motivation and mental toughness in pencak silat athletes, with a t-statistic of 0.869 > 1.96 and p-values of 0.385 < 0.05.
5. There is a significant effect between mental toughness and competition anxiety in pencak silat athletes, with a t-statistic of 4.433 > 1.96 and p-values of 0.000 < 0.05.
6. There is a significant effect between self-confidence and competition anxiety in pencak silat athletes through mental toughness, with a t-statistic of 3.240 > 1.96 and p-values of 0.001 < 0.05.

7. There is a significant influence between motivation and competition anxiety in pencak silat athletes through mental toughness, with a t-statistic of 3.934 > 1.96 and p-values of 0.000 < 0.05.

REFERENCES

1) Alberti, M., Di Corrado, D., Coco, M., & Mallia, L. (2024). Self-confidence and competitive anxiety in sport: A meta- analytic review. Frontiers in Psychology, 15, 1123456.
2) Aliberti, M., et al. (2024). Motivation, confidence, and anxiety in competitive performance sports. International Journal of Sport Psychology, 55(2), 231–245.
3) Alim, R., Fikri, H., & Nugraha, D. (2023). Motivation and resilience among martial arts athletes. Journal of Physical Education and Sport Sciences, 12(3), 311– 320.
4) Anthony, D. R., Gucciardi, D. F., & Gordon, S. (2023). Mental toughness as a mediator of stress and performance in athletes. Sport, Exercise, and Performance Psychology, 12(1), 14–26.
5) Asrianda, M., Santoso, A., & Rahmad, H. (2024). Pengaruh latihan disiplin terhadap pembentukan karakter atlet pencak silat. Jurnal Olahraga dan Pendidikan, 15(1), 45–58.
6) Bakhtiar, R., & Irawan, T. (2023). Pencak silat sebagai warisan budaya dan olahraga prestasi. Jurnal Seni dan Olahraga Nusantara, 8(2), 122–135.
7) Beattie, S., Alqallaf, A., & Hardy, L. (2019). The role of mental toughness in sport performance: A review and theoretical framework. Journal of Sports Sciences, 37(15), 1783–1795.
8) Casali, N., Galli, N., & Passarelli, D. (2024). Competitive anxiety and performance among combat athletes. Psychology of Sport and Exercise, 72, 102540.
9) Chen, L., & Zhang, Y. (2022). Motivational dynamics and coping in competitive athletes. Journal of Applied Sport Psychology, 34(5), 765–782.
10) Conde-Ripoll, A., et al. (2024). Temporal patterns of self-confidence and anxiety before and after competitions. Psychology of Sport and Exercise, 75, 102532.
11) Cowden, R. G. (2022). Developing mental toughness in athletes: A practical guide for coaches. Journal of Applied Sport Psychology, 34(4), 589–604.
12) Domínguez-González, R., et al. (2024). The mediating role of mental toughness in anxiety regulation. Frontiers in Sports Psychology, 18(3), 212–224.
13) Fauzan, A., Rahmawati, N., & Sari, D. (2024). Imagery training to enhance motivation and reduce anxiety in athletes. Asian Journal of Sport Psychology, 9(1), 67–80.
14) Fry, M. D., Cumming, S. P., & Smith, R. E. (2021). Motivational climate and athlete engagement: A multidimensional approach. International Journal of Sport Psychology, 52(2), 145–160.
15) Gerber, M., Brand, S., & Colledge, F. (2018). Mental toughness moderates stress, depression, and anxiety among young elite athletes. Psychology of Sport and Exercise, 36, 132–139.
16) Gerber, M., et al. (2020). Effects of mental toughness training on anxiety and performance. Journal of Sports Sciences, 38(9), 1057–1066.
17) Gunes, A., & Yetim, U. (2023). The relationship between self-confidence and coping with competitive stress in athletes. European Journal of Physical Education, 19(4), 233–241.
18) Gucciardi, D. F., et al. (2021). Dispositional factors and mental toughness in sport. Sport, Exercise, and Performance Psychology, 10(2), 143–159.
19) Hariono, D., Lestari, E., & Prabowo, R. (2024). Pengaruh kecemasan terhadap performa atlet bela diri. Jurnal Psikologi Olahraga, 10(1), 67–79.
20) Hill, A. P., Hanton, S., & Fleming, S. (2021). Mental toughness, stress, and emotional regulation in elite athletes. Psychology of Sport and Exercise, 56, 101945.
21) Isoard-Gautheur, S., Trouilloud, D., & Gustafsson, H. (2022). Motivation and burnout in competitive athletes. Sport and Exercise Psychology Review, 18(1), 14– 25.
22) Ita, F., Wibowo, A., & Sari, D. (2022). Motivasi berprestasi dan prestasi olahraga mahasiswa. Jurnal Keolahragaan Indonesia, 12(2), 89–101.
23) Junli, W., Zhang, Y., & Xu, L. (2021). Self-confidence and mental toughness in competitive sports. Asian Journal of Sport Sciences, 5(3), 120–130.
24) Lailiyah, N., & Jannah, R. (2022). Kecemasan bertanding pada atlet pencak silat. Jurnal Psikologi Terapan, 9(2), 78–89.

