



Larik Tradition as an Ethnosport: Movement Analysis and Implications for Physical Education Based on Local Wisdom

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ABSTRACT

Purpose - This study aims to reveal the unique features of the traditional Larik dance of the Riung Barat ethnic community in Ngada Regency and to analyze how its movement elements and cultural values provide practical implications for developing a physical education curriculum grounded in local wisdom.

Methodology - The study used an interpretive-phenomenological qualitative approach, involving 14 key informants (9 active fighters, 3 traditional referees, 2 traditional leaders) from Maronggela, where the larik tradition is practiced. Data were collected through participant observation during 5 Larik sessions, semi-structured in-depth interviews, focus group discussions, document studies, and functional movement analysis of 120 purposively selected video segments.

Findings - Larik is a turn-based whip duel using buffalo leather whips and curved bamboo shields, as well as round buffalo leather shields, with strict rules regarding only the upper body. Functional movement analysis shows six dominant categories: ready position/low stance (36.7%), whip attacks (31.7%), active defense with shields (13.3%), dodging/twisting (10.0%), footwork (5.0%), and recovery/transition rituals (4.3%). The three main cultural values embedded in this activity are gratitude to God and ancestors, predictions of the harvest, and solidarity between tribes.

Contribution - This study provides a theoretical contribution in the form of the first scientific documentation of the characteristics of Larik as an ethnosport, as well as a practical contribution in the form of recommendations for integrating Larik into the physical education curriculum to develop balance, agility, hand-eye coordination, explosive power, sportsmanship, courage, and a sense of brotherhood among students.

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INTRODUCTION

Traditional sports are an integral part of human cultural heritage that not only preserves ethnic identity but also contributes to the physical and social development of individuals (Hou & Kenderdine, 2024). In Indonesia, particularly among the Riung ethnic group in East Nusa Tenggara, the *Larik* tradition has emerged as a unique form of ethnosport, featuring whip-fighting that emphasizes dynamic movement techniques and local wisdom values (Awe et al., 2024). *Larik* is a traditional combat sport practiced by the Riung Barat ethnic community in Ngada Regency, East Nusa Tenggara, Indonesia, and is performed as part of a ritual expression of gratitude for the harvest. The tradition involves two warriors competing in an arena known as *nambe sale*, using *lempas* (a whip made from buffalo hide) along with defensive equipment such as *agang* and *giling* as shields. Its implementation is governed by customary norms and rules that have been passed down through generations. Therefore, *Larik* is not only understood as a form of physical combat but also as a representation of cultural values, spirituality, and the collective identity of the Riung Barat community. As an ethnosport, *Larik* reflects the integration of physical activity and cultural rituals, where movements are not merely competitive but expressions of social and spiritual harmony (Perez-Martinez et al., 2025).

Recent research shows that ethnic sports such as *Larik* can enrich physical education curricula by integrating elements of local wisdom, thereby increasing student motivation and holistic fitness (Ríos-Valdés et al., 2023). At the global level, studies on traditional martial arts, such as capoeira in Brazil or taekkyeon in Korea, emphasize the analysis of movement elements to reveal their pedagogical implications (Jin et al., 2022). In Indonesia, similar explorations of traditional games such as *egrang* or *sepak takraw* have shown potential for developing motor skills and ethical values (Rakhman et al., 2024). However, *Larik*, as an ethnosport, has not been analyzed in depth, although the book *Khasanah Budaya Riung* (Awe et al., 2024) provides a descriptive basis of its techniques and values.

Although traditional sports such as *Larik* are rich in pedagogical potential, their integration into modern physical education is often hampered by a lack of scientific analysis of their movement elements (Liu et al., 2021). In Indonesia, physical education curricula tend to be Western-oriented, ignoring local wisdom that could enhance cultural relevance and learning sustainability (Hikmah et al., 2022). As a result, students lose the opportunity to develop physical fitness and cultural identity, which could potentially reduce their interest in physical activities (Adrizal et al., 2024). Without in-depth analysis, traditions such as *Larik* are at risk of extinction, as seen in the decline in participation among the younger generation of the Riung ethnic group (Awe et al., 2024).

