

Traditional Games in Basic Education: A Literature Review on Their Impact on Integral Development and Cultural Identity

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ABSTRACT:

This literature review analyzes the impact of traditional games in basic education, highlighting their pedagogical and cultural value beyond recreation. Findings reveal that their systematic implementation enhances psychomotor development through coordination, balance, and fine and gross motor skills; fosters interdisciplinary cognitive learning when integrated into STEAM approaches; and strengthens socio-emotional competencies such as self-esteem, cooperation, and self-regulation. Likewise, traditional games serve as an effective medium for preserving and transmitting cultural identity, reinforcing community values, traditions, and a sense of belonging in the context of globalization and digitalization that threaten these practices. Their inclusive nature is also evident, as they enable the participation of students with diverse abilities, promoting equity and diversity within the classroom. Methodologically, 235 records from Scopus and SciELO were reviewed, of which 12 met the Joanna Briggs Institute quality criteria. Results underscore the importance of incorporating traditional games into the school curriculum with a frequency of 2–3 sessions per week, accompanied by context-based pedagogical strategies and evaluation tools. In conclusion, traditional games constitute an integral, inclusive, and culturally relevant resource that strengthens the holistic formation of students.

Keywords: Traditional games, basic education, integral development, cultural identity, educational inclusion.

1. Introduction

In basic education, the integration of traditional games as a pedagogical strategy to enhance students' holistic development remains markedly insufficient, which significantly limits their potential as both educational and cultural resources. Despite constituting a pivotal mechanism for transmitting community values and constructing cultural identity, their use in classrooms has been increasingly displaced by more academicist and technology-driven methodologies. As a result, opportunities to strengthen socialization, creativity, and a sense of belonging are curtailed, thereby undermining not only cognitive and socio-emotional development but also the safeguarding of cultural heritage during childhood.

The United Nations Children's Fund (UNICEF, 2024) highlighted that, worldwide, 190 countries have formally recognized early childhood education as a cornerstone of child development; nevertheless, only 72 systematically embed traditional games within their pedagogical frameworks. In these contexts, evidence shows that 48 million children achieve superior levels of coordination, memory, and socialization when compared to models exclusively reliant on formal instruction (World Bank, 2022). Furthermore, the World Health Organization (WHO, 2023) reported that 39% of countries failing to incorporate such practices display significant psychomotor delays in early childhood, primarily attributable to the absence of play-based dynamics (World Bank, 2024). In parallel, UNICEF (2023) underscored that traditional games enhance cognitive and emotional skills, exerting a direct and lasting influence on subsequent academic performance.

In Latin America, the Inter-American Development Bank (IDB, 2024) reported that fourteen countries have introduced early childhood education programs that deliberately integrate traditional games, thereby reaching and benefiting more than nine million preschool-aged children. In national contexts such as Mexico, Colombia, and Chile, this pedagogical innovation has demonstrably enhanced fine and gross motor

development, while simultaneously fostering greater capacities for collective cooperation (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2023). Nevertheless, the Economic Commission for Latin America and the Caribbean (ECLAC, 2023) emphasized that six countries across the region continue to rely on rigid, instruction-centered models, which currently disadvantage approximately three million children by generating deficits in coordination and creative expression (United Nations Children's Fund [UNICEF], 2023a). In parallel, Education Cannot Wait (ECW, 2023) argued that the systematic absence of play-based practices not only constrains early stimulation but also deepens structural inequalities in child development, particularly when contrasting urban and rural environments.

In the Peruvian context, the National Institute of Statistics and Informatics (INEI, 2023) reported that 1.2 million children are enrolled in early childhood education; however, only 430,000 actively participate in pedagogical programs that systematically incorporate traditional games. Each year, approximately 85,000 children are identified with delays in basic motor skills, a condition largely attributable to the predominance of memorization-centered teaching (Ministry of Health of Peru [MINSA], 2023). Furthermore, the United Nations Children's Fund in Peru (UNICEF Peru, 2023b) warned that 36% of public educational institutions do not possess structured plans embedding play-based activities into their curricula (National Institute of Statistics and Informatics [INEI], 2020). In a similar vein, the National Center for Strategic Planning (CEPLAN, 2022) stressed that this deficiency undermines both psychomotor and socio-emotional development, limiting autonomy and creativity while widening disparities in comparison with contexts where traditional games constitute a central component of early education. Building on this scenario, the present article seeks to examine traditional games within basic education in order to elucidate their contribution to students' holistic development

and the preservation of cultural identity. Accordingly, it raises the following research question: How do traditional games contribute to the psychomotor, cognitive, and socio-emotional development of school-aged children? In parallel, it inquires: To what extent do these practices strengthen cultural belonging and promote the intergenerational transmission of community values? Finally, it interrogates: What pedagogical proposals and educational strategies emerge from the curricular incorporation of traditional games, and what benefits become evident in teaching-learning processes? In this regard, the study emphasizes the significance of traditional games as both educational and socializing resources in contemporary contexts. Moreover, it aspires to provide policy and pedagogical recommendations that foster their integration into school and community programs, thereby safeguarding this cultural heritage and enhancing its positive impact on the comprehensive formation of students.

