

Beyond Technique: Pedagogy, Culture, and Psychological Readiness in Malaysian University Silat Athletes

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Abstract

Perspective. Traditional martial arts are increasingly incorporated into higher education as competitive and co-curricular activities; however, empirical evidence explaining how pedagogical practices influence psychological readiness and performance remains limited, particularly within culturally embedded martial traditions such as silat.

Problem. Much of the existing literature prioritises biomechanical or performance-oriented perspectives, offering limited insight into the pedagogical and psychological mechanisms through which training is translated into effective competitive outcomes. This gap risks reducing silat to a culturally neutral sport and overlooks its educational and cultural foundations.

Method. The purpose of this study was to examine the relationships between pedagogical practices, psychological readiness, and competitive performance among Malaysian university silat athletes, with particular attention to the mediating role of psychological readiness and the relative contribution of culturally grounded pedagogy. A quantitative, cross-sectional research design was employed involving 312 silat athletes from public universities in Malaysia. Data were collected using validated questionnaires and analysed using confirmatory factor analysis (CFA) and structural equation modelling (SEM).

Results. The findings indicate that pedagogical practices have a strong, positive relationship with athletes' psychological readiness, whereas psychological readiness, in turn, significantly predicts competitive performance. Pedagogical practices also demonstrate a weaker but significant direct effect on performance. Mediation analysis confirms that psychological readiness partially mediates the relationship between pedagogy and performance.

Conclusions. Among pedagogical dimensions, cultural–philosophical integration emerges as the strongest predictor of psychological readiness. In conclusion, the study provides empirical evidence that pedagogical quality, particularly culturally grounded pedagogy, plays a central role in shaping psychological readiness and enabling consistent competitive performance among university silat athletes. Future research should adopt longitudinal designs, incorporate objective performance indicators, and extend this pedagogical–psychological framework to other traditional martial arts and cultural contexts.

Keywords: *competitive performance; cultural integration; martial arts education; psychological readiness; silat pedagogy*

1. Introduction

Martial arts occupy a distinctive position within physical culture as integrated systems of bodily practice, ethical formation, psychological regulation, and cultural transmission (Cynarski & Lee-Barron, 2014; Vida et al., 2025). Increasingly, scholars argue that martial arts cannot be adequately understood through performance outcomes alone but must be examined as pedagogical and psychosocial systems embedded within specific cultural contexts (Groenen & Porrovecchio, 2022). This perspective is

particularly relevant in higher education, where institutional structures, competitive demands, and assessment regimes may reshape traditional instructional processes.

Despite this conceptual shift, empirical research on martial arts remains dominated by biomechanics, injury prevention, and performance analytics (Tropin et al., 2023; Yılmaz & Ateş, 2025). While valuable, these approaches prioritise physical optimisation and marginalise pedagogy as an explanatory mechanism. Educational research consistently demonstrates that learning

and performance in embodied disciplines are shaped not only by training volume but by pedagogical structure and learners' psychological readiness (Kočvarová & Soukup, 2018). Quantitative studies show that instructional design influences emotional regulation, attentional control, and coping under pressure (Alecú & Onea, 2025; Wang et al., 2025). However, within martial arts scholarship, psychological readiness is most often treated as an isolated predictor rather than as a pedagogically shaped process (Tao & Li, 2025).

These limitations are particularly evident in Southeast Asian martial traditions. While Japanese and Chinese martial arts are increasingly conceptualised as comprehensive pedagogical systems integrating moral, cultural, and physical education (Vida et al., 2025), silat remains underrepresented in quantitative pedagogical research. Existing silat studies tend to adopt narrative, developmental, or policy-oriented perspectives, focusing on participation pathways or cultural preservation rather than empirically testing instructional mechanisms within higher education (Razak et al., 2022; Purwanto & Perdani, 2023). Silat is a holistic educational tradition grounded in discipline, self-control, respect, and embodied awareness, where technical mastery is inseparable from character development and cultural internalisation (Cynarski & Lee-Barron, 2014; Nugroho et al., 2024). When institutionalised within universities, these pedagogical foundations face pressures arising from competition, formal curricula, and performance metrics. Without empirically grounded pedagogical models, silat risks being reduced to a culturally neutral physical activity detached from its educational and heritage-based dimensions (Razak et al., 2022).

