

CULTURALLY RESPONSIVE PHYSICAL LITERACY IN SCHOOL
PHYSICAL EDUCATION: A MALAYSIA–INDONESIA
CONCEPTUAL FRAMEWORK USING TRADITIONAL GAMES-
BASED PEDAGOGY

*Mohd Helme Basal¹

Mohammad Ikram Hamidi Rahim²

Muhammad Gilang Ramadhan³

Deris Maulana⁴

[1] Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia

[2] Sekolah Menengah Kebangsaan Taman Bukit Maluri, Wilayah Persekutuan Kuala Lumpur

[3] Faculty of Sports Science, Universitas Negeri Jakarta, Jakarta Timur, Indonesia

[4] Sports Coaching Education Study Program, Faculty of Sports and Health Education, Universitas Pendidikan Indonesia

*helme8705@uitm.edu.my

Abstract: Physical education has a strategic role in developing students' lifelong engagement in physical activity, yet its implementation in many school contexts remains dominated by isolated sport skills, technical drills, and performance-oriented instruction. Such approaches often neglect students' motivation, confidence, cultural identity, social interaction, and broader understanding of movement. This paper proposes a culturally responsive physical literacy framework for school physical education in Malaysia and Indonesia by integrating traditional games-based pedagogy. Drawing on the concepts of physical literacy, culturally responsive pedagogy, and game-based learning, the paper argues that traditional games such as *galah panjang*, *ting-ting*, *sepak raga*, *gobak sodor*, *engklek*, and *bentengan* can be repositioned as structured pedagogical resources rather than nostalgic or recreational activities. The proposed framework consists of five interrelated components: cultural movement content, pedagogical design, physical literacy domains, assessment, and outcomes. These components guide teachers in selecting culturally meaningful games, modifying rules and grouping strategies, developing motivation, confidence, competence, and knowledge, and assessing learning through observation, self-reflection, and peer feedback. The framework also addresses practical concerns related to large class sizes, limited facilities, mixed abilities, gender inclusion, and safety. This paper contributes to curriculum and teaching scholarship by offering a regional Malaysia–Indonesia perspective on culturally grounded physical education. It concludes that traditional games, when intentionally designed and assessed, can support active lifestyle orientation, cultural identity, cooperation, and lifelong physical literacy. Future research should validate the framework through expert review, Delphi studies, pilot interventions, and comparative classroom studies.

Keywords: Physical literacy, traditional games-based pedagogy, culturally responsive physical education, game-based learning, Malaysia–Indonesia curriculum.

INTRODUCTION

Physical education (PE) occupies a strategic position in schooling because it is one of the few curriculum spaces where students can learn through the body, develop movement competence, and form dispositions toward active living. Yet, in many school contexts, PE remains narrowly delivered through multi-activity sport units, technical drills, and performance-oriented tasks that separate skills from meaningful participation. Kirk (2010) described this dominant tradition as “physical education-as-sport-techniques,” a curriculum form that privileges isolated sport skills while offering limited opportunities for students to understand movement, make decisions, experience success, or connect physical activity with their own lives. Such practice weakens the educative purpose of PE because students may learn fragments of games without developing the confidence, motivation, knowledge, and competence required for lifelong engagement.

This limitation is increasingly problematic in light of global concerns about youth inactivity and health. Guthold et al. (2020) reported that 81% of adolescents aged 11–17 years were insufficiently physically active, demonstrating that conventional approaches to school and community physical activity have not produced

[1]

adequate population-level change. Physical inactivity is not simply a fitness issue; it is associated with broader physical, psychological, and social consequences during adolescence and across the life course (van Sluijs et al., 2021). Therefore, PE should not be reduced to short-term skill acquisition or sport performance. Rather, it should function as a foundation for health-oriented learning, personal meaning, enjoyment, social interaction, and sustained participation in diverse movement contexts (Ennis, 2017).

Physical literacy offers a strong conceptual direction for repositioning PE. It frames movement education as an integrated development of physical competence, motivation, confidence, knowledge, and understanding that enables individuals to value and take responsibility for physical activity throughout life (Whitehead, 2010). Systematic reviews have shown that physical literacy is increasingly used to connect PE, sport, health promotion, and lifelong participation, although its application requires careful pedagogical translation rather than superficial adoption (Edwards et al., 2017; Lundvall, 2015; Mat Yusoff et al., 2025). In this sense, quality PE must move beyond “busy, happy, good” lessons and instead design learning experiences that intentionally develop psychomotor, cognitive, affective, and social outcomes. Dudley et al. (2022) showed that learning interventions in PE can positively influence these multiple domains when teaching is structured, developmentally appropriate, and pedagogically purposeful.