2. Theoretical framework

The theory of play-based learning in early childhood education has been systematically situated within constructivist frameworks. Alharbi (2022) explained that play-based learning at this stage is grounded in Jean Piaget's constructivism, as he is recognized as one of the principal architects of twentieth-century child psychology. His theory asserts that knowledge is actively constructed through interaction with the environment, whereby play facilitates both the assimilation and accommodation of cognitive schemas (Veraksa et al., 2022). Moreover, Jorayeva (2025) highlighted that Lev Vygotsky expanded constructivism through a sociocultural perspective that underscores the decisive role of social interaction in child development. His concept of the zone of proximal development demonstrates that symbolic play strengthens cognitive and social competences, thereby fostering meaningful learning processes under adult mediation (Alharbi, 2022). Similarly, Veraksa et al. (2022) observed that the historical context of these theories coincided with the broader transition from traditional education to child-centered approaches. Ultimately, both

Piaget and Vygotsky converged on the premise that play constitutes an indispensable medium for exploration and knowledge construction in early childhood (Jorayeva, 2025).

In the sphere of early childhood education, play is conceptualized as a spontaneous and pleasurable practice that seamlessly integrates enjoyment with learning, thereby stimulating curiosity and fostering the construction of knowledge within a motivating environment. This dynamic incorporates cognitive, social, and emotional dimensions, enabling children to acquire competences holistically through free exploration and active interaction with both materials and peers. McLean et al. (2022) emphasize that, within this process, play does not constitute a mere pastime; rather, it functions as a pedagogical strategy that effectively bridges motivation and learning, thereby strengthening children's capacity for problem-solving and cooperative interaction.

From a complementary perspective, Cade (2023) emphasizes the symbolic dimension of play, insofar as it enables the imitation and representation of everyday situations, thereby enhancing children's understanding of their environment and facilitating language acquisition. Furthermore, Yin et al. (2022) stress that the flexibility and creativity inherent in these activities serve to reinforce critical thinking and foster autonomy in childhood. In this vein, Pyle et al. (2023) contend that the pedagogical value of play resides in its unique capacity to harmonize cognitive, social, and emotional dimensions, ultimately establishing it as an indispensable resource for holistic development.

Psychomotor development represents a foundational process in childhood, as it integrates the progression of motor and cognitive capacities that underpin the coordination of movements, the acquisition of bodily skills, and the gradual achievement of autonomy. This developmental trajectory encompasses both gross motor skills—such as walking, running, or climbing—and fine motor skills, linked to object manipulation and the precise use of hands and fingers (Amorim et al., 2024). Furthermore, it unfolds as a sequential

and cumulative pathway in which each stage advances from simple to complex, while simultaneously accommodating individual rhythms and consolidating the essential bases for independence and early learning (Rojo-Ramos et al., 2022).

In this vein, Cedeño-Roldán and Reyes-Meza (2022) emphasize that psychomotor development functions as a bridge between body and mind, integrating movement with cognition and sensory perception. The practice of physical activities stimulates the nervous system and enhances coordination, thereby contributing to physical balance and the mastery of new skills, while the integration of visual, auditory, and tactile stimuli reinforces both body and spatial awareness. These experiences strengthen children's self-confidence, stimulate intrinsic motivation, and foster emotional security when facing new challenges (Silva-Moya et al., 2022). Moreover, psychomotor development is not only associated with individual achievements but also with socialization. Through games and group dynamics, children learn to cooperate, share, and respect rules, which in turn reinforces coexistence and the building of bonds within school and family contexts (Amorim et al., 2024). In this regard, Pisco Llor et al. (2024) argue that revaluing motor activities in early childhood education is essential to consolidating holistic learning, insofar as they combine cognitive, emotional, and social dimensions within an environment of active and meaningful exploration.

Studies reveal an urgent need to integrate traditional games into the educational sphere, underscoring the substantial support of teachers for the implementation of an innovative pedagogical model. This research advances a culturally responsive approach that incorporates folkloric games into the development of children's creative movement. By valorizing ancestral games from diverse cultures, the study reinforces perspectives on inclusive teaching and highlights the essential role of movement in early childhood (Saarani et al., 2024).

Despite the proven effectiveness of traditional games in promoting motor, cognitive, emotional, and social development in early childhood education, persistent challenges continue to constrain their incorporation into classroom practice, as teachers design few pedagogical actions specifically directed toward their implementation. Moreover, within the contemporary context of accelerated technological advancement, traditional games are at risk of being displaced by digital alternatives, thereby jeopardizing their cultural and pedagogical preservation. This trend may significantly reduce children's opportunities to strengthen essential skills through play-based experiences grounded in their cultural environment. Accordingly, it is essential to reconsider how these practices are integrated into curricula and pedagogical activities (Martínez Araujo et al., 2024). Likewise, at the level of formal schooling, a growing concern has emerged regarding the preservation and use of traditional games, which remain fundamental for holistic growth and cultural formation during childhood. Currently, these practices are increasingly supplanted by structured sports, passive play, and electronic games, thereby eroding intergenerational cultural bonds. This situation, compounded by the limited transmission of cultural practices within families, negatively affects the development of motor skills, the internalization of values, and the consolidation of children's cultural identity. Furthermore, the marked preference among children for electronic games exacerbates the disconnection from ludic heritage. Consequently, there is an urgent need to recover and systematically incorporate traditional games into the educational curriculum (Calderón et al., 2023).

