Boosts and Setbacks of Implementing Indigenous Filipino Games: Perspectives from Curriculum's Stakeholders

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Abstract: Filipinos had enjoyed playing indigenous games long before any other games. Little is known about traditional games and their perspectives among educational stakeholders who support their preservation in the educational system for emerging countries like the Philippines. This study aimed to explore the viewpoints of educational stakeholders regarding integrating indigenous games into the curriculum. A scoping design was used to review pertinent journal articles. Thus 14 were considered after screening and filtering the searched records in three databases. It was found that stakeholders have both positive and negative perspectives on the said implementation. They perceived that implementing indigenous Filipino games a) promotes cultural heritage, b) facilitates convenient learning, and c) strengthens the foundation values, health, and socialization. However, there are some setbacks, like a) limitations in using traditional games in the classroom and b) the endangerment of indigenous Filipino games due to the fast growth of e-games. Therefore, a call to action among curriculum implementers to revisit what areas need to be strengthened in implementing indigenous games despite the continuous advancements of technology that paved the emergence of modern games and even the prioritization of sports games. Although support from the community is needed, and more mandates from the local government to promote these games in playing, especially outside school.

Keywords: Philippine indigenous games, Perspectives, Curriculum stakeholders, Scoping review

1. Introduction

Games have always been a way to feel at ease every time. Since they bring a positive vibe, their features can be used to modify behavior, especially in their application in education (Orejuela, 2022). While the Philippines is rich in folk music and ethnic melodies, it is also rich in traditional games ingrained in the minds and souls of Filipino children (Siregar, 2019). Back in the day, before technology and online games existed, Filipino youngsters enjoyed playing what is now known as traditional games (Booc, et al., 2019; Mozar, 2020). Children frequently play traditional Filipino or indigenous games in the Philippines, typically using local resources or equipment. Filipino kids create games that require the players to themselves because there are few toys. The intricacy of the results of their games arises from their ability to think and behave freely (Mozar, 2020; Villar, 2010).

Historically, the country's indigenous games (also known as the *laro ng lahi*, or traditional games)

were incorporated into the physical education curriculum, particularly at the elementary level, thanks to "Senate Bill 1108" written by Villar (Villar, 2010) and "House Bill 2675" written by Arroyo (Arroyo, 2013) which is an act to include traditional games and sports in the physical education (P.E.) courses in all levels of educational institutions and sports activities of local government units. So aside from integrating it into basic education (Trajkovik, *et al.,* 2018; Villar, 2010), the main goal is to teach them traditional games at a young age better preserve this cultural heritage, and this was pursuant to House Bill No. 8626 or the Philippine Indigenous Games Preservation Act of 2017, which supports preserving these traditional games by any means possible. One example is regular demonstrations of such games in national events, appropriate school activities, and the local government units' sports activities (Booc, *et al.,* 2019). These laws are still in effect today and are still observed in the country's provinces during local festivals. In addition, some Filipino games are integrated into postsecondary

Physical Education classes with a similar goal. Also, other universities integrate into one of the 'Physical Education' subjects covering "Philippine Games" (Tondo *et al.,* 2015).

Moreover, many studies (Iasha *et al.,* 2020; Kenanoglu & Duran, 2021; Moro & Billote, 2023) proved that other subjects besides Physical Education used traditional games to implement their lessons since students can easily learn when traditional games are incorporated into the lesson. Furthermore, given that learning is essential, it has been found that learning takes place when students enjoy the learning process because they can relate to what they know; therefore, it can be done according to the student's interest in traditional games (Asrizal *et al.,* 2018; Kamid *et al.,* 2022; Moro & Billote, 2023; Mutakinati *et al.,* 2018).

Consequently, children still like playing these activities as long as appropriate supervision is provided since they are less closely watched, giving them freedom. Youths can freely and without boundaries realize their thoughts while engaging in these traditional activities. With such a rich imagined environment, children may engage in these activities without any restrictions, significantly impacting all their developmental areas, particularly language development (Basal, 2017), encouraging them to become familiar with local customs and traditions and passing on practically extinct traditional games from generation to generation and make them visible to the next generation (Salam, 2016). After all, playing online games for an extended period has more harmful impacts than playing traditional games leading to the need for supervision among the youths (Kovacevic & Opic, 2014). Long-term gains will come from raising Filipinos' knowledge and passion for participating in traditional real-world games (Santos *et al.,* 2019).

