

Analysis Of The Psychological Aspects Of Pencak Silat Athletes Who Undergo Rapid Weight Loss And Its Impact On Competition Performance

Faisal Hanif Mico Satriaji^{1*}, Sahri²

¹²Universitas Negeri Semarang, Semarang, Indonesia

Keywords

Psychological; Rapid Weight Loss; Performance; Competition.

Abstract

Observations from the 2025 Semarang City Championship indicate that pencak silat athletes rely on Rapid Weight Loss (RWL), which triggers psychological stress, mental turmoil, and emotional instability. The consequences include impaired focus and premature fatigue. This study aims to analyze the influence of the affective, cognitive, and conative psychological aspects of athletes who practice RWL on their competition performance to address mental management challenges during competition. The research design used in this study is quantitative descriptive research. The population in this study consists of pencak silat athletes from the Dragon Fighter Club, with a sample size of 12 athletes. The instrument used in this study was a questionnaire. This questionnaire presented statements regarding psychological aspects such as affective (emotional), cognitive (focus and self-confidence), and conative (motivation and mental fatigue). Findings regarding the affective aspect indicate that athletes agreed with the variables of mood ($r=2.5$) and self-confidence ($r=2.91$), but disagreed regarding emotional control ($r=2.33$) and response to provocation ($r=2.25$). Cognitively, athletes agreed on focus ($r=2.67$) and reaction time ($r=2.58$), but disagreed regarding concentration ($r=1.83$) and memory ($r=2.5$). The conative aspect showed strong agreement regarding discipline ($r=3.33$), enthusiasm ($r=3.83$), and perseverance ($r=3.5$), though athletes disagreed regarding motivation ($r=2$). The analysis concluded that the affective aspect of pencak silat athletes was emotionally impacted in the mood dimension due to rapid weight loss. Cognitively, athletes experienced slower reaction times and reduced response speed during competition. However, the conative aspect showed no significant impact on motivation and mental fatigue. A limitation of this study is the lack of specific prior research, so the results remain subjective. Based on this phenomenon, this study emphasizes the importance of integrating psychological aspects into training programs to optimize athletes' emotional balance, focus, and self-confidence.

✉ Corresponding author :
E-mail: mico666s@student.unnes.ac.id

INTRODUCTION

Pencak silat is a martial art designed to defend against threats to one's safety by parrying attacks and ultimately countering the opponent, whether armed or unarmed (Apredi et al., 2025). In Indonesia, pencak silat is overseen by an organization called the Indonesian Pencak Silat Association (IPSI) (Rosalina dan Nugroho 2020). IPSI plays a crucial role in advancing and fostering the development of pencak silat within the realm of competitive sports by organizing competitions and establishing regulatory frameworks (Pratama, 2018). Competitive sports are defined as the realm of sports that systematically, progressively, and sustainably trains and develops athletes through competitions to achieve excellence, supported by sports science and technology (Prasetyo, Damrah, dan Marjohan 2018).

Pencak silat is also one of the most prestigious sports in competitions. In competitive sports, pencak silat is divided into several categories, including: combat events, individual artistic events, pair artistic events, and team artistic events (Septika, Wahyudi, dan Aryanti 2022). Understanding pencak silat competition regulations is one of the most important things that athletes, coaches, and competition officials must know. In pencak silat and nearly all martial arts, the most commonly known regulations pertain to categories and competition events. This is because these regulations relate to weight class regulations for athletes, ranging from youth to adult categories.

Weight management is crucial and requires serious attention, both in terms of training program knowledge and nutritional management, to achieve optimal athletic performance (Lailaturohmah, Andera, dan Mildawati 2023). Athletic performance can be enhanced through proper body weight management combined with an appropriate training program. Peak performance will not be achieved if, from training through to competition, optimal nutrition is not properly managed and maintained (Kurnia, Kasmiyetti, dan Dwiyantri 2020). Due to intensive training, balanced nutrition is the most critical component in supporting athletes' peak performance for competitions ranging from regional to national levels (Faizal dan Kusuma Hadi, 2019). Weight management in martial arts, particularly pencak silat, is required for specific categories and weight classes to comply with competition regulations (Syaifullah et al., 2023).