An evident challenge in early childhood education lies in the limited integration of traditional games as both pedagogical and cultural tools. The absence of clear strategies for their incorporation into classrooms prevents young children from experiencing and valuing these cultural expressions from an early age. This situation not only constrains cultural transmission but also hinders the development of

social and motor skills that such games could otherwise foster (Guapi Guamán, 2021). Despite the recognition of traditional games as valuable pedagogical resources for transmitting cultural values, worldviews, cultural identity, and supporting the holistic growth of children in their early years, persistent difficulties remain regarding their limited application and the adaptation of strategies within concrete educational contexts. Moreover, the prevailing tendency toward early sports specialization and a focus on individual performance directly contradict the inclusive and community-oriented spirit of traditional games (Morejon Calixto et al., 2024).

3. Methodology

The present study was undertaken through a bibliographic review of scientific literature, designed to identify, analyze, and synthesize the current state of knowledge regarding the impact of traditional games on holistic development and cultural identity in basic education. This methodological approach enables the establishment of thematic patterns, the detection of conceptual gaps, and the identification of pedagogical relationships documented in previous research, thereby ensuring both the traceability and replicability of the process. The literature searches were conducted in the Scopus and SciELO databases, which were deliberately selected for their recognized relevance in the domains of education, social sciences, and culture.

Controlled terms and Boolean operators were employed to optimize the search results. The search combinations applied were as follows:

“juegos tradicionales”, “educación básica” and “desarrollo integral”

“juegos tradicionales” or “identidad cultural” or “educación infantil”

“juegos tradicionales” and (“psicomotricidad” or “habilidades motoras”)

“juegos tradicionales” and (“aprendizaje” or “cultura”)

“educación básica” and “juegos tradicionales” or (“identidad cultural”)

These search strings were subsequently adapted to the search engine of each database, thereby ensuring both the comprehensiveness and accuracy of the information retrieved.

Selection Criteria

The following inclusion criteria were established:

Articles published between 2020 and 2025.

Empirical studies employing quantitative, qualitative, or mixed methods, as well as systematic reviews addressing traditional games in education.

Publications that explicitly examined their impact on psychomotor, cognitive, socio-emotional development, or on cultural identity.

The exclusion criteria were as follows:

Conference proceedings, book chapters, narrative reviews, and letters to the editor.

Articles without full-text access.

Studies that did not provide an original contribution or that focused exclusively on sports or digital video games unrelated to traditional games.

Selection and Organization of Studies

The selection process was carried out in several phases to guarantee both the relevance and quality of the included studies. Initially, 235 scientific articles were identified, from which duplicates were removed and titles and abstracts were screened. Subsequently, the thematic relevance of the full texts was assessed. Ultimately, 12 investigations published between 2020 and 2025 were retained, eleven indexed in Scopus and one in SciELO.

Extraction and Interpretation of Information

An analysis sheet was designed to collect the key elements of each study: authorship, year, country, journal, methodology, objectives, main findings, and contributions. These data were then systematized into a comparative matrix, thereby identifying convergences and divergences in educational and cultural approaches, which in

turn enabled the construction of a comprehensive overview of the topic.

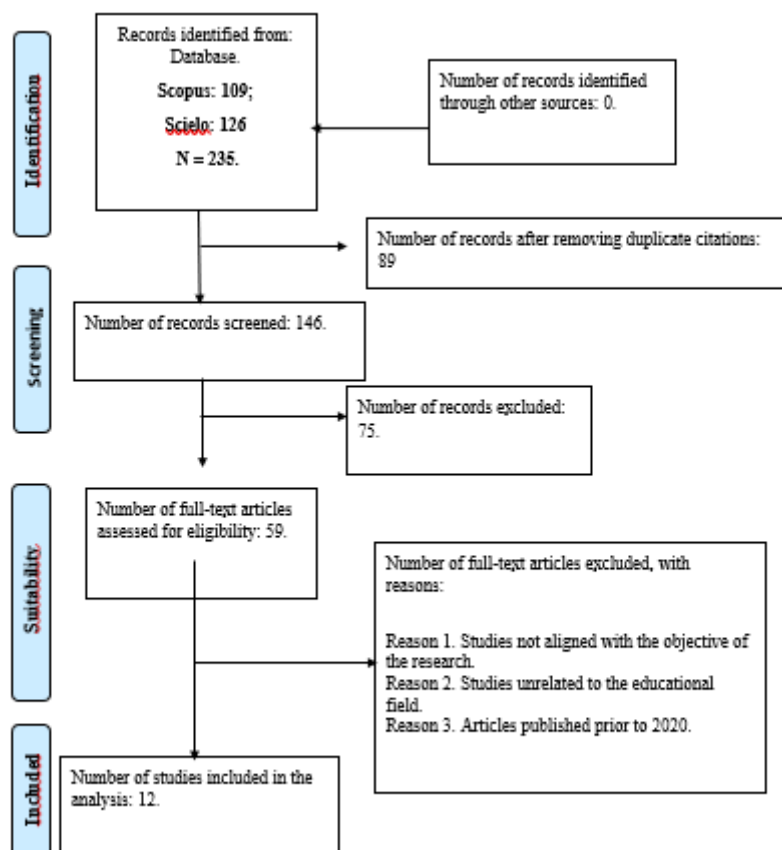
Quality Appraisal

To ensure methodological validity, the criteria of the Joanna Briggs Institute (JBI) were applied. Each study was evaluated according to its design, internal consistency, and clarity of presentation. The selected works met the minimum quality standards, providing sufficient evidence to analyze the benefits of traditional games in basic education.