Psychological readiness is a critical yet insufficiently integrated construct within this context. Empirical evidence demonstrates that self-efficacy, emotional regulation, attentional control, and resilience significantly influence martial arts performance and adaptation (Khodabandelou & Salehian, 2023; Wang et al., 2025). Notably, Tao and Li (2025) showed that psychological processes mediate the relationship between martial arts experience and adaptive outcomes among university students. However, few studies explicitly model psychological readiness as a mediator linking pedagogy and performance.

Similarly, culturally embedded pedagogical constructs remain largely absent from quantitative models. Research on culturally sustaining pedagogy shows that embedding local values within instruction enhances engagement, identity formation, and holistic learning (Martadi & Sampurno, 2025). Although philosophical analyses emphasise ritual, hierarchy, and tradition in the transmission of martial arts values (Cynarski & Lee-Barron, 2014), these dimensions are rarely operationalised as measurable constructs in empirical research (Kosynskyi et al., 2022; Vida et al., 2025). Collectively, the literature reveals three interrelated gaps: (1) a lack of quantitative pedagogical research on silat in higher education (Razak et al., 2022); (2) limited integration of psychological readiness as a mediating mechanism between pedagogy and performance (Alecú & Onea, 2025; Tao & Li, 2025); and (3) under-modelling of culturally grounded pedagogical dimensions central to silat practice (Martadi & Sampurno, 2025; Vida et al., 2025). Addressing these gaps requires an integrative quantitative approach that positions pedagogy as the mechanism through which cultural internalisation and psychological readiness influence performance. Multivariate and mediation-based modelling techniques provide appropriate tools for examining these relationships within university martial arts contexts (Kočvarová & Soukup, 2018; Wang et al., 2025). Accordingly, this study investigates the pedagogical determinants of psychological readiness and performance among Malaysian university silat athletes, contributing to martial arts pedagogy, physical culture, and higher education research by empirically positioning silat as both a competitive sport and a culturally grounded educational practice.

2. Method

Research Design and Methodological Rationale

This study employed a quantitative, cross-sectional survey design to examine the relationships among pedagogical practices, psychological readiness, and competitive performance among Malaysian university silat athletes. Quantitative approaches are well-suited to testing theory-driven relationships and mediation models involving multiple latent constructs in educational and sport contexts

(Kočvarová & Soukup, 2018). Such designs remain underutilised in research on martial arts pedagogy, particularly within culturally embedded instructional traditions (Vida et al., 2025).

The study responds to calls for more model-driven, empirically rigorous research on non-East Asian martial arts, such as silat (Razak et al., 2022). A cross-sectional approach was appropriate for modelling structural relationships within a higher education context, where athletes experience relatively stable pedagogical environments across a competitive season. This design is consistent with recent studies in martial arts that examine psychological and educational constructs using multivariate analysis (Alecú & Onea, 2025; Tao & Li, 2025).

Participants and Sampling

Participants were 312 Malaysian university silat athletes (196 males, 116 females), aged 18–25 years, all actively involved in university silat programmes and with at least 1 year of competitive experience. This criterion ensured adequate exposure to structured coaching and competition. Purposive sampling targeted athletes embedded in institutionalised higher education systems, consistent with prior work highlighting the role of educational context in martial arts development (Razak et al., 2022). The sample size exceeded recommended thresholds for CFA and SEM, supporting model stability and reliable parameter estimation (Kočvarová & Soukup, 2018).

Instrument Development

All questionnaires were self-developed based on established theories in sport pedagogy, sport psychology, and physical culture, rather than adopting copyrighted instruments. This approach ensured contextual and cultural relevance to silat within Malaysian universities, where philosophical values are integral to training and performance. The pedagogical instrument was titled the Silat Pedagogical Practices Questionnaire (SPPQ) and was designed to assess technical instruction, psychological support, and cultural–philosophical integration. Scale development followed a systematic, theory-driven process. Constructs were specified from the literature, including pedagogical practices, psychological readiness, and performance outcomes. Pedagogical items were grounded in

Self-Determination Theory, instructional design theory, and culturally responsive pedagogy. Psychological readiness reflected competitive confidence, emotional regulation, and attentional control, while performance indicators captured self-regulated performance and competitive consistency. An initial item pool was generated, followed by expert content validation involving specialists in sport pedagogy, sport psychology, and martial arts education. Items were refined based on clarity, relevance, and theoretical alignment prior to empirical testing.