Pencak silat, in realizing the scope of competitive sports, features competitions ranging from regional, national, to international levels. Performance achievements in the sport of pencak silat are influenced by several factors: physical, technical, and psychological (Guntoro, Muhammad, dan Qomarrullah 2020). High performance cannot be achieved without a focus on psychological conditions, even with perfect physical, technical, and tactical development in athletes (Devi dan Indardi, 2023). An athlete in prime physical and technical condition may not necessarily achieve good performance if not supported by sound psychological aspects (Octavianingrum dan Savira 2022).

Essentially, psychology is the science that studies human behavior. When applied to sports, it encompasses the behavior exhibited by an individual during physical activity, or what is referred to as their performance in sports (Jiventino dan Prayogo 2021). Psychological conditions in pencak silat athletes—such as self-confidence, anxiety, focus, and motivation—significantly aid an athlete's ability to make decisions, manage emotions, and maintain consistent performance during a match (Arifah et al., 2025). According to pencak silat regulations, body weight is a key concern for athletes, as it serves as a determining factor for competition categories and weight classes (Jumrotul, Aqobah, dan Rhamadian 2022).

Rapid weight loss is a strategy for drastic weight loss in just one week or less. Rapid weight loss is commonly used in martial arts, as these sports have regulations regarding weight categories and classes. The rapid weight loss (RWL) strategy itself is carried out before competitions or pre-matches and is used by athletes who struggle to maintain a consistent weight. Rapid weight loss is not only beneficial to athletes through drastic weight reduction but also carries physical and psychological risks (Zhong et al., 2025).. Psychologically, this extreme effort to reduce body weight shifts the athlete's focus, where concentration that should be allocated to competition strategy is distracted by the demands of meeting physical regulations (Suwirman dan Sepriadi 2019). In the pencak silat competition system, compliance

with weight classifications is an absolute requirement for athletes to be deemed eligible for competition (Mido et al., 2025).

Observations at a championship in Semarang indicate that athletes facing weight-related challenges tend to exhibit reduced focus and performance that contrasts sharply with athletes who maintain a stable weight. These challenges suggest that unsystematic weight-loss processes can hinder athletes' cognitive capabilities and movement effectiveness in the arena. Based on field observations at the 2025 Semarang City Championship, many athletes still rely on Rapid Weight Loss (RWL) strategies as a quick fix to meet weight class qualifications. However, this phenomenon highlights serious challenges in psychological management, where the pressure from the weight loss process disrupts athletes' mental readiness and emotional stability. These psychological impacts are characterized by a decline in cognitive function, manifesting as impaired focus (distorted concentration) and a low fatigue threshold during competition. This condition indicates a lack of psychological resilience in athletes when facing competitive pressure. Although numerous studies have examined the psychological aspects of pencak silat athletes' performance, research addressing internal physiological factors—such as the effects of rapid weight loss—remains very limited. To date, the literature on competitive pencak silat performance has tended to focus on psychological dimensions. However, other internal factors, such as rapid weight loss practices, have an equally significant impact yet have received minimal academic attention.

Based on this background, the researcher is interested in analyzing the psychological aspects of pencak silat athletes who employ rapid weight loss on their competition performance. The objectives of this study are as follows: to analyze the affective psychological aspects of pencak silat athletes who undergo rapid weight loss in relation to their competition performance; to analyze the cognitive psychological aspects of pencak silat athletes who undergo rapid weight loss in relation to their competition performance; and to analyze the conative psychological aspects of pencak silat athletes who undergo rapid weight loss in relation to their competition performance.

METHODS

The type of research used in this study is quantitative descriptive research. Quantitative descriptive research is a statistical analysis method that applies and provides a description or overview of the data that has been studied (Sudirman et al., 2023). Variables are elements that serve as the focus of observation and measurement. The variables in this study include: the psychological aspects of athletes who implement rapid weight loss (independent variable) and competition performance (dependent variable).

