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Adapting Pelintau Pencak Silat Teaching in Non-Formal Education During Early Recovery After a Flash Flood

Johaidah Mistar[1*], Muhammad Sulfa[2], Myrza Akbari[3], Prista Cindi Navera[4], Madhan Anis[5]
[1,3,5]Universitas Samudra, Indonesia
[2]Universitas Cahaya Prima, Indonesia
[4]Universitas Sains Cut Nyak Dhien, Indonesia

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ABSTRACT

Background: A late-2025 flash flood disrupted the physical, social, and psychological foundations of Pelintau Pencak Silat learning in Aceh Tamiang, Indonesia. **Objective:** This study examined disaster impacts, instructors' adaptive teaching strategies, and a provisional framework for disaster-responsive Pencak Silat teaching. **Method:** An intrinsic qualitative case study was conducted from January to March 2026. Seven purposively selected participants two lead instructors, two junior coaches, and three athletes completed 45–90-minute interviews; four training sessions were observed; and photographs, attendance records, and community archives were reviewed. **Results:** Interview evidence described loss of the training venue and cultural materials, dispersal, interrupted participation, and anxiety. Curriculum changes were supported mainly by lead-instructor accounts; method changes by junior-coach and athlete accounts; and organizational changes by instructor, coach, and athlete accounts. Observation and documentary materials contextualized the case, but the available record did not preserve item-level links that independently confirm particular interview claims. Cross-theme synthesis produced an interpretive pathway from disruption, through curriculum, method, and organizational adaptation and the relational mechanisms of safety, reconnection, identity, and autonomy, to participant-perceived early-recovery contributions. **Conclusion:** Pelintau instruction functioned as a flexible cultural learning space during early recovery. The framework is provisional rather than causal and requires stronger data-source traceability, longitudinal follow-up, and cross-site validation.

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INTRODUCTION

Pencak Silat is an Indonesian embodied knowledge system that integrates self-defense, art, spirituality, ethics, and pedagogy. Its transmission ordinarily combines progressive physical and technical mastery with moral, psychosocial, and spiritual formation (Martinkova et al., 2019; Sasmita et al., 2023; Nugroho et al., 2024). Contemporary instructional research also describes structured skill progression, feedback, and technology-supported practice as features of Pencak Silat learning (Angga et al., 2020; Mulyana et al., 2024). These pedagogical routines depend on instructors, shared practice spaces, material culture, and repeated social participation. Hydrometeorological disasters can therefore threaten not only buildings and equipment but also the relationships and situated practices through which intangible cultural heritage is transmitted (Higgins, 2022; Laime et al., 2024).

Silat Pelintau is a locally rooted Pencak Silat tradition associated with the social and cultural identity of Aceh Tamiang. It is learned primarily in a non-formal setting through voluntary participation, flexible organization, close instructor–learner relationships, and community stewardship. Non-formal education is purposeful and organized but operates outside the structures of formal schooling; its boundaries with informal and formal learning are contextual rather than absolute (La Belle, 1982; Norqvist & Leffler, 2017). Its flexibility, relational orientation, and value-driven practice can support wellbeing and context-sensitive teaching, although irregular attendance and limited resources can also constrain continuity (Dolev & Levi, 2025). These features make Silat Pelintau potentially adaptable in crisis while leaving it exposed when instructors, participants, and training sites are dispersed.

The case occurred after the late-November 2025 hydrometeorological disaster in Aceh. Official reporting showed that Aceh Tamiang remained under extended emergency-response status at the end of December 2025, situating the

community's experience within a regional emergency rather than a localized training-facility disruption (Badan Nasional Penanggulangan Bencana (BNPB, 2025). The Sendai Framework emphasizes inclusive recovery and the protection of cultural heritage, while the Inter-agency Network for Education in Emergencies (INEE) Minimum Standards treat safe, relevant, flexible learning as central from emergency response through recovery (INEE, 2024), United Nations Office for Disaster Risk Reduction (UNDRR, 2015). Education settings can also strengthen social capital and community resilience when they restore routines, relationships, and local participation after disaster (Mutch, 2014, 2023). Yet these frameworks are usually applied to formal schooling, leaving community-based cultural education insufficiently examined.