This study adopts a phenomenological approach to explore the movement elements embedded in the *Larik* tradition as an ethnosport practiced by the Riung Barat community in Ngada Regency, East Nusa Tenggara, Indonesia. A phenomenological perspective is appropriate because *Larik* can be understood not only as a physical contest but also as a lived cultural experience in which bodily movements are closely linked to symbolic meanings, social values, and ritual practices maintained within the community. Through this perspective, the analysis of movement may extend beyond purely technical or biomechanical aspects to include interpretations of how physical actions reflect cultural expressions and shared community traditions.

This study aims to identify, classify, and interpret the movement elements of *Larik* and to examine their possible implications for the development of local-wisdom-based physical education. In recent years, studies on ethnosports have grown in various cultural contexts. However, existing studies often emphasize cultural documentation or descriptive accounts, while analyses that relate traditional movement structures to potential educational applications in physical education receive relatively less attention.

Within this context, the present study positions *Larik* within the broader discussion of global ethnosports, where traditional bodily practices are increasingly viewed as cultural narratives and embodied heritage (Hou & Kenderdine, 2024). Comparative insights from international ethnosport studies (Ríos-Valdés et al., 2023; Jin et al., 2022) offer useful perspectives on how traditional combat practices may be interpreted within broader cultural and educational discussions. At the national level, studies such as Rakhman et al. (2024) illustrate the growing scholarly interest in Indonesian traditional sports, although the exploration of their movement

structures and possible educational relevance is still developing.

In this regard, the present study attempts to contribute to this discussion by examining *Larik* from both cultural and pedagogical perspectives. Drawing on empirical insights from Riung practitioners, this study seeks to provide a descriptive understanding of the movement elements of *Larik* and to discuss how these elements may inform the integration of local cultural practices into physical education learning contexts.

METHODOLOGY

Research Design

This study applies an interpretative phenomenological analysis (IPA) qualitative design. This design was chosen because it allows researchers to capture the lived experiences of *Larik* practitioners in depth while interpreting the cultural meanings embedded in their every bodily movement (Smith et al., 2022; Eatough & Smith, 2017). This approach is particularly suitable for researching ethnosports because movement is understood not only as a biomechanical activity but also as a living cultural text (Bronikowska & Groll, 2021; Pociello & Durry, 2020).

Participant

A total of 14 key informants were recruited using purposive sampling followed by snowball sampling. They consisted of nine fighters (aged 27–48 years), two experienced traditional referees (aged 52–66 years), and three traditional leaders (*dor*) who hold customary authority over the implementation of *Larik*. All informants were from Maronggela Village, the main organizer of *Larik* in West Riung Subdistrict, Ngada Regency.

The inclusion criteria were: (1) direct and active involvement in *Larik*, (2) local recognition as a fighter, referee, or traditional leader, and (3) willingness to provide informed consent. Those lacking experience or declining consent were excluded. Ethical approval and consent procedures ensured the protection of participants' rights, privacy, and voluntary participation, in accordance with the Declaration of Helsinki, which emphasizes independent review and informed consent to safeguard participants' welfare and autonomy.

Data Collection

Data collection took place from July to September 2025 using four main methods. First, participant observation was conducted during four *Larik* sessions held in the traditional courtyard of Warukia-Maronggela Village. Second, semi-structured in-depth interviews (averaging 68 minutes) were conducted with all informants at the residence of one of the traditional elders (*dor*) after the completion of the *Larik* event. This interview approach allowed participants to describe their experiences, meanings, and interpretations of the *Larik* practice from their own perspectives (Braun & Clarke, 2021).