The population refers to the entire group or set of elements possessing specific characteristics that are the subject of the study (Asrulla et al., 2023). The population in this study consists of pencak silat athletes from the Dragon Fighter Club. A sample is a subset of the population that shares the same characteristics. A sample is a selected group of individuals from the population that represents the entire population (Suriani et al., 2023). The sample for this study consists of 12 participants selected using total sampling.

An instrument is a measurement tool used to study variables in a study (Dewi et al., 2018). Research instruments play a crucial role in measuring variables systematically and objectively so that researchers can obtain accurate, consistent, and reliable data to understand the phenomena under study (Zayrin et al., 2025). The instrument used in this study is a questionnaire. The data collection technique in this study is the distribution of questionnaires. This questionnaire presents statements regarding psychological aspects such as affective (emotional), cognitive (focus and self-confidence), and conative (motivation and mental fatigue). Each indicator comprises two phases: the rapid weight loss phase and the competition phase (when the athlete is competing).

The procedures in this study included: observation of the research subjects. After observing the subjects, the researcher consulted on the instruments to be used. On the day of the study, the researcher provided instructions regarding the procedures for completing the questionnaire. After the subjects finished filling out the questionnaire, the researcher then conducted data analysis. The data analysis techniques used in this study included: validity and

reliability tests using SPSS 22; as well as descriptive statistical analysis. The validity test was conducted using the Pearson Product Moment test, and the reliability test used Cronbach's Alpha.

RESULTS AND DISCUSSION

Table 1. Distribution of Athletes' Psychological Aspects as They Relate to Competition Performance

Variable	Dimension	Mean (N= 12)	Category
Affective Aspect	Mood	2,5	Agree
	Emotional Control	2,33	Disagree
	Response to Provocation	2,25	Disagree
	Self-confidence	2,91	Agree
Cognitive Aspect	Strategic Concentration	1,83	Disagree
	Memory	2,5	Disagree
	Focus	2,67	Agree
	Reaction Time	2,58	Agree
Conative Aspects	Levels of Discipline	3,33	Strongly Agree
	Levels of Enthusiasm	3,83	Strongly Agree
	Motivation	2	Disagree
	Enthusiasm under any circumstances	3,5	Strongly Agree

Referring to **Table 1**, it is noted that the psychological aspects are divided into three parts: the affective, cognitive, and conative aspects of athletes regarding match performance, which are further subdivided into four statement dimensions within each aspect. Findings regarding the affective psychological aspect revealed that, on average, athletes agreed with statements regarding mood ($r=2.5$) and self-confidence ($r=2.91$), and disagreed with statements related to emotional control ($r=2.33$) and response to provocation ($r=2.25$). In the cognitive aspect, the average athlete agreed with statements regarding focus ($r=2.67$) and reaction time ($r=2.58$), and disagreed with statements regarding competitive concentration ($r=1.83$) and memory ($r=2.5$). Furthermore, the measurement of the conative aspect showed that, on average, athletes strongly agreed with statements regarding discipline level (3.33), enthusiasm level (3.83), and enthusiasm under any conditions ($r = 3.5$), and disagreed with the statement on motivation ($r = 2$).

Validity Test

The validity test of the instrument is a prerequisite test of the data used to measure and determine the extent to which the questions presented in the questionnaire are appropriate for the questionnaire/survey serving as the research instrument for the subjects. The questionnaire/survey instrument in this study is divided into 3 aspects and further contains 4 dimensions of statements. It is known that the significance value indicating the instrument is valid with a sample size of 12 is Sig. > 0.576. The results of the validity test for the questionnaire/survey instrument regarding the measurement of the affective aspect in pencak silat athletes are presented in **Table 2**.