Two gaps frame this study. Empirically, research on the post-disaster adaptation of embodied cultural learning systems in Indonesia remains limited, despite growing attention to climate threats and cultural continuity (Protschky, 2022; Higgins, 2022). Theoretically, broad accounts of community response can obscure how instructors, junior coaches, and athletes negotiate competing priorities of technical progression, safety, psychosocial recovery, and cultural transmission. Education-in-emergencies research identifies policy and implementation considerations for resilient education systems (Tarricone et al., 2025), but it offers limited explanation of how a voluntary martial-arts community reweights its curriculum and pedagogy during early recovery. The present case therefore examines both observed adaptation and the relationships among disruption, pedagogical response, and immediate recovery contributions.

This study aimed to identify and analyze how Silat Pelintau teaching was adapted in a non-formal learning setting during early recovery from the 2025 Aceh Tamiang flash flood. It addressed three objectives:

1. Assess the disaster's physical, social, and psychological effects on the Silat Pelintau learning ecosystem;
2. Identify and analyze the adaptive strategies implemented by lead instructors and junior coaches; and
3. Develop a provisional, empirically derived conceptual framework of disaster-responsive Pencak Silat teaching for subsequent validation.

METHOD

Research Design

This study employed an intrinsic qualitative case-study design to understand the meanings, experiences, and teaching processes associated with one bounded post-disaster setting (Creswell & Poth, 2025; Yin, 2018). The case was the Silat Pelintau learning community in Karang Baru Subdistrict, Aceh Tamiang Regency, Aceh Province. The site was selected because Karang Baru has been identified in community records as a center of Silat Pelintau development, the community experienced severe disruption during the 2025 flood, and instructors and athletes were attempting to resume practice. The design supports contextual interpretation and analytic transferability; it does not support statistical generalization or causal attribution.

The study was conducted from January to March 2026 during early recovery after the late-2025 flood. Month-level timing is reported because exact event and fieldwork dates were not available in the analytic record used for this manuscript. Purposive eligibility criteria were: direct knowledge of or involvement in Silat Pelintau instruction; direct experience of disaster effects; participation in recovery efforts; and voluntary consent. Seven participants were recruited: two lead instructors (GU-01 and GU-02), two junior coaches (PM-01 and PM-02), and three athletes (AT-01, AT-02, and AT-03). The Indonesian role-based code PM refers to pelatih muda (junior coach). Recruitment sought information-rich role contrast within one bounded case rather than statistical representation. The size of the accessible participant pool and the number of eligible people who declined were not documented, so the sample is not presented as complete coverage of the community. Data sources comprised semi-structured interviews, participatory observation, and documents.

Research Ethics

The study followed principles of voluntary participation, informed consent, confidentiality, and the right to withdraw (World Medical Association, 2013; Guelmami et al., 2024). Participants received information about the study's purpose, procedures, potential benefits, and risks and provided written informed consent. Identities were protected with role-based codes: GU for guru or lead instructor, PM for pelatih muda or junior coach, and AT for athlete. Audio files, field notes, and documentary materials were stored securely for academic use. The analytic record available for this revision did not include an institutional ethics approval or waiver decision and reference number; consequently, this draft does not claim a specific approval.

Researcher Positionality and Reflexivity

The researchers conducted participatory observation and therefore interacted with the training setting. The available methodological record did not identify their prior relationships with the Pelintau community, insider or outsider positions, relevant background, or use of reflexive journals, positionality memos, or peer debriefing. Accordingly,

observer involvement is treated as a potential influence on data generation and interpretation, role-specific accounts are retained, and causal claims are avoided. A complete factual positionality statement was not available for this revision.