For Malaysia and Indonesia, this challenge also has a cultural dimension. A PE curriculum that relies mainly on standardized modern sports risks marginalizing local movement cultures and students’ lived experiences. Meaningful PE literature emphasizes that students are more likely to value participation when lessons involve fun, challenge, social interaction, motor competence, and personally relevant learning (Beni et al., 2017; Mat Yusoff et al., 2024). Traditional games provide a promising but under-theorized pathway for achieving these aims because they combine movement skill, play, cooperation, strategy, identity, and cultural knowledge. However, their educational value depends on how teachers design, modify, teach, and assess them. This conceptual paper therefore argues for a culturally responsive physical literacy approach that repositions traditional games not as nostalgic add-ons, but as pedagogical resources for developing lifelong movement competence, motivation, and health-oriented learning in school PE.

PHYSICAL LITERACY AS A GOAL OF PHYSICAL EDUCATION

Physical literacy has emerged as a central goal of contemporary physical education because it provides a broader educational vision than the traditional emphasis on fitness, sport skills, or competitive performance. Rather than viewing students merely as performers of isolated motor techniques, physical literacy conceptualizes learners as embodied individuals who require physical competence, motivation, confidence, knowledge, and understanding to participate meaningfully in physical activity across the life course (Edwards et al., 2017; Lundvall, 2015). From this perspective, the purpose of PE is not only to make students fitter during schooling, but to equip them with the capacity and disposition to value, choose, and sustain active lifestyles beyond school.

This distinction is important because fitness and sport performance represent only partial outcomes of PE. A student may demonstrate high fitness test scores or perform specific sport skills effectively, yet still lack the confidence, motivation, understanding of movement, or personal meaning required for lifelong participation. Conversely, students with modest sport performance may develop strong physical literacy if they experience success, enjoyment, autonomy, social connection, and progressive movement competence. Cairney et al. (2019) argued that physical literacy should be understood as an integrated construct linking physical activity, health, psychological development, and social participation rather than as a narrow measure of motor skill or physical fitness. Therefore, PE lessons should deliberately address affective, cognitive, physical, and behavioural dimensions of learning.

Physical literacy also challenges teachers to rethink assessment and pedagogy. Traditional PE assessment often privileges observable performance outcomes, such as speed, strength, skill execution, or game results. However, assessment linked to physical literacy must also consider students’ confidence, motivation, knowledge of movement principles, decision-making, and ability to apply skills in varied contexts (Shearer et al., 2021). This requires pedagogies that are inclusive, developmentally appropriate, and meaningful, rather than repetitive drills detached from students’ experiences.

In the context of school PE, physical literacy therefore functions as a curriculum goal that connects movement learning with personal development and lifelong health. It supports a shift from teaching sports as ends in themselves toward using movement experiences to cultivate capable, confident, motivated, and informed movers. For Malaysia and Indonesia, this broader view is especially valuable because it allows PE to integrate culturally relevant activities, including traditional games, while still pursuing internationally recognized educational and health outcomes.

TRADITIONAL GAMES IN MALAYSIA AND INDONESIA

Traditional games in Malaysia and Indonesia should be understood not merely as recreational activities, but as culturally embedded movement practices that connect bodily learning with social values, local identity, and community knowledge. In physical education, their pedagogical value lies in the way they combine locomotor skills, tactical thinking, cooperation, rhythm, confidence, and cultural meaning within playful situations. Evidence from Malaysian school-based research shows that traditional games such as *galah panjang* can generate meaningful physical activity in children and therefore have potential for PE intervention design (Adnan et al., 2020). The key point, however, is that these games are not only “active”; they are educational when teachers intentionally connect movement demands with learning outcomes.