Of the 235 records initially identified, only 12 studies were included in the final analysis after a rigorous process of refinement and critical

evaluation. The reduction was due to three principal factors: (a) the exclusion of duplicates and articles without full-text access; (b) the elimination of studies that did not explicitly address traditional games in relation to holistic development or cultural identity; and (c) the application of JBI criteria to assess the methodological quality of the studies. This instrument made it possible to evaluate aspects such as research design coherence, clarity of presentation, relevance of objectives, and consistency of reported results. Only those studies that reached an acceptable level of quality were retained, thereby ensuring that the final analysis rests on solid, pertinent, and comparable evidence.

Figure 1. Process of the systematic bibliographic review of the literature.



Subsequent to the identification and screening process illustrated in Figure 1, the methodological quality of the selected studies was thoroughly assessed. To this end, the criteria of the Joanna Briggs Institute (JBI) were applied, taking into account elements such as research

design, methodological clarity, internal consistency, and thematic relevance. Table 1 synthesizes the outcomes of this appraisal and, in doing so, substantiates the final inclusion of 12 articles in the comparative analysis.

Table 1. Methodological quality appraisal of the scientific articles included (JBI criteria).

Author and year	Study design	Methodological Clarity	Internal Consistency	Thematic relevance	Overall Quality (JBI)
Calderón Villa et al. (2023)	Theoretical–empirical (theoretical and empirical methods)	High	High	High	✓ Included
Orak et al. (2020)	Qualitative, case study	Medium	High	High	✓ Included
Ketut et al. (2024)	Quantitative descriptive	High	High	High	✓ Included
Espigares et al. (2020)	Qualitative interpretative, case study	High	Medium	High	✓ Included
Siregar et al. (2021)	Quantitative and qualitative	Medium	Medium	High	✓ Included
Budiman et al. (2021)	Quasi-experimental	High	High	High	✓ Included
Mamani Huayanca (2023)	& Quantitative correlational and experimental	High	High	High	✓ Included
Wibowo et al. (2023)	Quantitative correlational	Medium	High	High	✓ Included
Suteja et al. (2022)	Research and Development (R&D)	High	High	High	✓ Included
Santoso et al. (2024)	Experimental pretest–posttest	High	High	High	✓ Included
Hendra et al. (2021)	Experimental	High	High	High	✓ Included
Thuc et al. (2024)	Quasi-experimental	High	High	High	✓ Included

Table 2 presents the information corresponding to each reviewed article, highlighting that 10 of them are indexed in the Scopus database and 2 in SciELO. For each publication, variables such as

authorship, year of publication, study title, methodology, main findings, and final contributions were taken into account, thereby ensuring a comprehensive comparative analysis.

Table 2. Characteristics of the scientific articles analyzed.

Author(s)	Study Title	Methodology	Country	Year	Database
Calderón Villa et al. (2023).	Traditional games for the different parts of Physical Education classes	Theoretical methods (historical–logical) and empirical methods	Cuba	2023	Scielo
Orak et al. (2020).	Adaptation of traditional children's games to the social studies curriculum: STEM course design for teachers	Qualitative research, case study	Turkey	2020	Scopus
Ketut et al. (2024).	Effectiveness of the motor learning model based on local wisdom to improve fundamental skills	Quantitative Descriptive	Indonesia	2024	Scopus
Espigares et al. (2020)	Games as enhancers of STEAM learning: Application of traditional Jamaican games in intercultural Early Childhood and Primary Education	Qualitative interpretative research, case study	Jamaica	2020	Scopus
Siregar et al. (2021)	The basic learning model of traditional movement-based games for early childhood (ages 5–6)	Quantitative and qualitative approaches	Indonesia	2021	Scopus
Budiman et al., (2021)	Enhancing self-esteem through Sundanese traditional games and sports in physical education	Quasi-experimental	Indonesia	2021	Scopus
Mamani & Huayanca, (2023).	Traditional games as enhancers of socio-psychomotor inclusion in Primary Education students with learning difficulties	Quantitative, correlational experimental	and Spain	2023	Scopus
Wibowo et al. (2023)	Physical activities, traditional games, and Javanese culture, particularly Wayang Kulit	Quantitative correlational	Indonesia	2023	Scopus
Suteja et al., (2022)	A traditional child-rearing model based on play as a means of cultural heritage in early childhood education	Research and Development (R&D)	Indonesia	2022	Scopus
Santoso et al. (2024)	Evaluation of the effect of traditional games on manipulative movements of primary school students by gender	Experimental pretest–posttest study	Ukraine	2024	Scopus
Hendra et al. (2021)	The effect of traditional games and motor exercises on skills (running, jumping, overhead throwing, and catching) in primary schools	Experimental method	Indonesia	2021	Scielo

