Journal of Childhood, Education & Society
Volume 4, Issue 3, 2023, 391-405
DOI: 10.37291/2717638X.202343270
ISSN: 2717-638X
Research Article

Exploring the feasibility of outdoor indigenous games and songs to enhance play-based pedagogy in early childhood education

Beatrice Matafwali[1], Mubanga Mofu[2]

Abstract: Indigenous play activities are crucial to cross-cultural knowledge and practice and are gaining ground as a pedagogical approach in early childhood education settings. The study aimed at systematically documenting culturally and developmentally appropriate outdoor indigenous games that could serve as resource materials for play-based learning in ECE centres. Participants comprising teachers, parents, grandparents, and adolescent girls and boys were drawn from Lufwanyama district of Zambia. Data was generated through Participatory Action Research to allow inter-cultural dialogue. Data was analysed using thematic categorisation. Results showed that documentation of indigenous games can serve as a resource capital for enhancing play-based learning practice in an early childhood education setting. The study further revealed that integrating indigenous games can strengthen home-school linkages through active community engagement. The study recommends that teachers can effectively implement play-based learning when the reservoir of developmentally appropriate indigenous games is easily accessible to them. We further argue for rethinking early childhood education pedagogical practice so that learning and development are seen as being influenced more by contextually responsive play and exploration, than by direct instruction and teaching.

Article History
Received: 01 March 2023
Accepted: 26 September 2023

Keywords
Indigenous games; Outdoor play; Songs; Early childhood education; Play-based learning

Introduction

The roots of Early Childhood Education (ECE) in Zambia can be traced to indigenous practices when young children were taught basic life skills, cultural norms, and customs within the confines of the family and the community. Story telling, indigenous games, and songs were seen as universal means of education as well as essential tools for cultural transmission of knowledge. However, the advent of formal Western-style education during the colonial era saw the emergence of a more structured approach to the provision of ECE. Upon Zambia's independence in 1964, the Government prioritised increasing access to education for all citizens, albeit, the provision of ECE was largely in the hands of the private sector. The Ministry of Local Government and Housing regulated ECE service provision, while the Ministry of Education provided an oversight on teacher training and curriculum. In 2004, the mandate for ECE was transferred to the Ministry of Education (MoE) Zambia and ECE has since been integrated into the national education structure as a foundation for lifelong learning (Matafwali & Kabali, 2017; MoE, 1996). With the introduction of the ECE curriculum in 2013, pedagogy at the ECE level was redefined by placing an emphasis on a play-based, child-centered approach (Ministry of Education, Science, Vocational Training and Early Education [MESVTEE] Zambia, 2013, 2014). In keeping with the demands of the curriculum, the pedagogical discourse in ECE has recently been dominated by the concept of play-based learning. In practice, play-based learning approach requires a teacher to be innovative by employing a variety of strategies including providing adequate classroom space for children to engage in various play activities such as dramatic play, block building, and sensory play (Lungu & Matafwali, 2020). The curriculum further recommends the use of low-cost teaching and learning items made with locally available resources to promote play-based

[1] University of Zambia, School of Education, Department of Educational Psychology, Sociology and Special Education, Lusaka, Zambia, e-mail: bmatafwali2000@yahoo.com, ORCID: https://orcid.org/0000-0003-2028-180X

[2] University of Zambia, School of Education, Department of Educational Psychology, Sociology and Special Education, Lusaka, Zambia, e-mail: mubangamofu@yahoo.com, ORCID: https://orcid.org/0000-0003-2494-3647

learning (MESVTEE, Zambia, 2014).