Reliability and Construct Validity

Internal consistency was assessed using Cronbach's alpha (α) and composite reliability (CR). All constructs exceeded the recommended threshold of 0.70, indicating high reliability. Construct validity was evaluated using Confirmatory Factor Analysis (CFA). All factor loadings exceeded 0.60, supporting convergent validity. Model fit indices met accepted criteria (CFI and TLI > 0.90; RMSEA and SRMR < 0.08), confirming satisfactory factorial validity and suitability for structural modelling.

Data Screening and Normality

Data screening revealed no instances of missing data. Skewness and kurtosis statistics were within acceptable thresholds (skewness < 2; kurtosis < 7), indicating approximate univariate normality. Multivariate diagnostics further supported the use of parametric and SEM analyses. Overall, the theory-driven instruments demonstrated high reliability, sound construct validity, and acceptable data normality, supporting the robustness of the measures and the credibility of subsequent analyses.

Instruments and Measures

Data were collected using a structured questionnaire comprising three main scales:

Pedagogical Practices Scale.

This scale assessed athletes' perceptions of instructional practices, including autonomy-supportive coaching, structured skill progression, feedback quality, and cultural–philosophical integration. The inclusion of cultural elements was informed by literature framing traditional martial arts pedagogy as a culturally embedded educational system rather than a purely technical

process (Cynarski & Lee-Barron, 2014; Vida et al., 2025). Cultural integration items captured the extent to which silat values, ethics, and identity were explicitly embedded in training, consistent with culturally sustaining pedagogy (Martadi & Sampurno, 2025).

Psychological Readiness Scale.

Psychological readiness was measured through items assessing competitive confidence, emotional regulation, and attentional focus. These dimensions provide evidence that psychological readiness is a key determinant of learning and performance in martial arts contexts (Khodabandelou & Salehian, 2023; Wang et al., 2025). The construct was modelled as a mediator, consistent with findings that psychological processes mediate the relationship between training experiences and adaptive outcomes (Tao & Li, 2025).

Competitive Performance Indicators.

Performance was assessed using self-reported indicators of tactical execution, competitive consistency, and perceived performance outcomes over the most recent season. Although objective data are desirable, self-reported measures provide valid insights into perceived performance effectiveness when grounded in competitive experience (Alecú & Onea, 2025).

All items were rated on a five-point Likert scale. Content validity was established through expert review, and internal consistency met acceptable reliability thresholds.

Data Collection Procedure

Data were collected during the competitive season via coordinated administration

at university training centres. Participation was voluntary, and responses were anonymous to minimise social desirability bias. Ethical procedures were followed in accordance with higher education sport research standards, including informed consent and confidentiality.

Data Analysis

Data analysis was conducted in two stages. First, confirmatory factor analysis (CFA) evaluated the measurement model’s construct, convergent, and discriminant validity. Second, structural equation modelling (SEM) tested hypothesised relationships between pedagogical practices, psychological readiness, and performance, including mediation effects. SEM is particularly suitable for research on martial arts pedagogy, as it enables simultaneous testing of complex, theory-driven relationships among latent variables (Vida et al., 2025; Tropin et al., 2023).

Results

Preliminary Analysis and Model Adequacy

Prior to testing the research questions, the adequacy of the measurement and structural models was evaluated. Confirmatory factor analysis (CFA) indicated that the proposed measurement model demonstrated satisfactory fit to the data. As reported in Table 1, all observed indicators loaded significantly on their respective latent constructs, with standardised factor loadings ranging from .64 to .87. Composite reliability (CR) values exceeded the recommended threshold of .70, and average variance extracted (AVE) values were above .50 for all constructs, indicating acceptable internal consistency and convergent validity.

Table 1. Measurement Model: Confirmatory Factor Analysis (CFA)

Construct	Indicator	Standardised Loading	CR	AVE
Pedagogical Practices	PP1–PP4	.68 – .84	.90	.57
– Autonomy-Supportive Instruction	AS1–AS4	.65 – .82	.88	.55
– Structured Skill Progression	SS1–SS4	.64 – .80	.87	.54
– Feedback Quality	FQ1–FQ4	.66 – .83	.89	.56
– Cultural–Philosophical Integration	CPI1–CPI4	.71 – .87	.92	.62
Psychological Readiness	PR1–PR5	.69 – .86	.91	.60
Competitive Performance	CP1–CP4	.65 – .82	.88	.56

The overall measurement model fit indices met

commonly accepted criteria ($\chi^2/df < 3$; CFI and

TLI > .90; RMSEA < .08), supporting the suitability of the data for subsequent structural equation modelling. These results are consistent with methodological standards recommended for quantitative educational and martial arts research using latent variable modelling (Kočvarová & Soukup, 2018; Vida et al., 2025).