The use of traditional games in physical education classes improves physical fitness and stabilizes the vestibular system of children aged 10–11

Thuc et al. (2024) Quasi-experimental study of children aged 10–11

Vietnam 2024 Scopus

3. Results

The studies reviewed in Table 3 demonstrate that traditional games exert an impact on child development across multiple dimensions—psychomotor, cognitive, socio-emotional,

cultural, and inclusive. They foster motor skills, meaningful learning, and the cultivation of values such as cooperation, identity, and respect. Consequently, they are consolidated as a comprehensive pedagogical strategy that transcends the merely recreational sphere.

Table 3. Main characteristics of the reviewed studies analyzed.

Subtheme	Authors	Main findings	Relevant Contributions and Convergences
Psychomotor	Calderón Villa et al. (2023); Ketut et al. (2024); Siregar et al. (2021); Santos et al. (2024); Hendra et al. (2021); Thuc et al. (2024)	Improvements in coordination, spatial orientation, vestibular balance, and locomotor, non-locomotor, and manipulative skills. Traditional game-based models foster psychomotor development in contexts of joy and collaboration.	Converge in highlighting that traditional games foster fundamental motor skills and overall motor development. Complementarity is observed: while Hendra et al. emphasize the combination with guided exercises, other authors underscore the sufficiency of traditional games as the primary strategy.
Cognitive / STEAM	Orak et al. (2020); Espigares et al. (2020)	Traditional games integrated into STEM courses promote active, meaningful, and kinesthetic learning; they mobilize artistic, mathematical, and scientific capacities in intercultural contexts.	Converge in asserting that traditional games activate cross-curricular learning and can be embedded in STEAM curricula, fostering problem-solving, logical reasoning, and creativity. They stress the value of intercultural approaches (e.g., Jamaican games).
Socio-emotional	Budiman et al. (2021); Hendra et al. (2021)	Traditional games increase self-esteem, promote emotional well-being, and strengthen cooperation and school coexistence.	Converge in showing that traditional games, beyond motor development, serve as key socio-emotional tools: they enhance self-esteem, reinforce social feedback, and foster harmonious coexistence.
Cultural Identity	Calderón Villa et al. (2023); Ketut et al. (2024); Wibowo et al. (2023); Suteja et al. (2022)	Traditional games transmit values, knowledge, and cultural bonds (Balinese, Javanese, ancestral child-rearing). Concern exists regarding declining youth interest in cultural expressions (e.g., Wayang Kulit).	The studies underscore the cultural function of traditional games: they strengthen identity and belonging. Wibowo warns of the risk of substitution by external influences, raising challenges for cultural preservation within formal education.

Inclusion	Mamani & Huayanca (2023); Budiman et al. (2021)	Traditional games improve self-esteem, motor skills, and participation in students with learning barriers. They foster diversity, respect, and confidence.	Confirm that traditional games are an effective inclusive strategy in Physical Education: they enable the participation of students with diverse abilities, consolidating their role as a key resource for educational equity.
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Table 4 brings together the main characteristics identified by various authors regarding traditional games and their impact within the educational sphere. These are organized according to their contributions to psychomotor, cognitive, socio-

emotional, and cultural development, thereby evidencing how such ludic practices, beyond enhancing physical and cognitive skills, also constitute a vehicle for cultural and identity transmission.

Table 4. Characteristics of traditional games grouped by authors that contribute to integral development and cultural identity.

Authors	Highlighted Characteristics of Traditional Games	Impact on Development	Integral Contribution to Cultural Identity
Calderón Villa et al. (2023)	Spatial orientation, motor coordination, body expression.	Foster physical and cognitive development in diverse contexts.	Strengthen values and cultural identity without the need for sophisticated resources.
Orak et al. (2020)	Integration into STEM courses, kinesthetic learning.	Promote meaningful, social, and cognitive learning.	Revalorize intercultural practices through play.
Ketut et al. (2024)	Based on Balinese wisdom (MMLBB), joy, and collaboration.	Strengthen basic motor skills in early childhood education.	Cultivate love and belonging to national culture from an early age.
Espigares et al. (2020)	Mobilize artistic, mathematical, and scientific capacities.	Stimulate logical, creative, and interdisciplinary thinking.	Reinforce intercultural values with an ethnomathematical approach.
Siregar et al. (2021)	Motor movement models in early childhood.	Develop locomotor, non-locomotor, and manipulative skills.	Link traditional practices to initial motor learning.
Budiman et al. (2021)	Sundanese games with social feedback.	Improve self-esteem, emotional well-being, and school coexistence.	Preserve ethnic cultural practices as an educational tool.
Mamani & Huayanca (2023)	Inclusion in Physical Education.	Strengthen motor skills, self-esteem, and confidence in students with learning barriers.	Promote respect for diversity and social integration.
Wibowo et al. (2023)	Javanese games, risk of declining youth interest.	Stimulate psychomotor, cognitive, and affective skills in adolescents.	Warn of the need to preserve traditions in the face of external influences.