Hence, traditional games in education are still prevalent today because of the laws regulating their preservation among youths. It is commendable that the vision of the *laro ng lahi* (indigenous Filipino games) is to improve the wellness and skills of individuals (Akbari *et al.,* 2009; Mozar, 2020; Villar, 2010; Ribas *et al.,* 2023; Siregar & Ilham, 2019) and ignite socio-cultural awareness (Kovacenvic & Opic, 2014; Mozar, 2020; Preztoza *et al.,* 2020; Ribas *et al.,* 2023; Siregar & Ilham, 2019). However, indigenous games are facing setbacks due to their popularization of games. They are even recognized as 'elite sports' (a term used for the sports being participated in at the national and international levels) (Tricco *et al.,* 2016),

leading the indigenous games to be left behind because they are overpowered not only these elite games but also online games (Booc *et al.,* 2019; Moro & Billote, 2023; Prestoza *et al.,* 2020). As pointed out, schools in basic education and some of the secondary and tertiary education incorporate indigenous games; however, it seems that there is no sustainability of these games because after executing them at schools, these are undermined as sports since it is rare to be included in sports events (or intramurals). In that case, to what extent or in what other ways will we sustain or preserve these games if it is only done within the school? Do we have other extension activities to promote and ignite our culture through indigenous games? Are we just implementing these games in compliance with the mandates and laws? These rhetorical questions led to curiosity about the purpose of implementing *laro ng lahi* in the school's curriculum. Some facets needed to be looking to give answers to these questions. Thus, one area that can be considered is to look at the perspective of stakeholders in education, including the students, teachers, parents, and others. Their perspectives covering their impressions, views, and attitudes need to be known because this can provide the curriculum implementers and makers with the status of traditional games and what interventions are needed to be improved for implementing the traditional games. Especially in response to the need of the 21st century, one of the main goals in teaching and learning is to raise the quality of education by using new teaching strategies, just as games (Orejuela *et al.,* 2022).

Therefore, this study aimed to review existing and available studies targeting the perspectives of stakeholders in education in the implementation or integration of indigenous Filipino games in the curriculum.

2. Methodology

2.1 Research Design

The researcher employed a scoping review in analyzing the existing literature on indigenous Filipino games. This kind of review will provide an avenue for identifying gaps and other implications for decision-making (Moro & Billote, 2023), thus providing an overview of what is being scoped (Pham *et al.,* 2014). Furthermore, a framework (Arksey & O'Malley, 2005) was used as a guide in conducting the said review, which covers the following five (5) stages, namely: a) identifying research questions, b) locating relevant studies, c) selecting studies, d) charting data, and e)

compiling, summarizing, and reporting results. With this, the methodological typology made by the researcher was different from the conventional typology of methodology, which are research design, population and locale of the study, data gathering tools, data gathering procedure, and data analysis. In this study, after the part of the research design, the 'search strategy or information strategy' is next, followed by 'screening and coding', and then 'data analysis'.

2.2 Search Strategy

The search was generally focused on the stakeholders' perspective on education, particularly the students, teachers, and others in implementing indigenous or traditional Filipino games, most commonly known as the *laro ng lahi*. Initially, the researchers made trials in searching the accessible databases that provide academic, educational, or multidisciplinary journal articles. With this, three databases were considered because these were able to give relevant articles answering what was being answered in this study.

First, Google Scholar was used since it catalogs a wide range of academic literature and is free (Haddaway *et al.,* 2015). Second, Science Direct was able to give a couple of articles that focused on what was being studied as well. Indeed, the database was considered because it places journals that are also full-text, curated topic areas, and in up-to-date publications (Gies, 2018). Lastly, the researchers used Semantic Scholar because what is good in this database is that it removed the tail of search results, allowing one to quickly get up to speed on one's disciplines while limiting the distraction caused by less relevant research (Gies, 2018). Other renowned academic databases were seen, but it was found that most of the searched articles were already indexed in the identified database, especially in Google Scholar.

2.3 Screening and Coding
2.3.1 Screening

In order to maintain the integrity of reviewing scientific sources, the researchers ensured that these should only be peer-reviewed journal articles, even though there were limited studies on indigenous Filipino games.
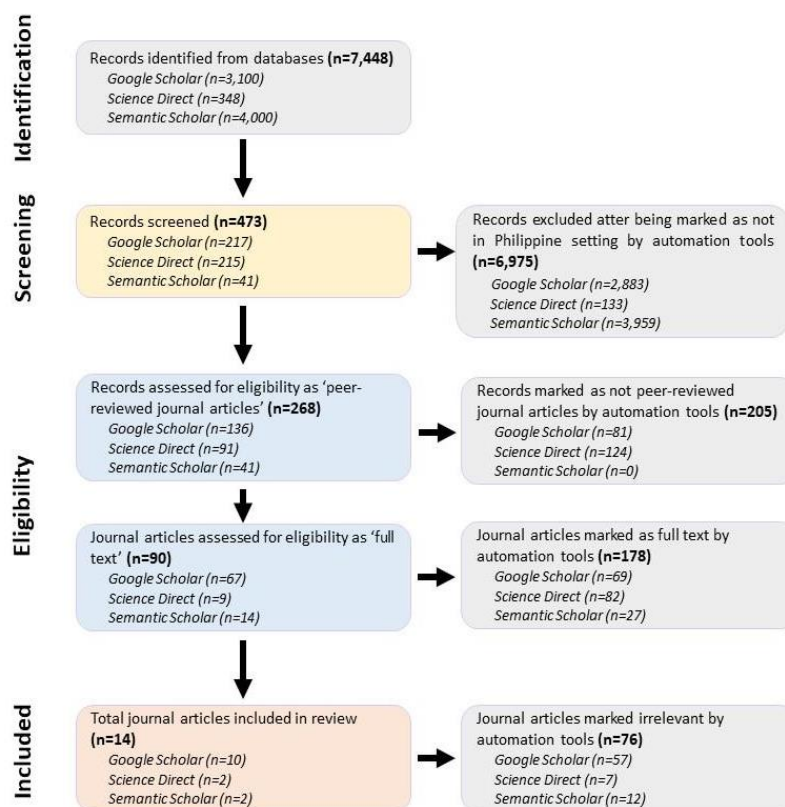