Table 2. Validity Test of the Affective Aspect

		Correlations				
		X1	X2	X3	X4	TOTALX
X1	Pearson Correlation	1	.395	.649*	.443	.780**
	Sig. (2-tailed)		.204	.022	.149	.003
	N	12	12	12	12	12
X2	Pearson Correlation	.395	1	.571	.291	.781**
	Sig. (2-tailed)	.204		.053	.358	.003
	N	12	12	12	12	12
X3	Pearson Correlation	.649*	.571	1	.340	.838**
	Sig. (2-tailed)	.022	.053		.280	.001
	N	12	12	12	12	12
X4	Pearson Correlation	.443	.291	.340	1	.656*
	Sig. (2-tailed)	.149	.358	.280		.020
	N	12	12	12	12	12
TOTALX	Pearson Correlation	.780**	.781**	.838**	.656*	1
	Sig. (2-tailed)	.003	.003	.001	.020	
	N	12	12	12	12	12

Based on the validity test of the measurement instrument for the psychological affective aspect of pencak silat athletes above, it is known that the 4 dimensions of statements are valid, with the calculated r-value against the table r-value on a significance scale of 0.656–0.838. The results of the validity test of the questionnaire/survey instrument for measuring the cognitive aspects of pencak silat athletes are presented in **Table 3**.

Table 3. Validity Test of the Cognitive Aspect

		Correlations				
		Y1	Y2	Y3	Y4	TOTALY
Y1	Pearson Correlation	1	.696*	.472	.629*	.867**
	Sig. (2-tailed)		.012	.121	.029	.000
	N	12	12	12	12	12
Y2	Pearson Correlation	.696*	1	.258	.697*	.861**
	Sig. (2-tailed)	.012		.418	.012	.000
	N	12	12	12	12	12
Y3	Pearson Correlation	.472	.258	1	.196	.602*
	Sig. (2-tailed)	.121	.418		.541	.038
	N	12	12	12	12	12
Y4	Pearson Correlation	.629*	.697*	.196	1	.811**
	Sig. (2-tailed)	.029	.012	.541		.001
	N	12	12	12	12	12
TOTALY	Pearson Correlation	.867**	.861**	.602*	.811**	1
	Sig. (2-tailed)	.000	.000	.038	.001	
	N	12	12	12	12	12

Based on the validity test of the measurement instrument for the cognitive psychological aspects of pencak silat athletes above, it was found that the 4 dimensions of the statements are valid, with calculated r values against the table r values on a significance scale of 0.602–0.867. The results of the validity test of the questionnaire/survey instrument for measuring the conative aspects of pencak silat athletes are presented in **Table 4**.

Table 4. Validity Test of the Conative Aspect

		Correlations				
		Z1	Z2	Z3	Z4	TOTALZ
Z1	Pearson Correlation	1	.702*	.430	.911**	.915**
	Sig. (2-tailed)		.011	.163	.000	.000
	N	12	12	12	12	12
Z2	Pearson Correlation	.702*	1	.245	.693*	.718**
	Sig. (2-tailed)	.011		.443	.013	.009
	N	12	12	12	12	12
Z3	Pearson Correlation	.430	.245	1	.424	.719**
	Sig. (2-tailed)	.163	.443		.169	.008
	N	12	12	12	12	12
Z4	Pearson Correlation	.911**	.693*	.424	1	.904**
	Sig. (2-tailed)	.000	.013	.169		.000
	N	12	12	12	12	12
TOTALZ	Pearson Correlation	.915**	.718**	.719**	.904**	1
	Sig. (2-tailed)	.000	.009	.008	.000	
	N	12	12	12	12	12

Based on the validity test of the measurement instrument for the cognitive-psychological aspects of pencak silat athletes above, it was found that the 4 dimensions of the statements are valid, with calculated *r* values against table *r* values on a significance level scale of 0.718–0.915.

Reliability Test

The instrument reliability test is a prerequisite test used to assess the instrument's consistency. It is generally accepted that data is considered reliable in the Cronbach's Alpha test if the value is > 0.6. The results of the instrument reliability test for measuring the psychological aspects of pencak silat athletes are presented in **Table 5**.