Suteja et al. (2022)	Ancestral games applied in child-rearing.	Foster cognitive and social development in early childhood.	Transmit knowledge and strengthen ties with cultural roots.
Santoso et al. (2024)	Improvements in throwing, catching, and kicking.	Strengthen motor learning in students.	Contribute to the preservation of traditional sports practices.
Hendra et al. (2021)	Combination of guided exercises and games.	Enhance motor skills and social cooperation.	Highlight complementarity between tradition and modern strategies
Thuc et al. (2024)	Games applied in basic education.	Improve balance, coordination, and physical fitness.	Consolidate traditional games as a pedagogical tool that remains valid and relevant today.

From the comparative analysis, it becomes evident that traditional games display a multidimensional character: they foster children's holistic development by stimulating both gross and fine motor skills (Calderón Villa et al.; Siregar et al.; Thuc et al.); moreover, they promote active and interdisciplinary learning when integrated into formal educational contexts such as STEM programs (Orak et al.; Espigares et al.); and, in addition, they strengthen self-esteem, cooperation, and socio-emotional well-being (Budiman et al.; Mamani & Huayanca).

In parallel, a robust cultural dimension becomes evident: Ketut et al., Suteja et al., and Wibowo et al. converge in asserting that traditional games embody the transmission of ancestral values and knowledge, thereby consolidating collective identity against external influences that jeopardize their continuity. This dual significance—both pedagogical and cultural—ultimately elevates traditional games to the status of a pivotal instrument for holistic education, insofar as they not only nurture academic and physical competences but also safeguard and revitalize cultural identity across emerging generations.

The results of this review demonstrate that traditional games constitute an effective pedagogical strategy precisely because they operate through multiple and complementary mechanisms. First, they generate meaningful motor practice by providing varied and

contextualized movements that strengthen coordination, balance, and manipulative skills. Second, they foster symbolization and cognitive learning by linking play experiences with disciplinary contents such as science, mathematics, or the arts, as evidenced by STEAM-oriented approaches. Third, they promote cooperation and socio-emotional regulation, insofar as they require interaction, negotiation of rules, and conflict resolution within inclusive environments. Finally, they reinforce cultural relevance by transmitting values, traditions, and a sense of belonging to the community, which ultimately positions traditional games as a comprehensive formative resource. Regarding the comparison across contexts, studies conducted in Asia (Indonesia, Vietnam, Thailand) underscore the nexus between play and local wisdom, whereas research in Latin American and Caribbean settings (e.g., Jamaica, Peru) highlights their intercultural and ethnomathematical potential. This cultural diversity confirms that, although the underlying mechanisms are universal, their effectiveness ultimately depends on the extent to which they are adapted to the specificities of each educational and socio-cultural context.

With regard to the conditions of effectiveness, the results suggest that curricular integration proves more robust when traditional games are implemented at a frequency of two to three sessions per week, each lasting approximately 20

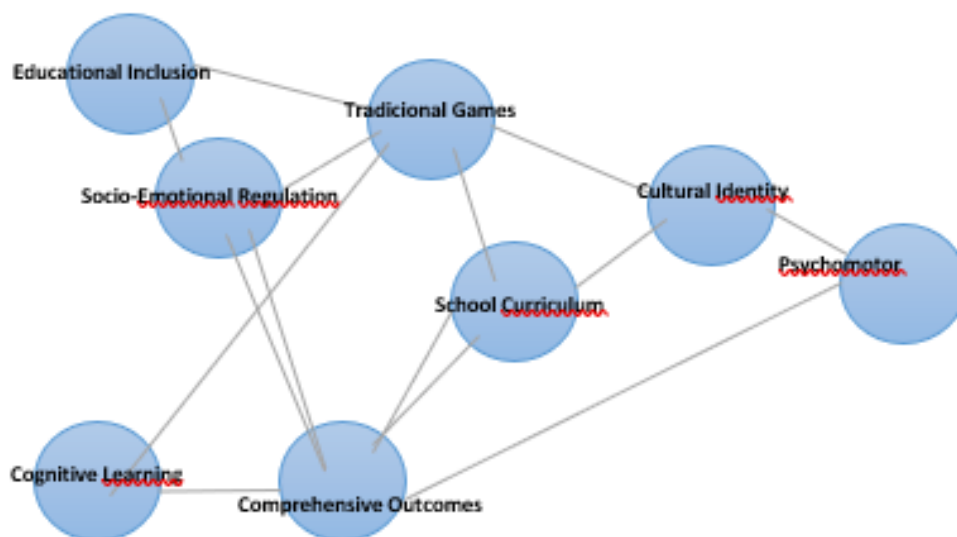
to 30 minutes, and following a pedagogical sequence that explicitly links playfulness with motor, cognitive, and socio-emotional objectives. Moreover, the most successful interventions are those that combine free activities with moments of teacher guidance, thereby ensuring both spontaneity and pedagogical orientation.