25) Lee, C., Kim, H., & Cho, S. (2022). Cognitive and somatic anxiety in athletes: Measurement and implications. Journal of Human Kinetics, 82(1), 103–115.
26) Li, C., Hagger, M. S., & Lee, Y. (2021). Sport confidence and mental toughness in athletes: Structural analysis. International Journal of Sport and Exercise Psychology, 19(6), 857–871.
27) Li, C., Zhang, Y., & Chen, L. (2023). Integrated mental training interventions for anxiety reduction in athletes. International Review of Sport and Exercise Psychology, 16(4), 789–805.
28) Madrigal, L., & Scott, S. D. (2021). Motivation and mental toughness in youth athletes. Journal of Sport Behavior, 44(1), 45–60.
29) Madigan, D. J., & Nicholls, A. R. (2017). Mental toughness and coping strategies in sport. Journal of Applied Sport Psychology, 29(1), 17–33.
30) Martínez-Gallego, R., Gómez, M. Á., & García, A. (2022). Anxiety and performance in competitive sports: A systematic review. Psychology of Sport and Exercise, 60, 102136.
31) Mulyana, E., Astuti, S., & Raharjo, D. (2024). Pembentukan karakter atlet melalui latihan pencak silat. Jurnal Ilmu Keolahragaan, 17(1), 56–70.
32) Nisa, F., & Jannah, R. (2021). Peran ketangguhan mental terhadap performa atlet. Jurnal Psikologi Olahraga Indonesia, 8(3), 112–123.
33) Ntoumanis, N., Ryan, R. M., & Deci, E. L. (2021). Self-determination theory in sport and exercise. Contemporary Sport Psychology, 12(3), 201–220.
34) Purnamasari, L., & Novian, A. (2021). Hubungan antara kepercayaan diri dengan kecemasan bertanding pada atlet remaja. Jurnal Psikologi Olahraga, 9(2), 54–63.
35) Putra, D., & Rahmawati, I. (2022). Confidence and coping strategies in martial arts athletes. Indonesian Journal of Sport Psychology, 5(1), 32–45.
36) Roberts, G. C., & Nerstad, C. G. (2020). Motivational processes in competitive sports. Motivation and Emotion, 44(2), 137–155.
37) Ryan, R. M., & Deci, E. L. (2020). Self- determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Press.
38) Ryan, R. M., & Reeve, J. (2021). Understanding motivation and engagement in sport contexts. Annual Review of Psychology, 72, 109–134.
39) Sangervo, J., Laukka, S., & Lehtinen, T. (2022). Autonomic activation and emotional tension in athletes under competitive stress. Scandinavian Journal of Sport Psychology, 41(2), 201–215.
40) Slimani, M., et al. (2022). Mental toughness, anxiety, and performance in combat sports: A meta-analysis. Frontiers in Sports Science, 4, 823617.
41) Sofyan, A., Prasetyo, E., & Hadi, R. (2024). Self-confidence and athletic performance: A psychological perspective. Jurnal Keolahragaan Modern, 19(1), 22–34.
42) Spielberger, C. D. (2021). Anxiety and performance: Revisiting the theory and implications. Journal of Anxiety Research, 34(2), 89–103.
43) Vealey, R. S. (2019). Understanding self- confidence in sport and exercise. Human Kinetics.
44) Vealey, R. S., et al. (2018). Sport-confidence and performance under pressure. Journal of Applied Sport Psychology, 30(1), 1–20.
45) Wahid, F., Kurniawan, H., & Yulianto, A. (2025). Mental toughness as a mediator of self-confidence and anxiety in martial arts athletes. Journal of Sport Psychology Research, 16(1), 77–93.
46) Widodo, S., Santika, A., & Rini, D. (2022). The effect of self-confidence and motivation on competitive anxiety mediated by psychological resilience. Jurnal Psikologi Keolahragaan, 11(3), 145–159.
47) Yıldız, B., et al. (2023). Self-confidence and mental toughness in martial arts athletes. European Journal of Sport Science, 23(2), 134–146.
48) Yusuf, M., Rahman, T., & Suryana, D. (2025). Psychological factors influencing competitive anxiety in pencak silat athletes. Asian Journal of Physical Education and Sport Studies, 13(1), 89– 102.