Play is a vital aspect of child development that transcends cultural barriers, fostering cognitive, emotional, and social development. Evidence confirming the importance of play in child development is well documented. Friedrich Froebel emphasised play as the foundation of learning, where children naturally explore and experiment to make sense of the world around them (Ransbury, 1982). According to Vygotsky (1978), play is an essential developmental activity that has a significant impact on a child's cognitive and social development during the early years. Research has repeatedly demonstrated that academic competency, such as language, cognitive, social-emotional, and psychomotor, is readily acquired through play. Children acquire high-level cognitive skills through play, including abstract thinking, exploratory skills, imagination, creativity, self-regulatory executive functions, memory, and problem-solving skills (Bergen, 2002; Johnstone et al., 2022; Semmar & Al-Thani, 2015). Play also enhances the development of social-emotional abilities, such as the capacity to form friendships, empathy, emotional control, conflict resolution, and attachment (Gagnon et al., 2007; Mendelsohn et al., 2018). For the majority of children especially in rural communities, play experiences involve outdoor activities that allow them to create their own play spaces, choose games play materials that interest them, and engage in vigorous physical activities such as climbing, jumping and running. Clements (2004) notes that outdoor play enables children to explore their community and engage in sensory-rich experiences like playing with sand, clay and water, searching, and fleeing. Children can experience all their senses while playing outdoor games through observations, physical activity, social interaction, math, science, art exercises, and dramatic play. The right to play also aligns with the African Charter on the Rights and Welfare of the Child and the United Nations Convention on the Rights of the Child, which emphasises the importance of providing children with appropriate play opportunities and safe spaces for recreation.

Even though play-based learning is widely acknowledged, ECE teachers frequently concentrate on structured indoor play activities that skew toward modern games, without maximizing on positive effects of unstructured outdoor indigenous games on child development (Khalid, 2008). Marginalisation of indigenous outdoor games in the ECE setting may be attributed to several factors. Usman and Yusuf (2021) contend that in today's technologically driven society, many ECE educators may be less knowledgeable about outdoor indigenous games and their value in promoting early childhood development. A qualitative study by Davies (1997) found that although teachers were aware of the value of outdoor play for children's development, they lacked the necessary knowledge and motivation to promote it as a pedagogical strategy.

Kemple et al. (2016) observe that children no longer spend as much time engaging in unstructured, child-directed outdoor play. The availability of television programmes, the popularity of computer games and other technology products, the lack of adequate physical space for outdoor play, and parental concerns about their children's safety in the physical environment have all been identified as factors reducing children's participation in outdoor indigenous play activities (Sanga, 2017; Singer et al., 2009). Other scholars have observed that the current educational system in many African countries is primarily based on the Western paradigm, and as a result, pedagogical strategies are reminiscent of Western societies' traditions relegating indigenous education practices to a subordinate position (Fafunwa and Aisiku, 1982 as cited in Nsamenang & Tchombe, 2012; Sanga, 2017). Pence and McCallum (1994) added that ECE was viewed as an institutional power and a modernising, globalising tool. Accordingly, Nsamemang (2008) contend that it is simple to spot a modernity index put forth by ECE specialists, while rarely acknowledging the cultural hegemony of the local communities. This study explores the potential of indigenous outdoor play activities into Early Childhood Education centres to enhance play-based learning.

Literature Review

Indigenous outdoor games have long been an essential aspect of human culture, providing entertainment, education, and fostering a sense of belongingness. For centuries, indigenous outdoor games have been treated as an institution for organised socialisation and leisure time (Petrovska et al., 2013; Usman & Yusuf, 2021). These games have been transmitted from generation to generation, cherished, used, and perfected (Khalid, 2008; Petrovska et al., 2013). Additionally, indigenous games preserve the folk

tradition central to national heritage. Khalid (2008) states that through engaging in indigenous games, children learn about the rules and values of their culture (Usman & Yusuf, 2021). These games also have spiritual value as well as social and historical relevance.

In the context of ECE, outdoor indigenous games hold enormous benefits as they foster holistic development, physical fitness, and cultural awareness (Usman & Yusuf, 2021). Indigenous outdoor games enhance gross and fine motor skills, balance, eye-hand coordination, increased spatial awareness and more significant social skills (Khalid, 2008). Mtonga (2012) compiled texts of indigenous children's songs and games in the 1980s in rural and urban areas of Zambia. His analysis illustrates how outdoor indigenous games help children to think, intellectualise or discuss their ideas and explore the world around them.