In the Malaysian context, *galah panjang* develops agility, acceleration, spatial awareness, and teamwork because players must evade opponents, guard zones, and communicate continuously. Its grid-based structure requires students to read space, time their movement, and make tactical decisions under pressure. *Ting-ting* or *ketingting*, similar to hopscotch, emphasizes balance, rhythm, single-leg coordination, landing control, and concentration. It is particularly useful for developing body control because success depends on coordinated hopping, postural stability, and precise foot placement. *Sepak raga*, as a culturally significant kicking game, develops coordination, flexibility, lower-limb control, rhythm, and collective timing. Unlike isolated kicking drills, the game demands responsiveness to others, encouraging cooperation and shared responsibility.

In Indonesia, *gobak sodor* has similar pedagogical power to *galah panjang* because it requires speed, agility, deception, anticipation, and team strategy. Studies on Indonesian traditional games report positive effects on fundamental motor skills and participation among elementary students, supporting their use as structured PE content rather than informal play (Fauzi et al., 2023). *Engklek* develops balance, hopping coordination, rhythm, sequencing, and confidence, especially for younger learners who need repeated but enjoyable locomotor challenges. *Bentengan* strengthens cardiovascular endurance, group tactics, cooperation, courage, and social trust because players must attack, defend, rescue teammates, and negotiate risk during play.

Therefore, these games should not be treated as cultural decorations in PE. Their real value emerges when teachers redesign them into progressive, inclusive, and assessable learning tasks. Systematic review evidence also shows that models of traditional games, including *gobak sodor* and *engklek*, can support motor development in elementary PE contexts (Sunanto et al., 2024).

THEORETICAL INTEGRATION

Integrating physical literacy, culturally responsive pedagogy, and game-based learning provides the theoretical foundation for repositioning traditional games as serious physical education content rather than recreational add-ons. Physical literacy explains the educational purpose of PE: to develop students’ physical competence, motivation, confidence, knowledge, and understanding so that they can participate meaningfully in physical activity across life (Cairney et al., 2019; Edwards et al., 2017). This is broader than technical skill acquisition because it includes affective, cognitive, social, and behavioural dimensions of movement learning.

Culturally responsive pedagogy explains the cultural logic of the framework. In PE, cultural responsiveness requires teachers to recognize students’ community knowledge, movement histories, language, values, and social experiences as legitimate learning resources. Flory and McCaughy (2011) showed that culturally relevant PE involves care, respect, communication, and curricular content that reflects students’ cultural worlds. Applied to Malaysia and Indonesia, this means that traditional games such as *galah panjang*, *ting-ting*, *sepak raga*, *gobak*

sodor, *engklek*, and *bentengan* should not be treated as peripheral heritage activities. They can become curriculum content through which students experience identity, belonging, cooperation, and embodied cultural knowledge.

Game-based learning provides the pedagogical mechanism for translating these ideas into practice. Tactical and game-centered approaches shift PE away from isolated drills toward modified games, decision-making, tactical awareness, problem-solving, and reflection. Reviews of game-centered approaches show potential benefits for students' tactical understanding, skill execution, affective outcomes, procedural knowledge, and physical activity participation (Breed et al., 2025; Harvey & Jarrett, 2014; Miller et al., 2015). This makes game-based learning compatible with physical literacy because both emphasize meaningful, adaptive, and context-sensitive movement rather than decontextualized performance.

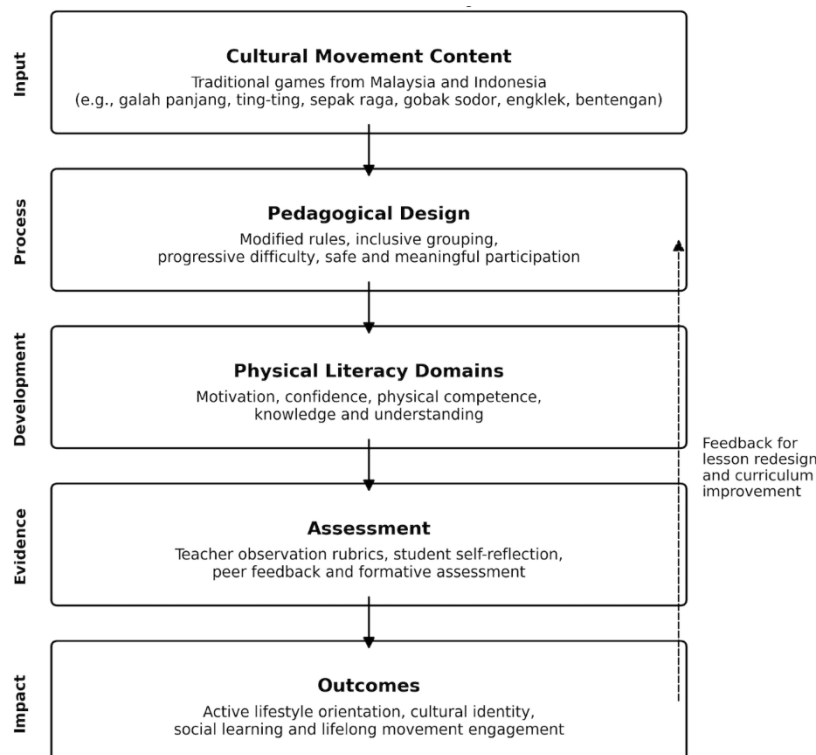
The strength of this integration is that each theory corrects the weakness of the others. Physical literacy without cultural responsiveness can become too universal and culturally thin. Culturally responsive pedagogy without physical literacy may celebrate tradition without clear developmental outcomes. Game-based learning without cultural responsiveness may simply reproduce dominant modern sports. Integrated, they allow traditional games to be redesigned as inclusive, progressive, and assessable PE tasks that develop movement competence, confidence, cooperation, strategy, cultural identity, and lifelong participation.