Structural Model Results

The structural model was tested to examine the hypothesised relationships between pedagogical practices, psychological readiness, and competitive performance among university silat athletes. The model demonstrated an acceptable fit to the data, allowing interpretation of the path coefficients associated with Research Questions 1–4. Standardised regression coefficients, standard errors, and significance levels are presented in Table 2.

RQ1: Pedagogical Practices and Psychological Readiness

Research Question 1 examined the relationship between pedagogical practices and athletes’ psychological readiness. As shown in Table 2, pedagogical practices exhibited a strong, positive, and statistically significant effect on psychological readiness ($\beta = .61, p < .001$). This finding indicates that higher-quality pedagogical environments characterised by

structured instruction, supportive feedback, autonomy support, and cultural-philosophical integration are associated with higher levels of psychological readiness among silat athletes.

The magnitude of this relationship suggests that pedagogical practices account for a substantial proportion of variance in psychological readiness, positioning pedagogy as a key antecedent rather than a peripheral influence. This result supports empirical work demonstrating that psychological readiness is a trainable outcome shaped by instructional design and learning environments rather than an inherent individual disposition (Alecú & Onea, 2025; Tao & Li, 2025).

RQ2: Psychological Readiness and Competitive Performance

Research Question 2 investigated the relationship between psychological readiness and competitive performance. The results revealed a strong, statistically significant positive relationship between psychological readiness and performance ($\beta = .54, p < .001$), as shown in Table 2. Athletes who reported higher levels of confidence, emotional regulation, and attentional focus also reported greater competitive consistency and more effective performance outcomes.

Table 2. Structural Model Path Coefficients (SEM)

Hypothesised Path	Standardised β	SE	p-value	RQ
Pedagogical Practices → Psychological Readiness	.61	.05	< .001	RQ1
Psychological Readiness → Competitive Performance	.54	.06	< .001	RQ2
Pedagogical Practices → Competitive Performance	.21	.08	.018	RQ3

This finding indicates that psychological readiness functions as a proximal predictor of competitive performance in silat. In practical terms, athletes who are psychologically prepared are better able to translate technical skills into effective competitive execution. The strength of this relationship is consistent with prior martial arts research demonstrating that psychological attributes such as self-efficacy, emotional control, and resilience are critical for performance under competitive pressure (Khodabandelou & Salehian, 2023; Wang et al., 2025).

RQ3: Direct Effect of Pedagogical Practices

on Competitive Performance

Research Question 3 examined whether pedagogical practices directly influence competitive performance. As shown in Table 2, the direct path from pedagogical practices to performance was positive and statistically significant, but notably smaller in magnitude than the indirect path through psychological readiness ($\beta = .21, p = .018$).

This result suggests that pedagogical practices do contribute directly to competitive performance, but their direct effect is comparatively modest. The reduced strength of this pathway indicates

that pedagogy does not primarily influence performance through immediate or mechanical transmission of skills alone. Instead, pedagogical practices appear to exert much of their influence indirectly by shaping athletes' internal psychological states. This pattern is consistent with educational research demonstrating that instructional quality often affects performance outcomes indirectly through motivational and psychological processes (Kočvarová & Soukup, 2018).

RQ4: Mediating Role of Psychological Readiness

Research Question 4 tested whether psychological readiness mediates the relationship between pedagogical practices and competitive performance. Mediation analysis using bootstrapped confidence intervals revealed a significant indirect effect of pedagogical practices on performance via psychological readiness (indirect $\beta = .33$, 95% CI [.24, .41]), as reported in Table 3.

Table 3. Mediation Analysis: Psychological Readiness as Mediator

Effect	β	95% CI (Bootstrapped)	Mediation Type	RQ
Direct Effect (Pedagogy \rightarrow Performance)	.21	[.04, .36]	Partial	RQ4
Indirect Effect (Pedagogy \rightarrow Psychology \rightarrow Performance)	.33	[.24, .41]	Significant	RQ4
Total Effect	.54	[.42, .65]	—	—

The direct effect of pedagogical practices on performance remained significant but was attenuated when psychological readiness was included in the model, indicating partial mediation. This pattern confirms that psychological readiness serves as a key explanatory mechanism through which pedagogical practices influence competitive outcomes. In other words, pedagogical practices enhance performance primarily by fostering psychological readiness, while also maintaining a smaller, independent direct effect.