Research Instruments

The primary instrument was a semi-structured topic guide organized around disaster impacts, curriculum, teaching methods, resources, schedules, evaluation, motivation, and expectations. Two reviewers with expertise in physical education and qualitative methodology examined the guide for relevance and clarity. Table 1 presents the topic outline, and Table 2 presents the core prompts available in the manuscript record; Table 2 is not a verbatim list of every question or follow-up probe used during the interviews.

Table 1. Interview Instrument Outline

Strategic Aspect	Indicator	Sample Question
Curriculum	Adjustment of teaching content	What material is taught after the disaster?
Methods	How content is delivered	How do you teach after the disaster?
Resources	Use of facilities and equipment	Where is practice held, and what equipment is available?
Schedule	Timing and attendance adjustment	When and how often is practice conducted?
Evaluation	Indicators of progress	How is learners' progress assessed after the disaster?

Table 2. Abbreviated Semi-Structured Interview Guide by Participant Group

Group	Nu	Question
Lead Teachers (GU)	1	Have there been any changes to the material taught to students in the aftermath of the disaster?
	2	What is the main focus of Silat Pelintau instruction at present?
	3	How do you adjust students' learning objectives in the post-disaster situation?
Junior Coaches (PM)	1	What was the atmosphere like, and how many students were participating in practice before the 2025 flash flood?
	2	What was the first thing you did to encourage the students to resume practice after the disaster?
	3	What indicators of learning success do you currently use?
Athlete (AT)	1	Tell us about your experiences during and after the flash flood! How are your home and family doing?
	2	Did you stop practicing after the flood? If so, why?
	3	What made you start practicing silat again after the disaster?

Procedures

All seven participants completed individual semi-structured interviews lasting 45–90 minutes. Core prompts were tailored to the responsibilities and experiences of the two lead instructors, two junior coaches, and three athletes. Follow-up questions appearing in the Results addressed physical damage, equipment, spiritual activities, facilities, schedules, evaluation, and future needs. The available record shows role-tailored probing but does not document a standardized probe sequence or whether identical probes were used across participants. With permission, interviews were audio-recorded and transcribed. The record does not identify the interview language, transcription conventions, translator, translation checking procedure, or treatment of culturally specific terms in the English quotations.

Participatory observation was conducted during four resumed training sessions. The researcher observed instructor–participant interaction, organization and intensity of activities, use of space and equipment, and responses to distress or withdrawal. Documentary analysis included photographs of the damaged and temporary training spaces, attendance records, and community archives. Interview claims in the Results are identified by participant code. Because the available record did not preserve item-level observation identifiers or document identifiers, observation and documentary materials are reported as contextual data rather than as independent confirmation of any specific interview claim. No contradictory observation or documentary evidence was documented in the available record.

Data Analysis

Interview transcripts, observation notes, and documents were analyzed using data condensation, data display, and conclusion drawing/verification (Miles et al., 2014). Initial codes captured venue and material loss, displacement, fear and withdrawal, simplified practice, cooperation, reduced contact, sharing and breathing, schedule and attendance flexibility, effort-focused assessment, identity, and future needs. These codes were compared across participant roles and grouped into higher-order categories of disaster disruption, curriculum adaptation, method adaptation, organizational adaptation, and immediate contributions. Cross-category comparison then generated the relational

constructs of safety, reconnection, identity, and autonomy. Tables 13 and 14 provide the role-by-theme matrix and analytical audit trail used to connect representative codes, participant roles, data-source status, and framework components.

Credibility was approached through comparison across seven participants and across interview, observation, and documentary datasets. The evidential contribution was asymmetric: interviews supplied the traceable theme-level evidence, while observation and documentary materials contextualized the case but could not be linked item by item in the available record. Table 14 makes this limitation explicit rather than treating dataset availability as proof of convergence. Role-specific or potentially divergent patterns were retained; for example, curriculum adaptation was supported by lead instructors, while identity restoration was articulated by an athlete. No contradictory non-interview evidence was documented, but absence of a documented contradiction is not equivalent to confirmation. No member-checking procedure was documented, so participant validation is not claimed.