Figure 1. PRISMA Flowchart (2015) Used by the Researchers in the Present Study

This criterion means that poor-quality articles were filtered out. Also, since there were many studies on indigenous studies outside the country, the articles considered are in the Philippine setting. They should cover the 'perspectives of the different stakeholders in implementing the *laro ng lahi*, wherein the identified stakeholders as individuals or institutions in the community involved in school matters, especially in curriculum enrichment (Fricke, 2018). These include the learners, teachers, school leaders/administrators, parents, community, and other stakeholders (or members of the school and larger community such as local government officials). However, upon reading, it was found that scholars or researchers had their perspectives on the said implementation; thus, they were included in this study as part of the stakeholders.

Although there is the latest Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart (Page *et al.,* 2021), the researchers used another PRISMA flowchart (Moher *et al.,* 2015) since the researchers found it more convenient to plot the screened materials for appraisal and further analysis, considering that only one area (i.e., databases) that the researchers looked for journal articles.

Figure 1 shows that 7448 records were identified from three databases after searching about 'indigenous games'. However, these were screened considering those records focusing on the Philippine setting; thus, having 473 records and excluding 6 975 records based on the automation tools. For the next selection, the researchers only considered those peer-reviewed journal articles with open-access or full text. With this, 205 records were removed after being identified as non-journal, and 178 journal articles were removed afterward because they had no full texts in their respective database. As a result, 90 peer-reviewed journal articles with full texts were screened. However, after a manual appraisal of each journal article, 76 were seen to have no relevance to what was being studied, which is the stakeholders' perspectives in implementing the indigenous Filipino games. Therefore, only 14 journal articles were considered for the review.

2.3.2 Coding

A repertory grid, also known as an authors' matrix, was used as a guide to code the screened studies. Once the 'viewpoints or perspectives of various stakeholders regarding the integration of indigenous or traditional Philippine games in the country's educational system' were summarized, two distinct codes surfaced: a positive perspective and a negative perspective (see Table 1). These codes emerged due to the categorization process, where each viewpoint was either positive or negative. The existence of these two distinct codes greatly facilitated the analysis of the coded data.

Table 1. The Coding Process that the Researchers Made in the Present Study

Identified Stakeholders	Perspectives on Indigenous or Traditional Philippine Games	Authors
	Positive Perspectives	
Students	• Indigenous games are considered to be far better than modern games; they prefer physical activities rather than sitting on chairs and playing video games.	Booc et al. (2019)
	• Indigenous games are favorable since they do not physically demand and they do not require more resources.	Avila (2021)
	• Indigenous games are considered entertaining, reflect local culture, and are in tune with the existing living styles of the locality.	Avila (2021)
	• Indigenous games can be made as activity tools in school subjects and to convert academic knowledge and skills into learning course lessons.	Avila (2021)
Teachers	• Integrating traditional games in teaching and learning can foster socialization, value integration, and health. Playing indigenous games can reduce screen time among students.	Booc et al. (2019)

• Indigenous games enable students to establish self-confidence and a positive attitude and develop sportsmanship, camaraderie, and friendship.	Prestoza et al. (2020)
• Indigenous games can serve as vehicles to instill patriotism, pave the way for family bonding, and are a great way to enliven neighborhood communities. Playing among families and communities fosters intergenerational bonding.	Prestoza et al. (2020)
• Indigenous games can develop motor skills, and body coordination, exercise locomotor, apply skill-related activities, and enhance mental capacity or conceptual skill enhancement.	Prestoza et al. (2020)
• Indigenous games can improve students' understanding, motivation, and attitudes toward learning a subject like Physics. Playing and engaging in indigenous games enhances conceptual skills among students.	Moro and Billote (2023)
• Indigenous games can be preserved to foster positive effects on students' values, attitudes, and health.	Agustin (2020)
• Playing indigenous games can teach the value of accepting defeat and sportsmanship.	Mabborang et al. (2022)
• Indigenous games played can maintain health and socialization.	Mabborang et al. (2022)
• Indigenous games can provide the conditions and conceptual ecology for them to undergo conceptual change and achieve a conceptual understanding.	Mozar (2020)
• These can provide relevant contributions and awareness to students about the diversity of cultures even without changing the lesson plan or the unit's goals. It also opens avenues for cross-cultural collaboration among students and teachers so they can learn from one another.	Cajetas-Saranza (2020)
• Indigenous games can be integrated into online games considering the growing innovations of e-games.	Cerda (2021)