This mediating structure aligns with recent empirical evidence in martial arts and sport psychology showing that psychological variables translate training experiences into adaptive outcomes (Tao & Li, 2025). It also supports conceptualisations of martial arts pedagogy as

an educational process that shapes internal regulation and readiness rather than merely technical execution (Vida et al., 2025).

RQ5: Relative Influence of Pedagogical Dimensions on Psychological Readiness

Research Question 5 examined which pedagogical dimension exerts the strongest influence on psychological readiness. To address this question, the individual effects of pedagogical sub-dimensions were analysed. The results, presented in Table 4, revealed that cultural–philosophical integration was the strongest predictor of psychological readiness ($\beta = .48$, $p < .001$), followed by autonomy-supportive instruction, feedback quality, and structured skill progression.

Table 4. Standardised Effects of Pedagogical Dimensions on Psychological Readiness

Pedagogical Dimension	Standardised β	p-value	Rank	RQ
Cultural–Philosophical Integration	.48	< .001	1	RQ5
Autonomy-Supportive Instruction	.31	.003	2	RQ5
Feedback Quality	.26	.011	3	RQ5
Structured Skill Progression	.22	.019	4	RQ5

This ranking indicates that pedagogical practices embedding silat's cultural values, ethical principles, and philosophical meanings play a particularly influential role in shaping athletes' psychological readiness. The prominence of

cultural–philosophical integration suggests that athletes who experience training as culturally meaningful and value-oriented may develop stronger emotional regulation, confidence, and focus. These results are consistent with research

on culturally sustaining pedagogy, which demonstrates that embedding local cultural values in instructional design enhances engagement, identity coherence, and self-regulation (Martadi & Sampurno, 2025). Within martial arts contexts, culturally grounded instruction has been shown to support psychological stability and adaptive performance by providing practitioners with a coherent framework for interpreting training demands and competitive stress (Cynarski & Lee-Barron, 2014; Kosynskyi et al., 2022).

In summary, the results provide empirical support for a model in which pedagogical practices influence competitive performance primarily through psychological readiness. Pedagogical practices showed a strong positive relationship with psychological readiness (RQ1); psychological readiness strongly predicted performance (RQ2); and psychological readiness partially mediated the relationship between pedagogy and performance (RQ4). While pedagogical practices also exerted a direct influence on performance (RQ3), this effect was comparatively smaller. Among pedagogical dimensions, cultural–philosophical integration emerged as the most influential predictor of psychological readiness (RQ5). Together, these findings highlight the central role of pedagogy, particularly culturally grounded pedagogy, in shaping psychological readiness and competitive performance in university silat athletes.

Discussions

From Empirical Relationships to Pedagogical Meaning (Macro Level)

The present study empirically examined how pedagogical practices in university silat training shape athletes' psychological readiness and competitive performance, with particular attention to mediating mechanisms and culturally embedded instructional dimensions. The findings collectively confirm that silat pedagogy operates not merely as a technical delivery system but as an educational process that translates cultural meaning into psychological readiness, thereby enabling competitive performance. This positioning aligns with contemporary martial arts scholarship that conceptualises traditional martial

Psychological readiness was a strong predictor of competitive performance. This reinforces a growing consensus in martial arts research that performance reliability under

systems as forms of physical culture integrating education, psychology, and identity (Cynarski & Lee-Barron, 2014; Vida et al., 2025).

Across the structural model, pedagogy emerged as the primary upstream determinant, exerting its strongest influence through psychological readiness rather than through direct effects on performance. This pattern supports broader educational research arguing that instructional environments shape internal regulatory capacities, which then mediate observable outcomes (Kočvarová & Soukup, 2018). In the context of silat, where training has historically emphasised discipline, emotional control, and ethical comportment, such mediation is not incidental but is structurally embedded within the art itself (Razak et al., 2022).

Pedagogical Practices as Determinants of Psychological Readiness

The results demonstrate a strong and significant relationship between pedagogical practices and psychological readiness. This finding substantiates the argument that psychological readiness is not an inherent trait of athletes but a pedagogically cultivated state, shaped by instructional design, feedback structures, and the social–cultural environment of training. This aligns with evidence that psychological readiness improves when training environments systematically integrate psychological skills, structured progression, and supportive coaching climates (Alecú & Onea, 2025). In martial arts contexts specifically, psychological capacities such as emotional regulation, attentional control, and confidence have been shown to develop through repeated exposure to pedagogically structured stressors rather than through isolated mental training (Khodabandelou & Salehian, 2023; Wang et al., 2025). The present findings extend this literature by demonstrating that such readiness is strongly predicted by pedagogy itself, rather than by training volume or competitive exposure alone.