RESULTS

The findings are organized against the three objectives: disaster effects (Section A), adaptive teaching strategies (Sections B-D), and the analytical traceability and provisional framework (Sections F-G). Quotations are concise interview excerpts. Interpretive claims are attributed to participant roles, and Tables 13–15 distinguish interview support from the contextual observation and documentary datasets.

A. Disaster Impacts on the Learning Ecosystem

Table 3. Interview Findings on the Impact of Disasters

Question	Participant's Response	Code
"What kind of physical damage has occurred at the training center?"	"The training center was completely destroyed. Ceremonial equipment, handwritten manuscripts, and photographs of past masters were lost."	GU-01
"What is the condition of the training equipment?"	"Traditional weapons are missing or severely damaged; some surviving items are unusable after exposure to mud and water."	GU-01
" What is the most significant impact?"	"The community has been scattered. Students evacuated to other cities or emergency tents, and the Friday night sessions are now silent."	GU-02
" Tell us about your experience during the flood!"	"My house was destroyed, and my parents' rice fields were buried in mud. Even light rain still made me feel scared and anxious."	AT-01
"Did you stop training after the flood?"	"I stopped for almost two months. The training space was gone, and I did not know whether my friends were still practicing."	AT-01

Table 3 shows a layered disruption rather than a single infrastructure problem. Physical losses included the venue, equipment, manuscripts, and photographs; social disruption appeared in displacement and the collapse of regular gatherings; and psychological effects included fear, anxiety, fatigue, and temporary withdrawal. The recurrence of these effects across instructor and athlete accounts explains why resumed teaching could not simply reproduce the pre-disaster technical curriculum.

B. Curriculum Adaptation

Table 4. Interview Findings on Curriculum Adaptation

Questions	Participants' Responses	Code
"Have there been any changes to the material being taught?"	"We shifted from stances, punches, kicks, and forms toward activities that build camaraderie and courage and can be done without special equipment."	GU-01
"What is the main focus of instruction right now?"	"Pelintau teaches resilience. Now resilience also means rising from adversity and rebuilding what has been broken."	GU-02
"How should we adjust the learning objectives?"	"We no longer set a timeframe for rank progression. The goal is to attend, try, and help one another."	GU-01

The curriculum was reweighted rather than abandoned. Technical content remained present in simplified form, while attendance, courage, cooperation, and resilience became immediate learning priorities. This pattern links the identified disaster effects to a deliberate reduction in performance pressure.

Table 5. Participant-Reported Qualitative Comparison of Curriculum Before and After the Disaster

Curriculum Aspects	Before the Disaster	Post-Disaster Setting
Main Focus	Mastery of techniques and forms	Mental recovery & character building
Learning Objectives	Physical and technical skills	Commitment & psychological resilience
Priority Topics	Basic movements, progressive forms	Simple movements, cooperative games
Duration per Session	Longer sessions	Shorter sessions during early recovery
Physical Intensity	Predominantly physical and technical emphasis	Reduced physical load with greater cooperative and psychosocial emphasis

Table 5 summarizes the direction of participant-reported change rather than measured proportions. Lead-instructor accounts support the shift from fixed technical progression toward simplified movement, attendance, cooperation, and resilience. The table does not estimate a physical-to-psychosocial percentage split or standardized session duration because the source and calculation of the earlier exact values were not documented. These comparisons characterize perceived early-recovery reweighting, not a permanent curriculum redesign.

C. Modifications to Teaching Methods (Trauma-Informed Teaching)

Table 6. Interview Findings on Modifications to Teaching Methods

Questions	Participants' Responses	Code
"What is the first step in encouraging students to resume practice?"	"We track each former participant, visit those still struggling, listen to their condition, and gradually guide them back to practice."	PM-02
"How do you handle anxious students?"	"We do not force anxious children. They may talk first or watch until they feel comfortable joining."	PM-01
"Are sharing or relaxation activities used?"	"We begin with a sharing circle. Once one child speaks, others usually open up, which helps them release their burden."	PM-01
"What made you come back to practice?"	"At practice I felt like myself again not only a flood victim. I recovered identity, self-worth, and connection with friends and coaches."	AT-02
"Do you still spar often?"	"We rarely spar now. Partner work is slow and non-contact, which makes me less afraid of injury."	AT-01

Junior coaches operationalized gradual re-entry through outreach, choice, observation before participation, and reduced contact. Athlete accounts indicate that these practices were experienced as lower-pressure and identity-restoring. Because instructors were not reported to have formal clinical training, the findings are described as trauma-sensitive or trauma-informed in orientation, not as a therapeutic intervention.