2.4 Data Analysis

Thematic analysis was used to elicit and draw conclusions from the coded data. In particular, after the researchers determined the different perspectives of stakeholders, particularly the teachers (Agustin, 2020; Barlizo & Osorno, 2022; Booc *et al.,* 2019; Cajetas-Saranza, 2020; Cerda, 2021; Morales, 2015; Mabborang *et al.,* 2022; Moro & Billote, 2023; Mozar, 2020; Prestoza *et al.,* 2020), students (Avila, 2021; Barlizo & Osorno, 2022; Booc *et al.,* 2019; Morales, 2015), government officials (Mozar, 2020), and even others (or the authors themselves) (Almario, 2005; Cagas *et al.,* 2022) and later make the coding, the data was analyzed thematically. Here, it was found that the Philippine traditional games can promote cultural heritage, facilitate convenient learning, and strengthen the foundation values, health, and socialization. As to the negative perspectives, two themes came: the limitations of using traditional games in the classroom and the endangerment of

indigenous Filipino games due to the fast growth of e-games.

3. Results

The researchers found two main perspectives among the stakeholders: positive and negative. Despite their difficulties, most Filipinos have a generally optimistic outlook and always look for it. Stakeholders, mainly in the area of modernization, had few unfavorable opinions.

3.1 Positive perspectives towards integrating traditional indigenous games

In particular, stakeholders still have positive perspectives towards integrating traditional indigenous games due to views that it helps to a) promote cultural heritage, b) facilitate convenient learning, and c) strengthen the foundation values, health, and socialization.

3.1.1 Promote cultural heritage

Cultural heritage refers to society's tangible and intangible characteristics passed down through the centuries. Buildings, monuments, and historic sites are examples of physical artifacts. On the other hand, intangible attributes are social customs, traditions, and practices frequently based on aesthetic and spiritual beliefs and oral traditions (Brumann, 2015). Indigenous games are intangible attributes considered social customs.

In essence, promoting cultural heritage enriches our lives in numerous ways, from deepening our understanding of history and identity to inspiring creativity and fostering unity among diverse communities (Cajetas-Saranza, 2020). It's a way to ensure that the treasures of the past continue to shine brightly in the present and future.

Promoting in schools our indigenous games has been challenging with today's modernization, wherein elite sports and mobile games overshadow traditional games. However, many stakeholders believe in preserving these traditional games by integrating them among lessons in school and playing them among students. It corroborates with a study (Mozar, 2020), which encourages incorporating traditional games in schools because of their crucial role in preserving our cultural heritage.

Furthermore, this finding agrees with different studies (Agustin, 2020; Cajetas-Saranza, 2020; Moro & Billote, 2023; Mozar, 2020) on the importance of traditional games in promoting our cultural heritage. However, studies should have addressed how well-integrated traditional integrated games are maintained outside class. There need for more studies to prove that cultural preservation among students is continuous.

3.1.2 Facilitate convenient learning among students

Convenient learning is the simple exchange of information, primarily due to facilitation. Indigenous games enable students to comprehend more quickly (Moro & Billote, 2023). Students and teachers also proved that lessons are easily understood when integrated with traditional games. Students learn best when they can positively relate to lessons with these games as examples. It corroborates with the studies conducted by previous scholars (Avila, 2021; Barlizo & Osorno, 2022; Morales, 2015; Morales, 2016; Moro & Billote, 2023), who found that students stay motivated during the lesson with indigenous games integrated into the lesson.

Stakeholders agreed that students could avoid choosing between online games and traditional games when they can play these games online. It is true in a study (Cerda, 2021) where traditional games on an online platform are encouraged since our generation aims to attain Education 4.0, the "technique of learning connected with the fourth industrial revolution and focuses on transforming the future of education through advanced technology and automation. However, preserving culture through e-games is still a question; it would still be effective.

3.1.3 Strengthen the foundation of values, health, and socialization among stakeholders

Values formation has been one important goal of Philippine education ever since (Nagahama, 2014). At the same time, it has been a piece of common knowledge among stakeholders of the physical benefits of playing traditional games. They also discovered that playing these traditional games has more benefits than meets the eye. It has been known that these games convey values and morals among stakeholders. Further, it fosters socialization among players who encourage the value of *"pakikisama"* (companionship), a very well-known value among Filipinos.