PROPOSED CONCEPTUAL FRAMEWORK

The proposed framework positions traditional games as culturally responsive pedagogical resources for developing physical literacy in school physical education. Its logic is sequential but recursive: culturally meaningful movement content is transformed through purposeful pedagogy, developed through physical literacy domains, monitored through multidimensional assessment, and directed toward lifelong and socially meaningful outcomes.

Figure 1

Proposed Conceptual Framework for Integrating Traditional Games into Culturally Responsive Physical Literacy-Oriented Physical Education



Note. The framework is intended to guide curriculum design, classroom pedagogy, and formative assessment rather than operate as a linear one-time sequence.

The first component, cultural movement content, refers to traditional games such as *galah panjang*, *ting-ting*, *sepak raga*, *gobak sodor*, *engklek*, and *bentengan*. These games provide culturally familiar movement contexts that can strengthen students' sense of identity and relevance in PE. This aligns with culturally relevant PE, which emphasizes using students' cultural knowledge and community experiences as legitimate curriculum resources (Flory & McCaughtry, 2011).

The second component, pedagogical design, requires teachers to modify rules, group students inclusively, and adjust difficulty progressively. Without this design work, traditional games remain informal play rather than structured learning. Game-centered approaches support this process by emphasizing tactical decision-making, problem-solving, interaction, and contextual skill use (Miller et al., 2015).

The third component, physical literacy domains, frames learning beyond fitness or sport performance. Students should develop motivation, confidence, movement competence, and knowledge, reflecting physical literacy as an integrated construct linked to health, participation, and lifelong movement engagement (Cairney et al., 2019; Edwards et al., 2017).

The fourth component, assessment, should include teacher observation, peer feedback, and student self-reflection. This is necessary because physical literacy includes physical, affective, and cognitive dimensions that cannot be captured through fitness tests alone (Shearer et al., 2021).

The final component, outcomes, emphasizes active lifestyle orientation, cultural identity, cooperation, and social learning. These outcomes reflect meaningful PE experiences, particularly social interaction, challenge, competence, and personally relevant learning (Beni et al., 2017).

DISCUSSION

The principal contribution of the proposed framework is not simply the inclusion of traditional games within physical education. Its stronger contribution is the repositioning of culture as part of the pedagogical architecture through which physical literacy is developed. Physical literacy integrates competence, motivation, confidence, knowledge, participation, and health, yet its varied representations can detach movement from the social and cultural conditions that give it meaning (Edwards et al., 2017; Cairney et al., 2019). The framework, therefore, extends physical literacy by arguing that what students learn to value about movement is partly shaped by whether curriculum content is recognisable, meaningful, and connected to cultural experience. This interpretation supports arguments that physical education should move beyond performance-centred conceptions toward learning that connects embodiment, meaning, and whole-person development (Mat Yusoff et al., 2025).