Fourth, a document study was conducted using the book *Khasanah Budaya Riung* (Awe et al., 2024) as well as community photo and video archives documenting *Larik* activities. The document analysis was intended to obtain contextual information on *Larik*'s historical background, cultural meanings, traditional rules, and visual documentation of movement patterns that may not be fully captured during field observations. These documentary sources were used to complement and triangulate the data obtained from interviews and observations, thereby enriching the contextual understanding of the *Larik* tradition. This procedure follows recent recommendations in qualitative and phenomenological research that emphasize the importance of multiple data sources for rich, contextually grounded descriptions of social phenomena (Creswell & Poth, 2018).

Instrument

The instrument consists of three main components, namely: functional category-based movement observation guidelines developed independently through preliminary observations and discussions with three traditional referees. The semi-structured interview guide contains 12 core questions and 20 follow-up

questions that have been tested, as well as a movement frequency checklist used during video analysis. The content validity of the instrument was reinforced through expert judgment by two lecturers in the Physical Education, Health, and Recreation study program at STKIP Citra Bakti and one expert in the field of culture in Ngada Regency.

Data Analysis

Data analysis was conducted through two complementary analytical tracks in order to capture both the structural characteristics of Larik movements and their cultural interpretations. First, movement analysis employed the Functional Movement Category Analysis technique (Parry et al., 2022; Bronikowska & Bronikowski, 2020). The researchers conducted three repeated viewings of 120 purposively selected 10-second video segments. The selection of video segments was based on several criteria, including the representation of different phases of the fight (opening, attack, defense, and response), variation in the techniques used by fighters, and the clarity of the body movements captured in the recordings. Each segment was assigned only one dominant movement category to minimize analytical overlap. The categorization process was discussed with three experienced traditional referees to ensure consistency with the local understanding of *Larik* techniques.

Second, qualitative data from interviews and group discussions were transcribed verbatim and analyzed thematically using Braun and Clarke's (2021) six-stage approach: data familiarization, initial coding, theme searching, theme reviewing, theme defining and naming, and report writing. Coding and theme development were conducted iteratively to maintain consistency with research objectives. Integrating both analytical tracks connected the structural features of Larik movements from video analysis and the cultural interpretations of participants, allowing movement patterns from videos to be contextualized with the meanings expressed by informants.

FINDINGS

The *Larik* tradition is an annual ritual practiced by the Riung Barat ethnic community in Ngada Regency as part of a harvest thanksgiving ceremony and a communal gathering (Awe et al., 2024). In this event, adult male fighters engage in a turn-based whip duel using traditional equipment, including a whip (tiuk or lempas) and defensive shields (agang and giling). In this setting, fighters perform a series of coordinated movements that involve attacking, defending, and responding to the opponent's strikes. These movement sequences provided the empirical basis for the movement analysis conducted in this study. Through repeated observation of video recordings from *Larik* fights, several recurring movement patterns were identified and categorized. At the same time, interviews and focus group discussions with fighters, referees, and traditional leaders provided insights into how these movements are understood within the community's cultural context.



Figure 1. Whips and shields used in the larik tradition

In the *Larik* tradition, several customary rules regulate the conduct of the fight. Whip strikes are permitted only on specific body areas, including the back, waist, stomach, chest, upper arms, and shoulders, while strikes

to the legs, buttocks, or genitals are strictly prohibited and may result in disqualification and customary sanctions. In addition, fighters are not allowed to strike twice in succession. Violations of this rule may lead to a customary sanction known as *ghan zezang*, which involves slaughtering an animal, such as a buffalo or pig, and sharing the meal collectively with the village community. The fight is performed in a traditional courtyard called *nambe sale*, where spectators form a circular arena with a diameter of approximately 8–10 meters. Within this arena, fighters alternate attacking and defensive movements according to the established rules of the tradition. The movement analysis was based on 120 video segments of 10 seconds each, purposively selected from five *Larik* sessions conducted in Maronggela Village. From these coded segments, several dominant functional movement categories were identified, reflecting the typical movement patterns performed by *Larik* fighters. The distribution of these movement categories is presented in Table 1.