Indigenous games also improve people's health and fitness while preserving and utilizing awareness of socio-cultural heritage (Siregar & Ilham, 2019; Mozar, 2020). Students' physical and mental well-being improves due to playing traditional Games or indigenous games. The majority of our traditional games, including *"kadang kadang," "patintero," "luksong tinik,"* and *"tumbang preso,"* made significant contributions to the growth of a person's overall well-being. Filipino culture and customs are extensive and visible in their traditional games. Despite being simple, these games contain cultural and social importance (Hortelano *et al.,* 2015). Like any other modern sports played in P.E., traditional games enhance an individual's basic motor skills (Mozar, 2020; Ribas *et al.,* 2023). While online games offer enjoyment among youths, it is less beneficial than the traditional games played before. Besides, traditional games improved physical, emotional, mental, and social wellness (Iasha *et al.,* 2020; Kovacevic & Opic, 2014; Villar, 2010). Children's interactions while playing increase their social well-being with their parents, classmates, and

other adults. Due to traditional games requiring physical exertion, these experiences influence the development of cognitive, emotional, and social skills and reach physical health (Siregar & Ilham, 2019).

Health and education are still considered significant concerns among schools in the Philippines (Benzian *et al.,* 2012). Traditional games are great avenues for fostering health among students while socializing and building rapport with their peers and adults. The studies discussed the importance of traditional games in values formation (Agustin, 2020; Mozar, 2020; Mabborang *et al.,* 2022; Prestoza *et al.,* 2020) and socialization (Booc, 2019; Mabborang *et al.,* 2022; Prestoza, 2020) among students and other stakeholders from different cultural backgrounds coming together to work on shared goals, projects, or initiatives. This collaboration involves people with diverse perspectives, values, beliefs, communication styles, and ways of approaching tasks. Besides, the aim of cross-cultural collaboration is to leverage these differences to create innovative solutions, enhance creativity, and foster mutual understanding and respect among players.

3.2   Negative   perspectives   towards integrating traditional indigenous games

While positive perspectives were found regarding the implementation of Indigenous Filipino games, it cannot be denied that negative perspectives came out. Two perspectives came out, and these are the a) limitations in using traditional games in the classroom and b) the endangerment of indigenous Filipino games due to the fast growth of e-games.

3.2.1 Limitations in using traditional games in the classroom

Most studies concluded that using conventional games was helpful (Avila, 2021; Barlizo & Osorno, 2022; Morales, 2015; Morales, 2016; Moro & Billote, 2023). In contrast, one study (Moro & Billote, 2023) did point out its limitations. It is impossible to connect traditional games with some scientific principles; they can only be used as examples and motivators. Even yet, this discovery was limited to that one topic. Therefore, more research is advocated on the value and potency of using conventional games as learning tools.

3.2.2 Endangerment of being replaced by e-games

The continued existence of traditional games among young Filipinos is threatened by the rising attraction of younger generations to technology and the rapidly modernizing world, which leads the younger Filipino generation to be open to contemporary innovations (Booc *et al.,* 2019; Moro & Billote, 2023). Besides, youths are more likely to be discovered playing online games in corners than traditional games on the streets or outside of their homes now that technology is so readily available (Agustin, 2020; Hortelano & Tindowen, 2015). A case study showed that students in the locale of their study play traditional games but rarely and mostly only during P.E. class every Friday (Prestoza *et al.,* 2020). The study signifies the need for more outlets where children will be motivated to play these traditional games even during their free time. There is a need for joint partnerships with the whole community to sustain the continuous preservation of traditional games.

It is regrettable to note that some stakeholders still doubt traditional games' advantages. Additionally, given that kids frequently opt to play modern games, some stakeholders think that continuous modernization threatens the survival of traditional games in school. Furthermore, stakeholders see indigenous games as below elite sports; even during school sports programs (intramurals), it is not added to the games being played (Cagas *et al.,* 2022). A study (Booc *et al.,* 2019) agreed that some students still cannot confidently play traditional games due to fear of getting hurt or acquiring airborne diseases while playing outside. In comparison, it is fast growing fascination of students with modern technologies as a threat to preserving indigenous games (Mozar, 2020). It is supported by a study (Page *et al.,* 2021) that despite the rising popularity of e-games, students tend to choose these as pastimes due to the easy availability of these platforms and gadgets among them.

4. Discussion

The positive views of stakeholders about how indigenous games benefit Filipino youth highlight the importance of safeguarding these games. This underscores stakeholders' committed efforts to preserve these games due to their belief in them as cultural heritage. Notably, some schools have shown that including native games not only helps preserve them but also reduces students' time on online games.