A review of literature shows that outdoor indigenous game genres are diverse and transcend cultures, thus highlighting the universal character of indigenous games across cultures. For instance, pebble games are played in many parts of Africa and other regions of the world. One such game is *Chiyato*, a game which is played by two or more players and requires placing several small stones in a small dug hole. The game is called *Gittey* in Pakistan (Khalid, 2008); *Nhodo* in Zimbabwe (Mandondo & Tsikira, 2021); *Chiyato* or *Chiyenga* in Zambia (Mtonga, 2012); *Mdako* in Tanzania (Smørdal, 2012), and *Ondota* in Namibia (Utete et al., 2017). Although the rules of the game may vary across regions, *Chiyato* game has been reported to promote eye-hand coordination, numeracy skills, emotional regulation, social skills, and problem-solving skills (Mandondo & Tsikira, 2021).

Another game is a board game that has several variations across cultures. It is called *Nsolo* in Zambia (Mtonga, 2012), *Tsoro* in Zimbabwe and has been played for thousands of years (Madondo & Tsirika, 2021; Moyo & Chinamasa, 2022; Nyanhongo, 2015). In East Africa, a version of this game is popularly known as *Bao*, with origins in Tanzania, in Malawi, it is called *Bali*, whereas in South Africa, this game is popularly known as *Morabaraba.* Previous research has shown that Morabaraba has been used in teaching math (Matsekoleng et al., 2022). The strategic skills found in *Morabaraba* can be likened to those in chess and checkers (Nyanhongo, 2015). This game teaches young children how to count (Moyo & Chinamasa, 2022) and helps them develop mathematical concepts and cognitive skills. Additionally, there are rope-jumping or skipping games which are popular among children. Two such examples are South Africa's *Lekusha* (Matsekoleng et al., 2022) and *Kgati* (Moloi et al., 2021) games. In Zambia, it is popularly known as *Waida*. Moloi et. al., (2021, p. 245) highlight that movements in *Kgati* game are intricately woven with mathematical concepts like geometric figures, fractions, and word sums."

Other games involve rigorous physical engagement. An example is *Pitto Garam,* as referred to in Pakistan (Khalid, 2008), and *Tachi* in Zambia (Mtonga, 2012). The game is played between two teams. One team is expected to fill up sand in a bottle. The opposing team is supposed to hit the bottle with a ball while the other team members try to refill the bottle with sand. This game enhances children's eye-hand coordination, and filling the bottle with sand promotes gross and fine motor coordination. Hide and seek is also a popular game played by children across cultures and goes by various names. In some regions in Zambia, the game is referred to as *Chidunu* or *Chidununе* (Mtonga 2012), *Oonch Neech,* in Pakistan (Khalid, 2008), *Escondidas* in Mexico, and *Chamuhwande Muhwande* in Zimbabwe (Madondo & Tsikira, 2021). Although the games bear different names, the rules require a group of children to run around for safety to avoid being caught by the chaser. The game helps children with gross motor skills, resilience, self-regulation, and turn-taking. Hopscotch is another popular children's game where players toss a pebble into patterned squares and hop through the squares to retrieve the pebble. The game is called by different names across cultures: *Espada* or *Kapendo* in Zambia (Mtonga, 2012); *Pada* in Zimbabwe (Madondo & Tsikira, 2021); *Tumatu* in Ghana (Adjei-Boadi et al., 2022); and *Hinke* in Denmark. Some of the benefits of hopscotch include movement of large muscles, flexibility, coordination, balance, and agility. Laely and Yudi (2018) conducted an experimental study which examined the impact of hopscotch on kinesthetic intelligence. Similarly, Polevey et al. (2023) found a statistically significant improvement in rhythm movements among 8 to 9 year olds who played hopscotch compared to children who participated in the standard school physical culture programme. Findings showed that children's kinesthetic intelligence increased after

exposure to hopscotch. Sriwidari et al. (2018) further found improved gross motor and social skills. While the efficacy of outdoor indigenous games in child development cannot be underscored, research has indicated a decline in these games in children's playgrounds and schools due to the influence of digital technologies and games (Gul, 2023; Madondo & Tsikira, 2021; Matsekoleng et al., 2022; Moloi et al., 2021).