Table 1. Distribution of Functional Movement Categories in the *Larik* Tradition (n=120 segmen)

Functional Movement Categories	Frequency	Percentage	Form of Movement
Ready position and low stance	44	36,7%	Knees bent, body leaning slightly forward, each hand holding a bamboo shield (<i>agang</i>) and a round shield made of buffalo hide (<i>giling</i>). Low stance as a form of solid defense when receiving blows/lashes.
Whip attack	38	31,7%	Flexible arm swing (from above, side, or below) when attacking with a whip, with full hip rotation adjusting to the direction of the punch/whip. Use maximum arm power, aiming at body parts such as the stomach, chest, waist, or back.
Active defense with shields (blocking)	16	13,3%	Raise the bamboo shield (<i>agang</i>) forward and upward to block attacks from above while pushing the shield (<i>giling</i>) to the side to cover the sides of the body. The parrying movement is performed quickly and firmly to deflect the whip attack so that it does not hit the body.
Defensive evasion (dodging/bending/bowing)	12	10,0%	When defending yourself using a shield and buckler, quickly and flexibly twist your waist to the left, right, or down while turning your body to dodge. This movement requires agility and good dynamic balance to avoid falling.
Footwork and foot positioning adjustments	6	5,0%	Move by stepping forward (close in on your opponent to narrow their attack area) or stepping sideways to dodge.
Recovery and transition	4	4,3%	Lowering the shield, regulating breathing, dancing and singing verses (<i>rait</i>) as an expression of satisfaction after successfully warding off the whip attack, while preparing to take turns attacking/whipping.

These findings indicate that a substantial proportion of *Larik* activity occurs in a ready or low stance (36.7%) and during whip attacks (31.7%). This pattern suggests that *Larik* fighters frequently alternate between maintaining a stable stance and performing rapid attacking movements. The ready stance appears to serve as a preparatory posture, enabling fighters to maintain balance while anticipating the opponent's actions before initiating an attack. Active defense using shields (13.3%) and evasive movements (10%) further indicate that *Larik* involves not only striking actions but also defensive and anticipatory responses. These movements require coordination between upper- and lower-body actions, as fighters simultaneously control the whip, maintain balance, and respond to the opponent's attack. This interpretation is also consistent with the informants' perspectives. Several fighters and referees emphasized that success in *Larik* depends not only on physical strength but also on the ability to anticipate and read the opponent's movements. As one fighter

explained, “*Larik* is not about who is the strongest, but who is the smartest at reading their opponent's movements” (F3). Similar views were expressed by a traditional referee who noted that effective fighters are those who can “wait for the right moment before striking” (R1).

Based on in-depth interviews with informants and focus group discussions, three main themes emerge from the tradition of gerak larik.

Theme 1: *Larik* as an Expression of Gratitude and Cultural Values

The first theme highlights *Larik* as a cultural expression of gratitude for the harvest and a means of transmitting traditional values across generations. Informants explained that *Larik* is closely linked to communal rituals that honor God and the ancestors. In this context, the rules governing *Larik* fights also reflect ethical values embedded within the tradition. For example, strikes are restricted to certain parts of the body, while attacks on vital areas such as the feet and genitals are strictly prohibited. Informants explained that these rules are intended to maintain a balance between courage and ethical responsibility during the fight. One traditional leader explained: “*Larik* is our way of thanking God and the ancestors for the harvest. Even though we fight, there are rules. We cannot whip the legs or vital parts because *Larik* must remain honorable.” (T1). Similarly, one fighter emphasized that *Larik* also functions as a learning process for younger generations: “Young people learn courage through *Larik*, but they must also learn control. You must fight without hatred.” (F4). These statements suggest that *Larik* functions not only as a competitive activity but also as a cultural mechanism for transmitting moral values, including courage, discipline, and respect for opponents.