Table 7. Subcomponents of the Trauma-Informed Teaching Approach

Sub-Components	Field Implementation	Source
Sharing session	Sharing experiences of flooding at the start of practice	PM-01, PM-02
Breathing exercises	Silat breathing techniques used as a calming activity	PM-02, AT-02
Reducing physical contact	Cooperative, not competitive, partner drills; sparring is temporarily suspended	PM-01, AT-01
Strengthening spiritual aspects	Group prayers before and after practice; recitation of zikir	GU-01, PM-02

Across the four subcomponents, junior-coach and athlete accounts associated routine, reduced contact, emotional expression, breathing, and culturally familiar spiritual practice with a greater sense of safety and readiness to participate. This cross-role interview pattern supports an intuitive, locally grounded teaching response. It does not independently demonstrate symptom reduction, and no item-level observation record was available to verify the frequency or consistency of these practices.

D. Adjustments to Resources, Schedules, and Evaluations

Table 8. Interview Findings on Facility Adaptations

Questions	Participant's Response	Code
"Where are the training sessions currently being held?"	"We practice in the refugee-camp courtyard on dirt and thin tarps. The important thing is that the children can move and gather."	GU-02
"What equipment is still available?"	"We lack mats and protective equipment. Bamboo substitutes for weapons, or we practice without equipment."	PM-01

Facility adaptation prioritized continuity of gathering over equivalence with the former venue. Temporary outdoor space and bamboo substitutes enabled participation but also introduced weather, surface, and safety constraints that require continued risk assessment.

Table 9. Interview Findings on Schedule Adjustments

Questions	Participant's Response	Code
"When and how often are the classes held?"	"Practice fell from three or four times weekly to one or two sessions, sometimes canceled by rain or attendance. Sessions moved from evenings to mornings or afternoons."	PM-02
"What is the student attendance policy?"	"Attendance is now voluntary. We send reminders but impose no penalties."	PM-01

Schedule and attendance flexibility reduced barriers created by displacement, family recovery work, weather, and anxiety. The trade-off was less instructional frequency and continuity, illustrating how non-formal flexibility can sustain access while complicating progression.

Table 10. Interview Findings on Changes in Evaluation

Questions	Participant's Response	Code
"How do you assess students' current learning progress?"	"We assess persistence, willingness to try, and mutual help rather than rapid technical or rank advancement, and we use more praise than criticism."	PM-01
"How do you feel as a student?"	"There is less pressure to master movements quickly. Praise for effort makes it easier to keep practicing."	AT-03

Evaluation shifted from rank-based technical attainment toward effort, re-engagement, and peer support. This protected participation during instability but did not provide standardized evidence of technical retention or psychosocial improvement.

Table 11. Participant-Reported Changes in Resources, Schedule, and Evaluation

Aspects	Before the Disaster	Post-Disaster Setting
Resources	Dedicated training area with conventional equipment	Temporary outdoor or refugee-camp space with substitute equipment
Schedule	Regular evening sessions, reported as three to four times weekly; attendance required	One or two weekly morning or afternoon sessions, subject to weather and attendance; voluntary attendance
Evaluation	Technical achievements (belts/ranks)	Participation, willingness to attend, effort

Taken together, participant accounts describe a shift from fixed institutional expectations toward situational judgment by instructors and voluntary learner choice. The reported change from three or four weekly sessions to one or two came from PM-02, and the available attendance records were not linked to these values. The comparison is therefore treated as a participant estimate rather than a researcher-calculated rate. This organizational flexibility formed the third adaptation domain.