In addition, the findings emphasize the need for more opportunities in schools to include indigenous games, ensuring their ongoing preservation. Since children are closely attached to electronic devices, stakeholders are encouraged to promote local games. They have effectively advocated for and supported traditional games, showcasing educators' role as learning facilitators. In their profession, teachers generally hold a positive view of various traditional games.

On the other hand, negative attitudes, biases, and stereotypes create a "societal stigma," often hindering the recognition, promotion, and integration of traditional indigenous games in schools. The absence of indigenous perspectives in educational curricula, media, and popular culture can reinforce stereotypes and contribute to a lack of understanding of indigenous traditions, including indigenous games. It is therefore needed to raise awareness about the cultural significance of indigenous games through educational initiatives, cultural programs, and media to help dispel stereotypes and promote understanding.

Moreover, the proliferation of digital technology can lead to negative effects on students' attention, productivity, and well-being due to excessive use of digital devices and platforms. As digital technology becomes more ingrained in daily life, it poses challenges related to focus, time management, and overall mental health. The distraction can lead to reduced face-to-face social interactions, which are important for social and emotional development. This highlights the need for educators, parents, and policymakers to promote responsible and balanced use of technology, provide guidance on digital literacy, and encourage critical thinking skills. Striking a balance between digital engagement and other forms of learning, social interaction, and physical activity such as indigenous games is key to ensuring a well-rounded educational experience for students.

Hence, promoting indigenous games involves acknowledging their role in preserving culture, promoting physical activity, and fostering identity and community among indigenous groups. Overcoming societal stigma requires collective efforts to challenge biases, amplify indigenous voices, and ensure traditional games are valued as important cultural assets. Also, limiting gadget use is important for a balanced lifestyle. Like sports, instead of sitting the whole day and playing online games, an alternative would be traditional games which involve physical activities and outdoor experiences. Basically, these games could contribute not only to the well-being but also to strengthening social connections.

5. Conclusion and Recommendation

This study examined journal articles focusing on the perspectives of educational stakeholders regarding the inclusion of indigenous Filipino games in the curriculum. The findings revealed a prevalence of positive viewpoints, underscoring the importance of incorporating indigenous games within the educational framework. However, it's important to acknowledge that alongside the advantages, there exists a negative perspective due to the ongoing and endangered status of these games. As also determined, contemporary sports and modern games have overshadowed traditional ones for a considerable period, and it was considered that the influence of modernization on this integration cannot be dismissed, as it aligns with broader societal advancements encompassing new inventions, brands, and features. It is in fact that indigenous games face competition not only from traditional sports but also from the rise of electronic games. This presents a challenge for curriculum implementers to strike a balance in promoting diverse games within educational settings, despite of being optimistic.

Therefore, this challenge necessitates strong community support to preserve indigenous games, extending efforts beyond school boundaries. Local governments and barangays could mandate additional opportunities for these native sports to be played outside of the school environment, contributing to their preservation. With these considerations in mind, it is strongly recommended to approach the implementation of indigenous games with careful planning, cultural sensitivity, and respect. Lastly, providing training and professional development opportunities for educators, coaches, and facilitators is advisable. This equips them with a comprehensive understanding of the cultural and historical context of the games, which is crucial since they play a central role in integrating indigenous games into the educational system.

References

Agustin, M.L.P. (2020). Proposed unification of indigenous games in teaching physical education in Cagayan national high school, the Philippines. *Middle Eastern Journal of Research in Education and Social Sciences*, 1(1), 27–34. [DOI]

Akbari, H., Abdoli, B., Shafizadehkenari, M., Khalaji, H., Hajihosseini, S., & Ziaee, V. (2009). The effect of traditional games in fundamental motor skill development in 7-9 year old boys. *Iranian Journal of Pediatrics*, *19*(2), 123-129.

Almario, V.S. (2005). Locating the Filipino popular imagination in the age of globalization. *Procedia - Social and Behavioral Sciences, 2*(5), 7316–7319. [DOI]

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19–32. [DOI]

Arroyo, D.M. (2013). *House bill no. 2675:* An act to include traditional games and sports in the physical education (PE.) courses in all levels of educational institutions and sport activities of local government units, appropriating funds therefor, and for other purposes. *16ᵗʰ Congress of the Philippines.* https://issuances-library.senate.gov.ph/bills/house-bill-no-2675-16th-congress-republic

Asrizal, A., Amran, A., Ananda, A., Festiyed, F., & Sumarmin, R. (2018). The development of integrated science instructional materials to improve students' digital literacy in scientific approach. *Jurnal Pendidikan IPA Indonesia,* 7(4), 442–450. [DOI]

Avila, R.V. (2021). Local wisdom in laro ng lahi as foundation in game-based pedagogy. *Jurnal Pendidikan Anak Usia Dini, 12*(2),107-124. [DOI]

Barlizo, R.J.E., & Osorno, R.M. (2022). The influence on physical education state anxiety and leisure motivation on perceived well-being of students. *European Journal of Physical Education and Sport Science, 9*(2), 149 – 175. [DOI]

Basal, H.A. (2017). In Turkey today, traditional children's games from the past (2ⁿᵈ ed*.). Nobel Publishing*, New York.