Theme 2: *Larik* as a Medium of Social Solidarity

The second theme highlights *Larik*'s role in strengthening solidarity and emotional ties among communities in West Riung. Informants explained that the tradition creates opportunities for interaction between fighters and spectators from different villages. The practice of ending each fight with a handshake symbolizes reconciliation and mutual respect between fighters. One referee explained: “After the fight, they shake hands. That means there is no anger or revenge. *Larik* is about courage, not hostility.” (R2)

Participants also noted that fighters from different villages are welcome to participate, provided they follow the established rules. “People from other villages can join the *Larik* fight. What matters is that they respect the rules.” (F2). These practices indicate that *Larik* serves as a social arena where relationships between villages are strengthened through shared cultural activities.

Theme 3: *Larik* as a Representation of Masculinity

The third theme concerns *Larik* as a cultural arena where adult men demonstrate courage, endurance, and emotional control. Although the community does not explicitly define *Larik* as a rite of passage, participation in *Larik* is widely understood as a demonstration of maturity and bravery. Informants explained that *Larik* requires not only physical strength but also mental discipline and self-control. One fighter described this as follows: “Anyone can hold a whip, but not everyone can stand in the arena. You must be brave and able to control yourself.” (F1)

Table 2. Summary of Thematic Findings on the Cultural Meanings of *Larik*

Theme	Key Meaning	Supporting Evidence
Gratitude and cultural values	<i>Larik</i> expresses gratitude for harvest and teaches ethical fighting rules	T1, F4 interview quotes
Social solidarity	<i>Larik</i> strengthens relationships between villages	R2, F2 interview quotes
Masculinity	<i>Larik</i> demonstrates courage, endurance, and emotional control	F1 interview quotes

The symbolic meaning of masculinity is also reflected in the specific movement patterns observed in the fights. Low stances require physical endurance, whip attacks demand speed and precision, while defensive movements using shields demonstrate courage in facing attacks without retaliating impulsively. Taken

together, these themes suggest that *Larik* functions not only as a cultural ritual or traditional sport but also as a social institution through which cultural values, solidarity, and masculine identity are expressed and maintained.

DISCUSSION

The findings of this study show that *Larik* movements are dominated by stable low stances (36.7%), explosive whip attacks (31.7%), and active defense using shields (13.3%). These movement patterns indicate that *Larik* involves repeated transitions between preparatory posture, striking actions, and defensive responses. From a physical education perspective, such combinations of stance stability, coordinated arm movements, and reactive defense suggest that *Larik* may provide opportunities to develop students' agility, coordination, and movement control. Similar outcomes have been reported in traditional games integrated into school programs, such as the Banjar traditional games intervention, which demonstrated a 28% improvement in students' motor skills after 12 weeks of training (Rakhman et al., 2024). In this sense, *Larik*'s movement structure offers a potential example of how traditional ethnosport activities may support the development of fundamental motor competencies in school physical education.

The dominance of whip attack movements (31.7%) observed in *Larik* also underscores the importance of rapid, coordinated striking actions in the fight. These explosive arm and hip movements require timing, precision, and whole-body coordination. Although this study did not directly measure physiological intensity, the movement characteristics observed in *Larik* resemble dynamic striking actions observed in traditional martial arts training. Previous studies have shown that similar explosive movement patterns in martial arts training can improve reaction speed and coordination among students (Kim et al., 2025). Therefore, the technical elements of *Larik* movements may provide useful references for designing culturally contextualized physical education activities that combine traditional movement practices with modern training principles.