Table 5. Reliability Test of the Psychological Aspects

Variabel	Reliability Statistics	
	Cronbach's Alpha	Number of Items
Affective Aspect	.754	4
Cognitive Aspect	.777	4
Conative Aspect	.794	4

Based on the results of the reliability test for the instrument used to measure the psychological aspects of pencak silat athletes, it was found that the Cronbach's Alpha values for all psychological aspects—which are divided into three variables—were greater than 0.6. Therefore, it can be concluded that all dimensions within each variable of the instrument are reliable.

Referring to **Table 1** regarding the distribution of measurements of the psychological aspects of athletes who undergo rapid weight loss and its impact on competition performance. In the affective aspect, it was found that, on average, athletes felt their mood became unstable when daily calorie intake was restricted for competition preparation and felt less confident in their physical strength during competition after experiencing drastic weight loss. However, athletes generally did not find it difficult to control their emotions in response to their surroundings even while in the weight-loss phase and were not easily provoked by opponents during matches despite having recently undergone drastic weight-loss methods. These findings align with the study by Trivic et al., (2020), which found that the application of rapid weight loss affects the mood of martial arts athletes due to drastic weight loss. However, although rapid weight loss impacts the mood of individuals undergoing it, the findings of this study indicate that, on average, athletes can still manage their emotional capacity. This is because numerous factors influence an athlete's

emotional intelligence, including emotional training through exercise programs and education (Kardiawan et al., 2023). This study indicates that there is no significant influence or correlation between the psychological affective aspects of athletes who undergo rapid weight loss and their competition performance.

In terms of cognitive aspects, on average, athletes feel that their focus during matches is often disrupted due to feelings of weakness following the weight loss process, and they perceive a decrease (slowing) in reaction time or the speed of responding to opponents' attacks due to mental fatigue resulting from the existing weight loss program. However, despite having undergone the weight loss process, athletes tend not to find it difficult to concentrate on the strategies or techniques taught by their coaches, although on average, athletes also reported frequently experiencing a decline in short-term memory as the competition approached. Referring to the study by Alizaee et al., (2018), it is noted that fluid depletion resulting from rapid weight loss has a negative impact on energy stores and fluid balance in athletes using this method. The results of this study indicate a correlation between an athlete's ability to focus and low fluid status (Putri et al., 2025). The findings of this study also align with the review by Bialowas et al., (2023) which found no significant impact of rapid weight loss on martial arts athletes' performance during competitions, particularly regarding cognitive aspects such as focus and self-confidence. Although many findings indicate that the implementation of rapid weight loss affects nutrient intake, nutrient intake also plays a role in maintaining physical performance, which in turn impacts competition performance (Akbar et al., 2024).

Measurements of athletes' conative aspects indicate that, on average, athletes maintain a high level of discipline in adhering to their pre-competition training programs despite often feeling physically weak due to weight loss, accompanied by sustained motivation driven by encouragement throughout the weight-loss process. Athletes did not experience a significant drop in motivation during competition and remained enthusiastic about scoring points throughout the match despite having recently undergone drastic weight loss. One factor influencing athletes' attitudes or character is the coach's leadership style (Maulana et al., 2025). The findings of this study are also consistent with previous research, in which motivation serves as an indicator in driving an individual's adherence to a weight loss program (Manalu et al., 2020). Although the study by Faizal & Hadi, (2019) notes that one factor contributing to weight issues during competition is a lack of attention and motivation from coaches. The findings of this study indicate that no significant influence or relationship was found between the conative aspects of athletes undergoing rapid weight loss and their match performance.

Integrating psychological aspects into training programs is a crucial step in minimizing the negative impact of external factors during competition (Elisa et al., 2025). Emotional balance acts as a buffer against mental pressure, while honed focus enables athletes to maintain proper technique even under conditions of extreme physical fatigue. Therefore, training programs must account for fluctuations in physical condition resulting from rapid weight loss while also maintaining the athletes' psychological stability to ensure peak performance (Yang et al., 2018).