This cultural emphasis also requires an important qualification. The presence of a traditional game in a lesson does not make the lesson culturally responsive. Culturally responsive physical education depends on how knowledge is selected, whose knowledge is authorised, how relationships are organised, and whether students participate in meaning-making rather than merely receive cultural content (Flory & McCaughtry, 2011; Wrench & Garrett, 2021). Research on Indigenous games similarly shows that culturally relevant pedagogy can enable curricular enactment, whereas limited teacher cultural awareness and curriculum constraints can inhibit it (Bonato et al., 2024). Cultural movement content should therefore begin pedagogical inquiry rather than function as heritage material reproduced unchanged. Rule modification, student voice, contextual explanation, and reflective dialogue become essential because cultural responsiveness concerns the pedagogical relationship with culture, not simply the cultural origin of an activity (Pill et al., 2022; Wrench & Garrett, 2021).

The pedagogical design component connects culturally meaningful content with game-centred learning. Evidence suggests that game-centred approaches can support knowledge, perceived competence, enjoyment, effort, tactical learning, and contextual skill use, although the strength of evidence varies across outcomes (Miller, 2015; Breed et al., 2025). Importantly, Breed et al. (2025) found that much comparative research in this area was limited by reporting quality and risk of bias. Game-centred pedagogy should therefore not be presented as an inherently superior method. Its value within the present framework lies in its capacity to create decisions, interactions, adaptations, and problems through which movement knowledge can be enacted. Traditional games become

educationally significant when their cultural meanings and movement problems are intentionally connected to learning rather than when play itself is assumed to produce physical literacy (Pill et al., 2022; Breed et al., 2025). The framework also addresses a problem in physical literacy assessment. Although physical literacy is theoretically multidimensional, assessment practice can fragment it into separately measured physical, affective, and cognitive indicators. Reviews have identified greater development of measures in the physical and affective domains than in the cognitive domains, along with ongoing concerns about methodological quality and feasibility (Shearer et al., 2021). The proposed combination of teacher observation, student reflection, and peer feedback is therefore conceptually important because it creates opportunities to examine competence alongside confidence, understanding, cooperation, and meaning. However, these forms of assessment should not become another checklist that reduces cultural identity or motivation to decontextualised scores. Assessment should remain aligned with the purpose of the task and should make visible how students participate, decide, explain, adapt, and relate to others during movement experiences (Shearer et al., 2021; Beni et al., 2017).

The focus on Malaysia and Indonesia gives the framework regional significance. Existing studies show that Malaysian traditional games can generate meaningful levels of physical activity and that Indonesian traditional games can support fundamental motor skill development and participation (Adnan et al., 2020; Fauzi et al., 2023). These findings establish pedagogical potential, but they do not by themselves demonstrate culturally responsive physical literacy. The present framework adds a missing explanatory layer by proposing that cultural movement content must pass through purposeful pedagogical design, multidimensional development, and aligned assessment before broader outcomes can reasonably be anticipated. In this sense, the unit of analysis shifts from the traditional game itself to its pedagogical transformation.

This shift is the framework's main theoretical novelty. It avoids two forms of reductionism that remain possible in school physical education. One reduces traditional games to cultural preservation, paying insufficient attention to learning. The other reduces physical literacy to transferable competencies without sufficient attention to the cultural worlds through which students encounter movement (Edwards et al., 2017; Bonato et al., 2024). By integrating cultural content, pedagogical design, physical literacy domains, assessment, and outcomes as a recursive system, the framework proposes that culturally responsive physical literacy is produced through relationships among these components rather than through any single component alone. The argument remains conceptual and therefore requires empirical testing, but it offers a testable basis for examining when traditional games become meaningful curriculum rather than merely alternative activities (Bonato et al., 2024; Breed et al., 2025).

IMPLICATIONS FOR TEACHERS AND CURRICULUM DESIGNERS

The proposed framework has direct implications for PE teachers and curriculum designers because traditional games cannot be transferred into school lessons without pedagogical adaptation. If teachers simply reproduce traditional games in their original form, some students may be excluded due to differences in ability, gender confidence, body size, prior experience, or safety awareness. Therefore, traditional games-based PE should be designed through the principles of inclusion, meaningful participation, progressive challenge, and physical literacy development.

For large class sizes, teachers should use small-sided formats, station-based rotations, and multiple playing grids. For example, *galah panjang* and *gobak sodor* can be divided into several smaller courts so that more students are active at the same time rather than waiting in long queues. Game-centered PE research supports using modified games because they increase opportunities for decision-making, tactical understanding, interaction, and contextual skill development (Miller et al., 2015). This matters because physical literacy develops through repeated, meaningful engagement, not through passive observation or occasional turns.