E. Motivation and Hopes

Table 12. Interview Findings on Motivation and Expectations

Questions	Participant's Response	Code
"Do you aspire to become a silat teacher?"	"I want to become an instructor. After the disaster, I understood that silat also teaches resilience."	AT-01
"What are your hopes for the future of Silat Pelintau?"	"The government should recognize that this culture matters for children and can support healing; the community also needs support."	GU-01
"What is the most urgent need right now?"	"We urgently need audiovisual documentation, structured basic training modules, and financial-management skills."	PM-01

F. Evidence-Source and Role Traceability

Table 13 maps the themes to the participant roles represented in the quoted evidence. A dash indicates that no excerpt from that role was reported for the theme; it does not establish disagreement or absence of the experience.

Table 13. Role-by-Theme Matrix for Reported Interview Evidence

Theme	Lead instructors (GU)	Junior coaches (PM)	Athletes (AT)	Role-pattern interpretation
Disaster impacts	GU-01, GU-02	-	AT-01	Instructor and athlete accounts; no junior-coach excerpt reported
Curriculum adaptation	GU-01, GU-02	-	-	Lead-instructor perspective only
Trauma-sensitive method	GU-01	PM-01, PM-02	AT-01, AT-02	Cross-role interview support; strongest among coaches and athletes
Resources, schedule, evaluation	GU-02	PM-01, PM-02	AT-03	Cross-role support, with components reported by different roles
Motivation and future needs	GU-01	PM-01	AT-01	All three roles represented by at least one excerpt

The matrix shows that methodological and organizational adaptations have broader role coverage than curriculum adaptation, while identity is most explicit in an athlete account. The framework therefore preserves role imbalance instead of describing every theme as shared by all participants.

Table 14. Analytical Audit Trail from Representative Codes to Framework Components

Framework component	Representative codes → category	Traceable interview roles	Observation/ document status	Convergence, divergence, or limit
Disaster disruption	Venue/equipment/archive loss; displacement; fear; withdrawal → physical, social, psychological disruption	GU-01, GU-02, AT-01	Photographs and community archives named in Methods; no item identifier linked	Cross-role interview support; no contradictory non-interview evidence documented
Curriculum adaptation	Simplified movement; cooperation; attendance; resilience → reduced performance pressure	GU-01, GU-02	No item-level observation or document citation	Lead-instructor evidence only
Method adaptation	Outreach; sharing; breathing; reduced contact; gradual return; identity → safety, reconnection, identity	GU-01, PM-01, PM-02, AT-01, AT-02	Four sessions observed, but no observation identifier linked to a practice	Cross-role interview pattern; psychosocial contribution remains perceived
Organizational adaptation	Temporary space; substitute equipment; flexible schedule/ attendance; effort-based assessment → access and autonomy	GU-02, PM-01, PM-02, AT-03	Photographs and attendance records named; no specific item linked	Exact comparisons treated as participant reports, not measured rates
Immediate contribution	Re-engagement; connection; identity; continuity → perceived psychosocial support and cultural transmission	Evidence distributed across GU, PM, and AT excerpts	No standardized outcome or longitudinal record	Interpretive outcome pathway; no clinical or causal claim

The audit trail distinguishes availability of a dataset from traceable corroboration. In the current record, observations and documents contextualize the case, but only participant-coded interview excerpts can be followed directly from evidence to theme and framework component.

G. Empirically Derived Conceptual Framework

The framework was constructed in three analytical steps. First, descriptive codes were grouped into disruption and the three adaptation domains shown in Table 14. Second, comparisons across participant roles identified relational patterns: reduced contact and optional participation supported safety and autonomy; outreach, sharing, and group practice supported reconnection; and returning to Pelintau practice supported identity. Third, these patterns were linked to immediate, participant-perceived contributions of re-engagement, cultural continuity, and psychosocial support.

Curriculum adaptation was concentrated in lead-instructor accounts, identity was most explicit in one athlete account, and no item-level non-interview evidence was available to resolve these role imbalances. The pathway is therefore an interpretive synthesis rather than a tested causal sequence.