CONCLUSION

Based on the results of the analysis, it can be concluded that the affective (emotional) aspect of pencak silat athletes is more significantly impacted in terms of mood due to rapid weight loss on their competition performance. In terms of cognitive aspects (focus and self-confidence), pencak silat athletes tend to experience slower reaction times and reduced response speed during competition after implementing rapid weight loss. Furthermore, regarding conative aspects (motivation and mental fatigue), no significant impact was found on the competition performance of pencak silat athletes resulting from the implementation of rapid weight loss. A limitation of this study is the scarcity of prior discussions or studies that specifically analyze psychological aspects in athletes, making this study somewhat subjective. As for suggestions for future research, it is recommended to examine the variables in this study using new subjects, which can then serve as a comparative reference for analyzing pencak silat athletes.

REFERENCES

- Akbar, A. H., Ginting, A. P., Tobing, B. M. L., Hardiansyah, M., Situmorang, M. D., & Nurkadri. (2024). Peran Nutrisi Dalam Meningkatkan Pforma Pemain Tenis Lapangan Aidil. *Jumper: Jurnal Mahasiswa Pendidikan Olahraga*, 5(2), 614–622. <https://doi.org/doi.org/10.55081/jumper.v5i2.3022>
- Alizaee, H., Abadi, Y., Mirzaei, B., Habibi, H., & Barbas, I. (2018). *Prevalence of Rapid Weight Loss and Its Effects on Elite Cadet Wrestlers Participated in the Final Stage of National Championships*. 1(1), 3–7. <https://doi.org/10.5812/intjssh.64316.Research>
- Apredi, M., Mellu, S., Anakaka, D. L., & Ratu, F. (2025). Profil Psikologis Atlet Pencak Silat Kota Kupang dalam Menghadapi Pertandingan. *Jurnal Global Ilmiah*, 3(2), 1346–1360.
- Arifah, N., Komarudin, Saputra, M., & Novian, G. (2025). KEPERCAYAAN DIRI DAN KECEMASAN ATLET PENCAK SILAT PADA FASE PERSIAPAN. *Jurnal Pendidikan Olahraga*, 8(1), 25–31.
- Asrulla, Risnita, Jailani, M. S., & Jeka, F. (2023). Populasi dan Sampling (Kuantitatif), Serta Pemilihan Informan Kunci (Kualitatif) dalam Pendekatan Praktis. *Jurnal Pendidikan Tambusai*, 7(3), 26320–26332.
- Bialowas, D., Laskowski, R., Franchini, E., & Kujach, S. (2023). Examining the effects of pre - competition rapid weight loss on hydration status and competition performance in elite judo athletes. *Scientific Reports*, 1–8. <https://doi.org/10.1038/s41598-023-41872-1>
- Devi, N. C., & Indardi, N. (2023). Pengaruh Psikologi Latihan Terhadap Pembinaan Olahraga dan Sport Personology Atlet Club Bolavoli TWOSRA. *Journal of Sport Science and Education*, 7(2), 92–97.
- Dewi, E. M. P., Saharullah, Hasyim, & et all. (2018). *Psikologi Olahraga Mental Training*.
- Elisa, N., Anggraini, S., Safira, A. D., K, A. B. P., Khusumadewi, A., & Ratnasari, D. (2025). COGNITIVE RESTRUCTURING SEBAGAI STRATEGI MENINGKATKAN FOKUS, REGULASI EMOSI, DAN MENTAL JUARA ATLET. *Jurnal Ilmiah Pendidikan Dasar*, 10(4), 804–820. <https://doi.org/doi.org/10.23969/jp.v10i04.37238>
- Faizal, A., & Hadi, F. K. (2019). GAMBARAN FAKTOR - FAKTOR PENYEBAB MASALAH BERAT BADAN (OVERWEIGHT) ATLET PENCAK SILAT PADA MASA KOMPETISI. *Jurnal Ilmiah Sport Coaching And Education*, 3(1), 65–78. <https://doi.org/doi.org/10.21009/JSCE.03107>