Defensive movements in *Larik*, such as active shield blocking (13.3%) and evasive body actions, highlight the system's demand for anticipatory responses and body control, not just offensive actions. These findings indicate that *Larik* fighters must constantly adjust their positioning, timing, and focus to respond effectively to attacks. Coordinated defensive patterns, as observed in traditional martial arts programs, help students improve balance and spatial awareness through dynamic dodging and blocking movements (Yan et al., 2022). Thus, in educational settings, these patterns can serve as practical examples for teaching coordination, balance, and situational awareness in culturally relevant physical education activities.

Thematic analysis reveals three key cultural meanings of the *Larik* tradition that extend beyond its physical movements: expressions of gratitude for the harvest, reinforcement of social solidarity, and representations of courage and masculinity. These themes indicate that *Larik* is not only a physical activity but also a cultural practice that integrates ritual, social relationships, and community values. Similar findings have been reported in studies of traditional sports in Indonesia, where ethnosport practices function as both physical activities and cultural learning processes that strengthen local identity (Hikmah et al., 2022).

Gratitude for the harvest is a central theme that emerged strongly from the interviews, underscoring *Larik*'s spiritual dimension within the Riung Barat harvest ritual. Informants explained that *Larik* symbolizes appreciation for the blessings received from nature and ancestors. This cultural interpretation aligns with studies of other Indonesian ethnosports, such as the Sagi boxing tradition of the So'a ethnic community, where combat practices are embedded in ritual contexts and collective belief systems (Bile et al., 2025). These findings suggest that integrating ethnosports like *Larik* into educational contexts may help students understand the cultural meanings underlying physical activities.

Social solidarity emerges as the second theme, highlighting *Larik* as a communal space that strengthens relationships between villages. Informants consistently emphasized that *Larik* fights end with gestures of reconciliation, such as handshakes between fighters. These practices illustrate how traditional sports can promote social cohesion and emotional connection within communities. Similar observations have been reported in studies of traditional movement-based activities such as capoeira and other martial arts practices,

which have been associated with the development of empathy, emotional resilience, and social bonding among participants (Lev-Ari et al., 2025; Ntalachani et al., 2025). The third theme examines *Larik* as a cultural space for adult men to display courage, endurance, and emotional control.

Overall, *Larik* integrates movement skills and cultural learning, reflecting its value as a traditional sport that combines physical, emotional, social, and cultural dimensions (Bronikowska & Bronikowski, 2020). *Larik* thus offers a relevant example of how ethnosport traditions can support both cultural preservation and holistic physical education.

CONCLUSION

This study investigates the specific movement elements and cultural meanings within the *Larik* tradition of the Riung Barat ethnic community in Ngada Regency. *Larik's* movements are primarily characterized by stable low stances, whip attacks, and defensive responses with shields, demonstrating balance control, coordinated striking, and anticipatory actions. Thematic analysis identifies three main cultural meanings associated with *Larik*: expressions of gratitude for the harvest, reinforcement of social solidarity, and representations of courage and maturity in the local cultural context.

In sum, *Larik* demonstrates how a traditional combat activity can integrate physical movement with broader cultural and social meanings. Its movement structure and cultural narratives highlight opportunities for learning activities that support motor skills, character development, and cultural awareness. With appropriate safety and pedagogical considerations, *Larik*-inspired activities could be adapted into physical education where local traditions are important.

This study advances the discussion on ethnosports in culturally responsive physical education by empirically describing *Larik* movement patterns and their associated cultural meanings. By connecting movement analysis with phenomenological insights from community practitioners, the study exemplifies how traditional sporting practices function as both physical activities and cultural knowledge systems.

It is important to acknowledge several limitations of this study. The research was conducted within a single community context in Maronggela Village, which may limit the generalizability of the findings to other regions where *Larik* or similar traditions may be practiced differently. In addition, the study focused primarily on movement observation and participant interpretation, without including physiological measurements of physical intensity or experimental testing within school settings. Future studies may therefore explore the implementation of *Larik*-based physical education modules in schools, including experimental or longitudinal designs to examine their potential effects on students' motor development, cultural literacy, and physical fitness.

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