Benzian, H., Monse, B., Belizario. V. Jr., Schratz, A., Sahin, M., & Helderman, W. (2012) Public health in action: Effective school health needs renewed international attention. *Global Health Action,* 5(1), [DOI] [PubMed]

Booc, R.P., Rafaela, K.B., Torres, M.J., Bulawan, R.P., Jabonero, L.C. II., Cortuna, I.J.M., & Asuncion, J.E. (2019). The traditional Filipino games: Status check among generation Z. *International Scientific Journal Theoretical and Applied Science,* 10 (78), 150–152. [DOI]

Brumann, C. (2015). Cultural heritage. International Encyclopedia of the Social & Behavioral Sciences, 2, 414–419 [DOI]

Cagas, J.Y., Mallari, M.F.T., Torre, B.A., Kang, M.G.D.P., Palad, Y.Y., Guisihan, R.M., Aurellado, M.I., Sanchez-Pituk, C., Realin, J.G.P., Sabado, M.L.C., Ulanday, M.E.D., Baltasar, J.F., Maghanoy, M.L.A., Ramos, R.A.A., Santos, R.A.B., & Capio, C.M. (2022). Results from the Philippines' 2022 report card on physical activity for children and adolescents. *Journal of Exercise Science and Fitness, 20*(4), 382–390. [DOI] [PubMed]

Cajetas-Saranza, R. (2020). Approaches to integrating multicultural concepts as input to multicultural teacher education program. *The Normal Lights, 14*(1), 25 – 55. [DOI]

Cerda, C.M. (2021). Towards a "Filipino" video game: Teaching Filipino culture and identity for video game development. *Transactions of the Digital Games Research Association, 5*(3), 43–64.

Fricke, S. (2018). Semantic scholar. *Journal of the Medical Library Association, 106*(1), 145–147. [DOI]

Gies, T. (2018). The science direct accessibility journey: A case study. *Learned Publishing, 31*(1), 69–76. [DOI]

Haddaway, N.R., Collins, A.M., Coughlin, D., & Kirk, S. (2015). The role of google scholar in evidence reviews and its applicability to grey literature searching. *PLoS One, 10*(9), 1–17. [DOI] [PubMed]

Hortelano, R., Juan, J.P., & Tindowen, D.J. (2015). Indigeneous games of the Agtas of Peñablanca, Cagayan. *Bannag: A Journal of Local Knowledge, 5*(1), 1-5.

Iasha, V., Al Ghozali, M.I., Supena, A., Wahyudiana, E., Setiawan, B., & Auliaty, Y. (2020). The traditional games effect on improving students working memory capacity in primary schools. *Proceedings of the 4th International Conference on Learning Innovation and Quality Education*, 126, 1–5. [DOI]

Kamid, K., Rohati, R., Hobri, H., Triani, E., Rohana, S., & Pratama, W.A. (2022). Process skill and student's interest for mathematics learning: Playing a traditional games. *International Journal of Instruction, 15*(3), 967–988. [DOI]

Kenanoglu, D., & Duran, M. (2021). The effect of traditional games on the language development of pre-school children in pre-school education. *Asian Journal of Education and Training, 7*(1), 74–81. [DOI]

Kovacevic, T., & Opic, S. (2014). Contribution of traditional games to the quality of students' relations and frequency of students' socialization in primary education. *Croatian Journal of Education, 16*(1), 95–112.

Mabborang, F.D., Suarez, A., Dacuycuy, M.C., Malapira, D.J., & Agag, R. (2022). Street games in Filipino society in selected rural towns of Ilocos Norte. *Asian Research Journal of Arts & Social Sciences,18*(1), 10-17. [DOI]

Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., & Stewart, L.A. (2015). Preferred reporting items for systematic review and meta- analysis protocols (PRISMA-P) 2015 statement. *Systematic Review,* 4(1), 1–9. [DOI] [PubMed]

Morales, M. P. E. (2016). Exploring indigenous game-based physics activities in pre-service physics teachers' conceptual change and transformation of epistemic beliefs. *EURASIA Journal of Mathematics Science and Technology Education, 13*(5), 1305 – 1409. [DOI]

Morales, M.P.E. (2015). Influence of culture and language sensitive physics on science attitude enhancement. *Culture Studies of Science Education.*10, 951–984. [DOI]

Moro, K.C., & Billote, W.J.S.M., (2023). Integrating Ivatan indigenous games to learning module in Physics: Its effect to student understanding, motivation, attitude, and scientific sublime. *Science Education International, 34*(1), 3–14. [DOI]

Mozar, J.R.D. (2020). Enhanced curriculum with the integration of indigenous game to physical education in the different state universities and colleges (SUCs) in CARAGA Region, Philippines. *International Journal of Applied Science and Research, 3*(2).