- Faizal, A., & Kusuma Hadi, F. (2019). Jurnal Ilmiah Sport Coaching And Education Vol . 1 Januari 2019 GAMBARAN FAKTOR - FAKTOR PENYEBAB MASALAH BERAT BADAN (OVERWEIGHT) ATLET PENCAK SILAT PADA MASA KOMPETISI Ari Faizal Ari.fazal@akornas.ac.id Masalah Berat Badan (Overweight) Atlet Pencak. *Jurnal Ilmiah Sport Coaching And Education*, 1, 65–78.
- Guntoro, T. S., Muhammad, J., & Qomarrullah, R. (2020). Faktor Kemampuan Fisik dan Psikologis Penunjang Keterampilan Atlet Elit Sepakbola Propinsi Papua. *Jurnal Sportif*, 6(2), 390–406.
- Jiventino, L., & Prayogo, Y. (2021). Peranan Psikologi Olahraga dalam Meningkatkan Prestasi Cabang Olahraga Sepak Bola. *Prosiding Seminar Nasional Pendidikan Kepelatihan Olahraga*, 1(2), 220–228.
- Jumrotul, Q., Aqobah, & Rhamadian, D. (2022). DAMPAK KECEMASAN (ANXIETY) DALAM OLAHRAGA TERHADAP ATLET. *Journal of Sport Science and Tourism Activity*, 1(1), 33–39. <https://doi.org/http://dx.doi.org/10.52742/josita.v1i1> ©
- Kardiawan, I. K. H., Nitiasih, P. K., & Riastini, P. N. (2023). *Kecerdasan Emosi Atlet Tenis Lapangan : Faktor-Faktor Yang Mempengaruhi dan Cara Mengembangkannya*. 11(3), 240–244.
- Kurnia, D. I., Kasmiyetti, & Dwiyantri, D. (2020). Sport and Nutrition Journal. *Sport and Nutrition Journal*, 2(2), 56–64. <https://doi.org/https://doi.org/10.15294/spnj.v2i2.39001>
- Lailaturohmah, Andera, N. A., & Mildawati, R. (2023). Pemeriksaan Berat Badan dan Tinggi Badan Rutin sebagai Upaya Optomalisasi Tumbuh Kembang Anak. *Lentara Jurnal*, 3(2), 70–84.
- Manalu, R. M., Manurung, T., & Manurung, Y. (2020). HUBUNGAN MOTIVASI DENGAN KEPATUHAN PELAKSANAAN DIET PADA PENDERITA DIABETES MELITUS. *Jurnal Keperawatan Priority*, 3(2), 53–61. <https://doi.org/doi.org/10.34012/jukep.v3i2.970>
- Maulana, M. I., Akbar, Z., Ariyan, M., & Maulana, H. (2025). Pengaruh Gaya Kepemimpinan Pelatih dalam Membangun Hubungan Emosional Atlet pada Konteks Budaya Disiplin (Studi pada Tim POPB Pencak Silat DKI Jakarta). *Jumper: Jurnal Mahasiswa Pendidikan Olahraga*, 5(3), 855–864. <https://doi.org/doi.org/10.55081/jumper.v5i3.3562>
- Mido, G. O., Helilintar, R., Farida, I. N., & et all. (2025). Algoritma C4 .5 dalam Klasifikasi Kategori Pertandingan Atlet Pencak Silat. *Jurnal Nusantara of Engineering*, 8(2), 339–346.
- Octavianingrum, W., & Savira, S. (2022). HUBUNGAN KEPERCAYAAN DIRI DENGAN REGULASI EMOSI PADA ATLET PENCAK SILAT PUSLATDA JAWA TIMUR. *Character Jurnal Penelitian Psikologi*, 9(2), 50–55.
- Prasetyo, D. E., Damrah, & Marjohan. (2018). Evaluasi Kebijakan Pemerintah Daerah dalam Pembinaan Prestasi Olahraga. *Jurnal Gelanggang Olahraga*, 1(2), 32–41. <https://doi.org/https://doi.org/10.31539/jpjo.v1i2.132>
- Pratama, R. Y. (2018). PERKEMBANGAN IKATAN PENCAK SILAT INDONESIA (IPSI) TAHUN 1948-1973. *e-Journal Pendidikan Sejarah*, 6(3), 108–117.
- Putri, M. N. S., Sulastri, D., Sauma, E., Fasrini, U. U., Kedokteran, P. S., Kedokteran, F., Andalas, U., Gizi, D. I., Kedokteran, F., Andalas, U., Psikiatri, D., Kedokteran, F., Andalas, U., Ilmu, D., Masyarakat, K., Kedokteran, F., Andalas, U., Manis, L., Pauh, K., ... Barat, S. (2025). *Hubungan Antara Status Hidrasi*