Table 15. Provisional Framework for Disaster-Responsive Pelintau Teaching

Framework Stage	Evidence in This Case	Adaptive Response or Mechanism	Immediate Contribution
Disaster disruption	Loss of venue, equipment, archives; displacement; fear and withdrawal	Needs recognition and reduced performance pressure	Teaching priorities recalibrated
Curriculum adaptation	Reduced readiness for intensive technical progression	Simple movements, cooperative activity, resilience and character emphasis	Feasible participation and continuity
Method adaptation	Anxiety, silence, fear of injury, loss of identity	Sharing, breathing, spiritual practice, reduced contact, gradual re-entry	Safety, trust, reconnection, and identity
Organizational adaptation	Damaged facilities, irregular attendance, competing recovery demands	Temporary space, substitute equipment, flexible schedules, effort-focused assessment	Access, autonomy, and re-engagement
Provisional outcome pathway	Cross-role interview patterns; observations and documents contextualized the case but were not item-linked	Context-sensitive reweighting of tradition rather than abandonment	Participant-perceived psychosocial support and cultural-transmission continuity

The framework proposes that flexible pedagogical adaptation may preserve a culturally meaningful learning space through safety, reconnection, identity, and autonomy. These mechanisms are grounded in the participant-coded patterns summarized in Tables 13 and 14. Immediate contributions remain participant perceptions and interpretive inferences; they were not measured as clinical, technical, or long-term outcomes. Participants' future orientation combined cultural continuity, public recognition, and organizational capacity. The expressed need for documentation and structured modules points to a transition from improvised continuity toward more durable recovery planning.

DISCUSSION

The findings show that Pelintau teaching during the emergency-to-early-recovery transition was maintained through selective pedagogical reweighting. In ordinary Pencak Silat education, progressive technical mastery is intertwined with moral, spiritual, physical, and psychosocial formation (Martinkova et al., 2019; Nugroho et al., 2024; Sasmita et al., 2023). After the flood, technique was not rejected, but intensive progression, sparring, fixed rank timelines, and performance criticism were temporarily subordinated to attendance, courage, cooperation, and emotional safety. This contrast explains the adaptation more precisely than labeling it a wholly new curriculum.

The shift is consistent with education-in-emergencies principles that prioritize safe access, relevant learning, protection, and continuity while systems move from acute response toward recovery (INEE, 2024; Tarricone et al., 2025). Data collection occurred from January to March 2026 after the late-2025 flood, and Aceh Tamiang remained under extended emergency-response status at the end of December (BNPB, 2025). The observed arrangements should therefore be understood as early-recovery practices. Their durability cannot be inferred: temporary reductions in intensity and flexible attendance may support re-entry but could weaken technical progression if retained without review.

Sharing circles, breathing, non-coercive participation, reduced contact, and predictable spiritual routines align with trauma-informed educational principles of safety, trust, choice, collaboration, and empowerment (Carello & Butler, 2015; Thomas et al., 2019; Tykha, 2025). Junior-coach and athlete accounts associated these practices with lower perceived fear, renewed connection, and restored identity. The instructors were not reported to have clinical roles or formal trauma-specific training, and symptoms were not measured. The approach is therefore interpreted as trauma-sensitive pedagogy with participant-perceived psychosocial value, not therapy or evidence of clinical recovery. This boundary supports training in supportive communication, safeguarding, psychological first aid, and referral protocols rather than clinical treatment.

Non-formal education theory helps explain how rapid adaptation was possible. Voluntary participation, relational authority, flexible time and place, and value-based learning allowed instructors to adjust content and organization without formal curricular approval (La Belle, 1982; Norqvist & Leffler, 2017; Dolev & Levi, 2025). Those same

features created vulnerabilities, including irregular attendance, dependence on a small leadership group, and limited material capacity. Similar disaster research shows that educational settings can rebuild routines and social capital, but such contributions depend on sustained community participation and institutional support (Mutch, 2014, 2023).