Mutakinati, L., Anwari, I., & Yoshisuke, K. (2018). Analysis of students' critical thinking skill of middle school through stem education project-based learning. *Jurnal Pendidikan IPA Indonesia, 7*(1), 54–65. [DOI]

Nagahama, H. (2014). The development of values education under the integrated learning subject in the Philippines. *Journal of Education and Learning, 8*(2), 152–163. [DOI]

Orejuela, J.G., Tolin, M.R., & Soreta, M.O. (2022). Flipping the language classroom: Effects of gamifying instruction in the English language proficiency of Filipino ESL students. *Rajasthali Journal, 2*(1), 95-105.

Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C. D., Shamseer, L., Tetzlaff, J.M., Akl, E.A., Brennan, S.E., Chou, R., Glanville, J., Grimshaw, J.M., Hróbjartsson, A., Lalu, M.M., Li, T., Loder, E. M., Mayo-Wilson, E., MacDonald, S., McGuinness, L.A., Stewart, L.A., Thomas, J., & Tricco, A.C., Welch V.A., Whiting P., Moher D., (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *The British Medical journal, 372.* [DOI] [PubMed]

Pham, M.T., Rajić, A., Greig, J.D., Sargeant, J.M., Papadopoulos, A., & McEwen, S.A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5(4), 371–385. [DOI]

Prestoza, M.-J. R., Paludipan, C. P., & Abad, A. E. (2020). Perception of elementary school teachers on laro ng lahi in Quirino, Isabela. *International Journal of Linguistics, Literature and Culture, 6*(3), 1–8. [DOI]

Ribas, J.P., Hernández-Moreno, J., Díaz-Díaz, R., Borges-Hernández, P.J., Ruiz-Omeñaca, J.V., & Jaqueira, A.R. (2023). How to understand sports and traditional games and how to apply it to physical education: On the "goal of game". *Frontiers in Sports and Active Living, 5*, 1–9. [DOI]

Salam, M. (2016). Early Childhood Education an Introduction*, National Council of Educational Research and Traning.*

Santos, J., & Antonio, R., Capulong, B.C., Santos, D.R., Magugat, E.M., Leabres, J.H., & Ortega, M.J. (2019). Using mobile gaming to promote students' conceptual understanding of traditional Filipino games. *SSRN Electronic Journal.* [DOI]

Siregar, N. R. & Ilham, M. (2019). Traditional game as a way for healthy in Bajo's children. *KnE Life Sciences, 4*(11), 19–25. [DOI]

Tondo, J.E., Silverio, A.D.P., Bawer, M.C., & Evangelista, L. (2015). Ethnobotany of Lubuagan: Household materials and Ornaments. *Pacific Science Review B: Humanities and Social Sciences, 1*(2), 104–107. [DOI]

Trajkovik, V., & Malinovski, T., Vasileva Stojanovska T., & Vasileva, M. (2018). Traditional games in elementary school: Relationships of student's personality traits, motivation and experience with learning outcomes. *PLoS ONE, 13*(8), 1–15. [DOI] [PubMed]

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K., Colquhoun, H., Kastner, M., Levac, D., Ng, C., Sharpe, J. P., Wilson, K., Kenny, M., Warren, R., Wilson, C., Stelfox, H. T., & Straus, S. E. (2016). A scoping review on the conduct and reporting of scoping reviews. *BMC Medical Research Methodology*, 16(5), 1–10. [DOI] [PubMed]

Villar, M. B. (2010). *Senate bill no. 1108: Traditional games and sports act of 2010.* 15th Congress of the Philippines. https://legacy.senate.gov.ph/lisdata/86027156!.pdf

Ethics pproval
The stuy did not undergo ethics approval since no human intervetion happened. However, as per ethical considerations, the authors ensured that all reviewed literature was properly cited.

Author Contribution Statement
Claire Irish C. Balay-as - Conceptualization, Validation Methodology, Data collection, Analysis, Writing—original draft, John Rey Osben Pelila - Conceptualization, Validation Methodology, Methodology, Data collection, Analysis, Writing—original draft, & Stephenie O. Busbus - Writing—review & editing. All authors read and approved the final manuscript.

Informed Consent
The study did not use informed consent since all the reviewed literature was open-access..

Additional Materials:
No additional materials were added to this study.

Conflict of interest
The authors declare no conflict of interest.

Does this article pass screening for similarity?
Yes