Psychological Readiness as a Proximal Predictor of Performance

pressure depends less on technical repertoire alone and more on the athlete's capacity to regulate affective and attentional states during competition (Alecú & Onea, 2025; Tao & Li, 2025). From a

silat perspective, this relationship is theoretically coherent. Traditional silat training emphasises composure, restraint, and situational awareness, qualities that correspond directly to contemporary constructs of psychological readiness. The present findings empirically validate these traditional pedagogical assumptions in a higher-education performance context, demonstrating that psychological readiness functions as a proximal mechanism that translates training into competitive execution (Vida et al., 2025).

Direct Versus Indirect Pedagogical Effects on Performance

Pedagogical practices exerted a statistically significant but comparatively weaker direct influence on competitive performance. This asymmetry between direct and indirect effects is instructive. It suggests that pedagogy does not primarily improve performance by directly enhancing observable outcomes (e.g., tactics or technique alone), but rather by shaping internal capacities that stabilise the expression of performance. Such a pattern mirrors findings in educational psychology, where instructional quality often demonstrates modest direct effects but strong indirect effects through motivational and self-regulatory constructs (Kočvarová & Soukup, 2018). In martial arts pedagogy, this underscores that coaching effectiveness cannot be evaluated solely by immediate performance metrics but must also consider longer-term psychological development (Tropin et al., 2023).

Psychological Readiness as a Mediating Mechanism

The significant partial mediation observed confirms that psychological readiness functions as a key explanatory mechanism linking pedagogy and performance. These findings advance martial arts research by empirically integrating pedagogy and psychology within a single structural model. While previous studies have demonstrated mediation effects between martial arts practice and psychological outcomes (Tao & Li, 2025), few have positioned pedagogy itself as the primary antecedent. The present results indicate that pedagogical quality determines the extent to which training experiences are internalised, thereby enabling consistent performance under competitive demands. Importantly, partial mediation suggests

that pedagogy also retains a direct instructional function likely related to technical clarity, tactical understanding, and structured skill development, while psychological readiness accounts for the majority of the translation of performance. This balanced structure reflects silat's dual identity as both a combat system and an educational tradition (Cynarski & Lee-Barron, 2014).

Cultural–Philosophical Integration as the Dominant Pedagogical Dimension (RQ5)

Cultural–philosophical integration emerged as the strongest predictor of psychological readiness. This result provides rare quantitative evidence supporting long-standing qualitative and philosophical claims that culture is not peripheral to martial art pedagogy but central to psychological formation. Culturally embedded pedagogy appears to enhance psychological readiness by providing athletes with a coherent interpretive framework for training stress, discipline, and competition. When athletes understand training as meaningful beyond immediate performance connected to identity, values, and tradition, they may experience greater emotional stability and motivational clarity (Martadi & Sampurno, 2025). Similar conclusions have been drawn in studies of national martial arts incorporated into physical education to promote cultural identity and psychosocial development (Kosynskyi et al., 2022). This finding directly addresses concerns that institutionalising silat within universities may dilute its cultural essence. Instead, the results suggest that preserving cultural–philosophical elements enhances, rather than undermines, psychological and performance outcomes (Razak et al., 2022; Vida et al., 2025).

Implications

The study contributes to martial arts scholarship by empirically validating a pedagogy–psychology–performance model grounded in physical culture theory. It challenges reductionist performance models and supports conceptualisations of martial arts as integrated educational systems (Cynarski & Lee-Barron, 2014). For coaches and educators, the findings underscore the importance of:

- embedding cultural and philosophical

instruction within daily training,

- treating psychological readiness as a pedagogical outcome, and
- designing instruction that integrates technical, psychological, and cultural dimensions.

At an institutional level, universities should recognise silat not merely as a competitive sport but as a culturally grounded educational practice, with implications for curriculum design, coach education, and assessment frameworks (Razak et al., 2022).

4. Conclusions

This study demonstrates that pedagogical practices in university silat training influence competitive performance primarily by developing psychological readiness, with cultural–philosophical integration playing a central role. By empirically linking pedagogy, psychology, and performance, the findings reposition silat as a legitimate domain of higher education research within martial arts pedagogy and physical culture. Future research should extend this model longitudinally and across different martial traditions, further exploring how culturally grounded pedagogy sustains both performance excellence and educational integrity.

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