For limited facilities, curriculum designers should prioritize low-equipment games that can be taught in classrooms, corridors, halls, small fields, or multipurpose spaces. Games such as *ting-ting* and *engklek* require minimal equipment and can be adapted using chalk, tape, cones, or floor markers. This makes traditional games especially useful for schools with limited infrastructure. However, limited facilities should not become an excuse for poor pedagogy. Teachers must still define learning intentions, modify space, manage movement flow, and ensure that

every activity connects to physical literacy domains such as competence, confidence, motivation, and knowledge (Cairney et al., 2019; Edwards et al., 2017).

For mixed-ability classes, teachers should vary rules, roles, task complexity, and success criteria. In *bentengan*, for instance, some students may serve as attackers, defenders, rescuers, observers, or strategy leaders. In *sepak raga*, teachers can modify ball type, height, number of touches, or group size. Inclusive PE literature emphasizes that meaningful participation requires adaptation rather than merely placing all students in the same activity (Qi & Ha, 2012). Assessment should therefore value improvement, cooperation, decision-making, and confidence, not only speed, power, or technical superiority.

For gender inclusion, teachers should avoid reinforcing the idea that certain games, movements, or leadership roles belong to boys or girls. Grouping should be flexible, rotating, and sensitive to student comfort, while still challenging gender stereotypes through shared responsibility and equitable participation. Culturally responsive PE requires teachers to respect students' backgrounds while also creating democratic and socially just learning environments (Flory & McCaughtry, 2011).

Finally, safety must be embedded in curriculum planning. Teachers should teach warm-up routines, spatial awareness, safe tagging, landing mechanics, respectful contact, and risk management. Safety should not remove challenge; rather, it should make challenge developmentally appropriate. Meaningful PE depends on optimal challenge, social interaction, enjoyment, and perceived competence (Beni et al., 2017). Thus, well-adapted traditional games can help teachers deliver PE that is inclusive, culturally relevant, safe, and aligned with lifelong physical literacy.

FUTURE RESEARCH AGENDA

Future research should move the proposed framework from conceptual argument to empirical validation. A weak paper stops at proposing a model; a stronger scholarly contribution shows how the model can be tested, refined, and applied across real PE settings. Therefore, the next stage should involve validation studies, expert consensus work, pilot interventions, and comparative Malaysia–Indonesia classroom research.

First, content validation studies are needed to examine whether the five components of the framework, cultural movement content, pedagogical design, physical literacy domains, assessment, and outcomes, are conceptually clear, culturally appropriate, and pedagogically relevant. Researchers may use expert review panels consisting of PE lecturers, curriculum specialists, school teachers, traditional games practitioners, and physical literacy scholars. Instruments such as content validity index procedures could be used to determine whether each framework component is essential, relevant, and understandable.

Second, a Delphi study should be conducted with PE experts from Malaysia and Indonesia. This method is suitable because the framework requires cross-national agreement on culturally responsive PE practices, suitable traditional games, age-appropriate adaptations, safety considerations, and assessment indicators. A two- or three-round Delphi process could help establish consensus on which traditional games are most feasible for school PE and which physical literacy outcomes should be prioritized.

Third, pilot intervention studies are required to test the framework in actual PE lessons. Short-term interventions could examine whether traditional games-based lessons improve students' motivation, confidence, movement competence, knowledge, cooperation, and enjoyment. These studies should avoid the common mistake of measuring only fitness or motor performance. A stronger design would include mixed-method evidence such as observation rubrics, student reflections, teacher interviews, and pre-post physical literacy measures.

Fourth, comparative Malaysia–Indonesia classroom studies should be developed. These could examine how teachers in both countries adapt similar games under different curriculum expectations, facilities, class sizes, and cultural contexts. Such studies would strengthen the regional contribution of the framework and prevent the collaboration from becoming superficial.

Finally, future research should explore teacher professional development. Even a strong framework will fail if teachers lack confidence, resources, or assessment literacy. Research should therefore investigate how PE teachers can be trained to design inclusive, safe, culturally responsive, and physical literacy-oriented traditional games lessons.