Tables 13 and 14 show how participant roles and representative codes informed the preliminary framework in Table 15. Disaster disruption prompted reported adaptations in curriculum, method, and organization; those adaptations were interpreted through safety, reconnection, identity, and autonomy; and the immediate contributions were re-engagement, cultural-transmission continuity, and participant-perceived psychosocial support. The framework adds analytic granularity by showing which roles support each component and where evidence remains thin. It is a context-bound proposition, not a validated model, and should be tested with item-linked observations and documents across other Pencak Silat communities and disaster phases.

Several limitations qualify the findings. The sample comprised seven participants at one site during a short early-recovery window; the accessible pool, refusals, and basis for information sufficiency were not documented. Participant age range, gender, years of Pelintau involvement, coaching experience, and whether athletes were minors were unavailable, limiting transferability and preventing evaluation of age-specific consent, assent, distress, referral, and photograph safeguards. Institutional ethics approval or waiver details, researcher positionality and reflexive procedures, interview language, transcription and translation procedures, and member checking were not documented in the available record. Interviews dominated the traceable Results evidence, while the four observations and documentary datasets lacked item-level identifiers linking them to particular claims. No standardized technical or psychosocial outcomes or longitudinal follow-up were available. Future studies should retain a source-indexed audit trail, report participant characteristics in aggregate, document ethics and translation procedures, use role-balanced sampling, and combine longitudinal and cross-site qualitative comparison with repeated measures of attendance, wellbeing, technical learning, safety, and cultural transmission.

CONCLUSION

This intrinsic case study found that the late-2025 flood disrupted the physical, social, and psychological foundations of Silat Pelintau learning. During early recovery, instructors reweighted curriculum priorities toward resilience and cooperative participation, used trauma-sensitive methods that emphasized safety and gradual re-entry, and made resources, schedules, attendance, and assessment more flexible.

The proposed framework connects those adaptations with relational mechanisms of safety, reconnection, identity, and autonomy and with immediate contributions to re-engagement, participant-perceived psychosocial support, and cultural-transmission continuity. It is derived from this case but remains interpretive and provisional rather than causal or clinically evaluative. The results indicate that community-based martial-arts education can contribute to early recovery when cultural continuity and learner wellbeing are treated as linked priorities. They do not establish long-term effectiveness, technical retention, or generalizability beyond this setting.

Local education, sport, culture, and disaster-management agencies may support safe temporary spaces, documentation of cultural knowledge, instructor preparation in supportive communication, safeguarding, psychological first aid, and referral protocols, and flexible continuity plans. These provisional recommendations follow from the reported distress, non-clinical instructor roles, and resource disruption and should be refined collaboratively with the Pelintau community. Longitudinal and cross-site studies are needed to validate the framework, identify when early adaptations should be retained or withdrawn, and evaluate outcomes for participation, wellbeing, safety, technical learning, and cultural continuity.

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CONFLICT OF INTEREST

The authors declare no conflict of interest with any party in relation to the conduct or publication of this research.

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***Johaidah Mistar (Corresponding Author)**
Physical Education, Department Faculty of Teacher Training and Education
Universitas Samudra
Langsa City, Aceh Province. Indonesia
Email: johaidah.mistar@unsam.ac.id

Muhammad Sulfa
Universitas Cahaya Prima, Bone, Indonesia,
Bone, Makassar. Indonesia
Email: muhammadsulfasport@gmail.com

Myrza Akbari
Physical Education, Department Faculty of Teacher Training and Education
Universitas Samudra
Langsa City, Aceh Province. Indonesia
Email: myrza.ab@unsam.ac.id

Prista Cindi Navera
Physical Education, Department Faculty of Teacher Training and Education
Universitas Sains Cut Nyak Dhien, Aceh, Indonesia,
Langsa City, Aceh Province. Indonesia
Email: pristacindinavera@uscnd.ac.id

Madhan Anis
History Education Department Faculty of Teacher Training and Education
Universitas Samudra, Langsa,
Aceh, Indonesia
Email: madhan.anis@unsam.ac.id