Nevertheless, significant research gaps remain: the majority of studies employ cross-sectional or short-term quasi-experimental designs, which restrict the analysis of long-term impacts; in addition, there is considerable heterogeneity in the measures applied—ranging from motor skill rubrics to self-esteem questionnaires—thus hindering meaningful comparisons across investigations; and finally, geographical coverage remains uneven, with scarce evidence from

African and European countries where traditional games equally hold considerable educational potential.

In an integrative manner, a conceptual model can be proposed that connects the elements reviewed: when embedded in school contexts, traditional games activate mechanisms of meaningful motor practice, cognitive symbolization, socio-emotional cooperation, and cultural relevance; these mechanisms, in turn, generate observable outcomes in psychomotor development, interdisciplinary learning, educational inclusion, and cultural identity. Such a model demonstrates that traditional games are not merely recreational activities but rather genuine mediators of comprehensive learning and civic formation.

Figure 2. Conceptual Model of Traditional Games in Basic Education



The model illustrates how traditional games operate as an articulating axis of multiple dimensions: psychomotor development, cognitive learning, socio-emotional regulation, cultural identity, and educational inclusion. When these mechanisms are integrated into the curriculum, they generate comprehensive formative outcomes in students. The figure thus synthesizes the idea that traditional games are not merely recreational practices but rather pedagogical and cultural mediators with a profound impact on holistic education,

educational equity, and the preservation of community identity.

4. Discussion

Impact on Children's Psychomotor, Cognitive, and Socio-Emotional Development

The evidence gathered in this review underscores that traditional games constitute a pedagogical resource with a substantial impact on children's holistic development, although their effects display significant variation according to context, research design, and target population. At the

psychomotor level, a broad convergence of studies confirms that traditional games enhance coordination, balance, as well as locomotor and manipulative skills (Ketut et al., 2024; Siregar et al., 2021; Thuc et al., 2024; Santoso et al., 2024). Yet, noteworthy divergences emerge: while Ketut et al. (2024) and Thuc et al. (2024) highlight improvements in fine motor coordination through short, collective games, Santoso et al. (2024) documents sustained gains in strength and postural control following extended programs. Such findings indicate that practice frequency and duration remain critical but insufficiently standardized variables, thereby constraining the possibility of direct comparability across studies.

From a cognitive perspective, traditional games have been shown to stimulate environmental awareness, problem-solving capacity, and logical reasoning, particularly when integrated into pedagogical models grounded in STEAM (Orak et al., 2020; Espigares et al., 2020). Nevertheless, their impact is mediated by disciplinary focus: whereas Orak et al. (2020) report positive outcomes among pre-service teachers through STEM designs applied to the social sciences, Espigares et al. (2020) stress their contribution to creativity and the transfer of competencies to scientific learning contexts. This diversity of approaches demonstrates that the curricular contextualization and disciplinary adaptation of games are decisive factors conditioning their effectiveness on higher-order cognitive functions.

From a socio-emotional perspective, the findings are equally consistent in highlighting the strengthening of self-esteem, cooperation, and the appreciation of cultural diversity (Budiman et al., 2021; Mamani & Huayanca, 2023). Nevertheless, while Budiman et al. (2021) focuses on group cohesion and the reduction of school-related anxiety in Asian contexts, Mamani and Huayanca (2023) demonstrate that, in Latin American settings, traditional games foster inclusion and cultural equity, thereby reinforcing a sense of belonging. These contextual differences suggest that traditional games not only promote universal socio-emotional skills but also embody local cultural identity, ultimately

functioning as a bridge between tradition and schooling.

Despite these convergences, the evidence reveals significant methodological limitations. Most of the reviewed studies employ non-experimental or quasi-experimental designs, with small samples and heterogeneous intervention durations, thereby introducing biases and constraining generalizability. Moreover, the absence of comparative meta-analyses and the scarcity of longitudinal research restrict the assessment of the sustained impact of such practices. It is therefore imperative to advance toward investigations based on more robust designs, standardized measures of psychomotor skills and socio-emotional competencies, and greater cultural and geographical diversity in order to consolidate the evidence.

Taken together, the results support the incorporation of traditional games into educational planning as a tool for fostering holistic, active, and inclusive learning from early childhood. Nevertheless, their effectiveness ultimately hinges on pedagogical adaptation, curricular systematization, and the recognition of the specific socio-cultural contexts in which they are implemented.

Contribution to Cultural Identity

The reviewed studies concur that traditional games play a central role in the construction of cultural identity, conceived as a dynamic process initiated in childhood through the internalization and experience of community practices (Calderón Villa et al., 2023; Suteja et al., 2022; Wibowo et al., 2023). The evidence demonstrates that participation in these dynamics not only provides recreational benefits but also functions as a cultural vehicle, enabling children to establish affective bonds with their social environment, reinforce their sense of belonging, and consolidate shared values, norms, and traditions. In this regard, Calderón Villa et al. (2023) emphasize how such games strengthen the transmission of ancestral knowledge, while Suteja et al. (2022) underscore their capacity to revitalize local customs through intergenerational practice. Likewise, Wibowo et al. (2023) highlight the