CONCLUSION

This paper argues that traditional games from Malaysia and Indonesia can be repositioned as meaningful pedagogical resources for developing physical literacy in school physical education. The central issue addressed in the paper is that PE is often reduced to isolated sport skills, fitness routines, or competitive performance. Meanwhile, students require broader learning experiences that develop motivation, confidence, movement competence, knowledge, social interaction, and lifelong engagement in physical activity. Physical literacy offers a stronger educational direction because it connects movement learning with health, personal meaning, and sustained participation beyond school.

The proposed framework integrates three key ideas: physical literacy, culturally responsive pedagogy, and game-based learning. This integration is important because each idea strengthens the others. Physical literacy clarifies the developmental goals of PE; culturally responsive pedagogy ensures that learning is connected to students' identities and local movement cultures; and game-based learning provides practical teaching strategies for decision-making, cooperation, tactical awareness, and inclusive participation. Through this integration, games such as *galah panjang*, *ting-ting*, *sepak raga*, *gobak sodor*, *engklek*, and *bentengan* can move beyond nostalgic or recreational use and become structured curriculum content.

The framework also highlights that successful implementation depends on teacher design. Traditional games must be adapted for class size, facilities, mixed ability, gender inclusion, and safety. Without thoughtful modification, these games may reproduce exclusion or remain informal play. With purposeful design, however, they can support active learning, cultural identity, social development, and physical literacy outcomes.

The paper contributes to PE curriculum and teaching scholarship by offering a regional, culturally grounded framework for Malaysia–Indonesia collaboration. Its value lies not only in preserving traditional games, but in transforming them into contemporary educational tools. Future empirical studies should validate the framework through expert review, Delphi studies, pilot interventions, and comparative classroom research. Ultimately, culturally responsive traditional games-based PE can help schools develop students who are not merely skilled performers, but confident, motivated, culturally connected, and physically literate movers for life.

REFERENCES

- Adnan, M., Shahrudin, S., Abd Rahim, B. H., & Ismail, S. M. (2020). Quantification of physical activity of Malaysian traditional games for school-based intervention among primary school children. *Journal of Taibah University Medical Sciences*, 15(6), 486–494. <https://doi.org/10.1016/j.jtumed.2020.09.006>
- Beni, S., Fletcher, T., & Ní Chróinín, D. (2017). Meaningful experiences in physical education and youth sport: A review of the literature. *Quest*, 69(3), 291–312. <https://doi.org/10.1080/00336297.2016.1224192>
- Bonato, G., Dinan Thompson, M., & Salter, P. (2024). Investigating Indigenous games as Indigenous knowledges and perspectives in PETE. A systematic literature review. *Curriculum Studies in Health and Physical Education*, 15(2), 182–201. <https://doi.org/10.1080/25742981.2023.2218350>
- Breed, R., Lindsay, R., Kittel, A., & Spittle, M. (2025). Content and quality of comparative tactical game-centered approaches in physical education: A systematic review. *Review of Educational Research*, 95(2). <https://doi.org/10.3102/00346543241227236>
- Cairney, J., Dudley, D., Kwan, M., Bulten, R., & Kriellaars, D. (2019). Physical literacy, physical activity and health: Toward an evidence-informed conceptual model. *Sports Medicine*, 49(3), 371–383. <https://doi.org/10.1007/s40279-019-01063-3>
- Dudley, D., Mackenzie, E., Van Bergen, P., Cairney, J., & Barnett, L. (2022). What drives quality physical education? A systematic review and meta-analysis of learning and development effects from physical education-based interventions. *Frontiers in Psychology*, 13, Article 799330. <https://doi.org/10.3389/fpsyg.2022.799330>