- dengan Daya Konsentrasi Siswa Sekolah Dasar Alam Ar-Royyan , Kota Padang *The Relationship Between Hydration Status And Concentration Ability in Elementary*. 7(1), 69–77.
- Rosalina, M., & Nugroho, W. A. (2020). Analisis Tingkat Percaya Diri dan Motivasi Pencak Silat Pada Popda Kota Cirebon Tahun 2018. *Jendela Olahraga*, 05(2), 141–149.
- Septika, F., Wahyudi, A., & Aryanti, N. E. (2022). PENGEMBANGAN MEDIA LATIHAN PENCAK SILAT PADA KATEGORI TANDING. *Sport Science & Education Journal*, 3(2), 26–35. <https://doi.org/https://doi.org/10.33365/ssej.v3i2.2221>
- Sudirman, Kondolayuk, M. L., Sriwahyuningrum, A., Cahaya, I. M. E., Astuti, N. L. S., Setiawan, J., Tandirerung, W. Y., Ragmi, S., Nusantara, D. O., Indrawati, F., Fittriya, N. L., Aziza, N., Kurniawati, N., Wardhana, A., & Hasanah, T. (2023). *Metodologi Penelitian 1*.
- Suriani, N., Risnita, Jailani, M. S., & et all. (2023). Konsep Populasi dan Sampling Serta Pemilihan Partisipan Ditinjau. *Jurnal Pendidikan Islam*, 1(2), 24–36. <https://doi.org/https://doi.org/10.61104/ihsan.v1i2.55>
- Suwirman, & Sepriadi. (2019). Penurunan Berat Badan Atlet Pencak Silat. *Media Ilmu Keolahragaan Indonesia*, 9(1), 1–4. <https://doi.org/https://doi.org/10.15294/miki.v9i1.18555>
- Syaifullah, R., Putro, B. N., Liskustyawati, H., Sabarini, S. S., Riyadi, S., Mukholid, A., Nugroho, D., Waluyo, & Utomo, T. A. (2023). Menjaga Berat Badan Atlet Pencak Silat Jawa Tengah Menuju PRA PON 2023. *Jurnal Pengabdian Kepada Masyarakat*, 1(1), 1–4.
- Trivic, T., Ostojic, S. M., Milovancev, A., & Maksimovic, N. (2020). *Effects of Rapid Weight Loss on Judo Athletes : A Systematic Review*. 12(5), 1–17. <https://doi.org/doi:10.3390/nu12051220>
- Yang, W., Heine, O., & Grau, M. (2018). *Rapid weight reduction does not impair athletic performance of Taekwondo athletes – A pilot study*. 1–19. <https://doi.org/10.1371/journal.pone.0196568>
- Zayrin, A. A., Nupus, H., Maizia, K. K., Marsela, S., Hidayatullah, R., & Harmonedi. (2025). Analisis Instrumen Penelitian Pendidikan (Uji Validitas Dan Relibilitas Instrumen Penelitian). *Jurnal Pendidikan, Sosial, & Humaniora*, 3(2), 780–789. <https://doi.org/https://doi.org/10.61104/jq.v3i2.1070> Analisis
- Zhong, Y., Tang, W., Weldon, A., Gough, L. A., Gee, T. I., Lakicevic, N., Xu, K., Yin, M., Liang, Z. De, Ren, Z., Franchini, E., & Li, Y. (2025). Reevaluating the Definition of Rapid Weight Loss in Sports : a Call for Change. *Journal of the International Society of Sports Nutrition*, 22(1), 1–5. <https://doi.org/10.1080/15502783.2025.2550312>