formative role of these games in shaping community values, showing that they operate as an effective pedagogical means for preserving cultural memory within school contexts. Nevertheless, this cultural function of traditional games faces significant challenges in the context of globalization and digitalization. Although the reviewed studies document their contribution to cultural preservation, they also reveal a progressive disengagement among younger generations, who increasingly perceive electronic and transnational games as more appealing alternatives due to their visual dynamism, immediate interactivity, and alignment with contemporary narratives. This phenomenon, described in the analyses of Wibowo et al. (2023), displaces traditional play practices and reduces opportunities for the intergenerational transmission of social norms and values, thereby posing a threat to cultural diversity and the continuity of ancestral practices. Accordingly, the review reveals a tension between the persistence of local cultural practices and the influence of digital modernity, which calls for intentional action through educational policy and curricular planning. In this sense, it is recommended that traditional games be systematically incorporated into school and community programs, not merely as recreational resources but as pedagogical strategies for the preservation of cultural identity, thereby ensuring students' comprehensive formation and reinforcing the socio-cultural fabric across both school and intergenerational contexts.

Pedagogical Strategies Derived and Benefits of Their Implementation

The reviewed literature reveals that traditional games possess remarkable pedagogical versatility, enabling their application under multiple methodological approaches that reinforce motor learning as well as cognitive and socio-emotional processes (Ketut et al., 2024; Orak et al., 2020; Hendra et al., 2021). In the domain of motor learning, Ketut et al. (2024) demonstrate that their systematic practice fosters the development of both basic and complex motor skills, thereby consolidating comprehensive psychomotor progress. These findings converge in showing

that the combination of physical activity with playful stimulation proves more effective than conventional methodologies of repetitive exercise, thus reinforcing the importance of integrating games into physical education programs.

With regard to educational inclusion, traditional games have shown significant potential for integrating students with diverse abilities, since they allow the adaptation of rules, roles, and levels of demand. This promotes equity and strengthens respect for diversity within the classroom—elements that Hendra et al. (2021) identify as essential for ensuring the active participation of students with learning difficulties or at risk of social exclusion. Their implementation not only guarantees participation but also enhances intrinsic motivation and self-regulation, dimensions that are key to consolidating learning in heterogeneous environments.

In the context of physical education, these games have been incorporated into curricula as tools that stimulate not only physical fitness but also social competences such as cooperation, empathy, and conflict resolution. Nevertheless, the value of their implementation transcends disciplinary boundaries. Within interdisciplinary approaches—particularly in STEM-oriented courses—Orak et al. (2020) demonstrate how traditional games can be re-signified as strategies for contextualizing abstract concepts and facilitating complex learning through culturally relevant and playful experiences. In this way, games operate as a bridge between bodily movement and the active construction of knowledge, ultimately generating experiential and multisensory learning.

Taken together, these didactic strategies enable the creation of educational environments that are active, inclusive, and culturally relevant—settings in which ancestral knowledge is recognized and valued, creativity is enhanced, and meaningful learning is fostered. The curricular integration of traditional games, by linking bodily movement with the acquisition of knowledge, exerts a positive impact on both the quality of learning

and the construction of a more equitable and motivating school experience. This, in turn, reinforces the imperative of their planned and sustained implementation, particularly in contexts where cultural diversity and social inequalities demand pedagogical strategies that are both sensitive and inclusive. Explain implications for theory, practice, or policy

5. Conclusion

This literature review has addressed the three central questions formulated in the study. First, concerning the impact of traditional games on psychomotor, cognitive, and socio-emotional development, the findings consistently converge in demonstrating that these practices strengthen fundamental motor skills, enhance coordination, balance, and manipulative abilities, while at the same time fostering interdisciplinary cognitive learning and socio-emotional regulation.

Second, with regard to the construction of cultural identity, the reviewed studies confirm that traditional games constitute an effective vehicle for transmitting values, traditions, and cultural belonging, thereby contributing substantially to reinforcing both the individual and collective identity of students.

Third, it has been verified that traditional games represent a viable pedagogical strategy for educational inclusion, insofar as they facilitate the participation of students with diverse abilities, improve self-esteem, and strengthen social interaction, thus promoting equity and respect for diversity within the classroom. On the basis

of this evidence, three key orientations are outlined:

- a) Operational curricular recommendations: the systematic incorporation of traditional games into the Physical Education curriculum and interdisciplinary areas, with a frequency of two to three sessions per week lasting 20 to 30 minutes, accompanied by standardized motor skill evaluation rubrics (coordination, manipulation, balance) and adaptations aligned with the educational level.
- b) Implications for teacher training and educational policy: the promotion of teacher development programs that integrate the pedagogical use of traditional games, together with policy frameworks that advance intercultural and inclusive education as well as school health promotion.
- c) Future lines of research: the design of controlled trials and longitudinal studies, the use of standardized measures for psychomotor development and socio-emotional competencies, and the implementation of comparative intercultural investigations aimed at establishing conditions of effectiveness across different contexts.

In synthesis, traditional games should not be regarded as mere recreational practices but rather as a comprehensive pedagogical resource that enhances psychomotor, cognitive, socio-emotional, cultural, and inclusive development, thereby consolidating their role as a strategic axis for educational innovation.

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Confirm originality of work

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