- Edwards, L. C., Bryant, A. S., Keegan, R. J., Morgan, K., & Jones, A. M. (2017). Definitions, foundations and associations of physical literacy. A systematic review. *Sports Medicine*, 47(1), 113–126. <https://doi.org/10.1007/s40279-016-0560-7>
- Ennis, C. D. (2017). Educating students for a lifetime of physical activity: Enhancing mindfulness, motivation, and meaning. *Research Quarterly for Exercise and Sport*, 88(3), 241–250. <https://doi.org/10.1080/02701367.2017.1342495>
- Fauzi, R. A., Suherman, A., Saptani, E., Dinangsit, D., & Rahman, A. A. (2023). The impact of traditional games on fundamental motor skills and participation in elementary school students. *International Journal of Human Movement and Sports Sciences*, 11(6), 1368–1375. <https://doi.org/10.13189/saj.2023.110622>
- Flory, S. B., & McCaughtry, N. (2011). Culturally relevant physical education in urban schools: Reflecting cultural knowledge. *Research Quarterly for Exercise and Sport*, 82(1), 49–60. <https://doi.org/10.1080/02701367.2011.10599721>
- Guthold, R., Stevens, G. A., Riley, L. M., & Bull, F. C. (2020). Global trends in insufficient physical activity among adolescents: A pooled analysis of 298 population-based surveys with 1.6 million participants. *The Lancet Child & Adolescent Health*, 4(1), 23–35. [https://doi.org/10.1016/S2352-4642\(19\)30323-2](https://doi.org/10.1016/S2352-4642(19)30323-2)
- Harvey, S., & Jarrett, K. (2014). A review of the game-centred approaches to teaching and coaching literature since 2006. *Physical Education and Sport Pedagogy*, 19(3), 278–300. <https://doi.org/10.1080/17408989.2012.754005>
- Kirk, D. (2010). *Physical education futures*. Routledge.
- Lundvall, S. (2015). Physical literacy in the field of physical education: A challenge and a possibility. *Journal of Sport and Health Science*, 4(2), 113–118. <https://doi.org/10.1016/j.jshs.2015.02.001>
- Mat Yusoff, S., Leng, C. H., Razak, R. A., Basal, M. H., Marzaini, M., & Farhan, A. (2024). Conceptions of assessment: Perceptions of physical and health education teachers in Selangor, Malaysia. *Pertanika Journal of Social Sciences & Humanities*, 32(1), 189–216.
- Mat Yusoff, S., Mohamed, A. M. D., Mohamad Marzaini, A. F., Mohd Radzi, F. A., Basal, M. H., & Hassan, M. H. (2025). Towards embodied criticality. Reframing physical education curriculum for whole person development. *Sport, Education and Society*, 1–16. <https://doi.org/10.1080/13573322.2025.2563694>
- Miller, A. (2015). Games centered approaches in teaching children and adolescents. Systematic review of associated student outcomes. *Journal of Teaching in Physical Education*, 34(1), 36–58. <https://doi.org/10.1123/jtpe.2013-0155>
- Pill, S., Evans, J. R., Williams, J., Davies, M. J., & Kirk, M. A. (2022). Conceptualising games and sport teaching in physical education as a culturally responsive curriculum and pedagogy. *Sport, Education and Society*, 27(9), 1005–1019. <https://doi.org/10.1080/13573322.2021.1964461>
- Qi, J., & Ha, A. S. (2012). Inclusion in physical education: A review of literature. *International Journal of Disability, Development and Education*, 59(3), 257–281. <https://doi.org/10.1080/1034912X.2012.697737>
- Shearer, C., Goss, H. R., Boddy, L. M., Knowles, Z. R., Durden Myers, E. J., & Fowweather, L. (2021). Assessments related to the physical, affective and cognitive domains of physical literacy amongst children aged 7 to 11.9 years. A systematic review. *Sports Medicine Open*, 7, Article 37. <https://doi.org/10.1186/s40798-021-00324-8>
- Sunanto, S., Tuasikal, A. R. S., Indahwati, N., Suryanti, S., Himawan, A., Purwoto, S. P., & Firmansyah, I. (2024). Models of traditional games in physical education and sports: Its effect on increasing the motor development of elementary school students. *Retos*, 61, 722–727. <https://doi.org/10.47197/retos.v61.107121>
- van Sluijs, E. M. F., Ekelund, U., Crochemore-Silva, I., Guthold, R., Ha, A., Lubans, D., Oyeyemi, A. L., Ding, D., & Katzmarzyk, P. T. (2021). Physical activity behaviours in adolescence: Current evidence and opportunities for intervention. *The Lancet*, 398(10298), 429–442. [https://doi.org/10.1016/S0140-6736\(21\)01259-9](https://doi.org/10.1016/S0140-6736(21)01259-9)
- Whitehead, M. (Ed.). (2010). *Physical literacy: Throughout the lifecourse*. Routledge.
- Wrench, A., & Garrett, R. (2021). Navigating culturally responsive pedagogy through an Indigenous games unit. *Sport, Education and Society*, 26(6), 567–578. <https://doi.org/10.1080/13573322.2020.1764520>