Theoretical Framework

The social-cultural theory was applied in this study. Given the significant role the social-cultural milieu plays in influencing children's learning and development, the application of the social-cultural theory highlights several important elements. Vygotsky's sociocultural theory (1978) explicitly acknowledges the concept of Zonal of Proximal Development (ZPD), that children learn and develop through interactions with more knowledgeable adults through scaffolding and within cultural settings. Teachers, parents, and elderly community members would act as facilitators in the learning process by participating in indigenous games. Scaffolding, a social-cultural theory concept further involves providing temporary support to children to bridge the gap between their current understanding and advanced understanding, can easily be done through indigenous games. Thus, the study contends that indigenous games offer opportunities for children to engage in meaningful play, social interactions, and cultural practices, fostering the development of language, cognitive skills, psychomotor skills, social-emotional and cultural knowledge.

Study Objectives

The study sought to underscore the importance of outdoor indigenous games that could serve as resource capital for play-based learning at ECE centres in the Zambian context. Understanding the perception of relevant community members, parents, and grandparents was a strategic entry point to integrating outdoor indigenous games as a pedagogical approach at ECE.

Study Questions

The following questions guided the study:

1. What was the perception of community members, parents and grandparents on outdoor indigenous games?
2. What outdoor indigenous games and songs could serve as a resource capital for play-based learning at early childhood centres?

Method

This intervention was implemented through action research using a Participatory Action Research (PAR) approach**.** The rationale for a Participatory Approach was ensuring meaningful participation of community members, which is a significant ethical consideration, especially when dealing with indigenous cultures. Dunbar and Scrimgeour (2006) stressed the importance of cultural protocols in indigenous research, the need for researchers to be cognisant of the cultural customs, traditions, and protocols of the indigenous population they are researching. Orminston's (2010) research underscored the importance of incorporating indigenous knowledge systems and methodologies in research from an indigenous perspective. Ermine et al. (2004) notes the significance of respecting indigenous knowledge, fostering collaborative relationships, involving locals, demonstrating cultural sensitivity, and ensuring research ownership and management. It also highlights the role of diverse participants as co-researchers in constructing social knowledge (Baldwin, 2012; Cashman et al., 2008; MacDonald, 2012; Reason and Bradbury, 2008). Selenger (1997) highlights the seven components of the PAR process: recognising the community's origin, aiming for radical social transformation, involving community participation at all levels, addressing powerless groups, and creating awareness for self-reliance development. PAR is more than a scientific method, as community participation enhances the analysis of social reality. PAR also allows researchers to be committed participants, facilitators, and learners, fostering engagement rather than detachment.

Study Site and Implementation Context

The study site was Lufwanyama district of the Copperbelt Province of Zambia. İmplementation was done through an International Civil Society Organisation (referred to hereinafter as the implementing partner) that was supporting community-based ECE centres in the implementing district. The programme was implemented at the ECE centres, household level, and within the community. Although the intervention's main objective was to gain an understanding of indigenous practices that were important to child development, the research team recognised the ethical value of not imposing predefined views on the community. İdentifying potential partners and opportunities for synergy was essential. Thus, Community engagement began by forming collaborative partnerships with the implementing partner, an ECE-implementing organisation, to gain insight into their priorities and community needs. Through this initial meeting, the implementing partner highlighted the value of play-based learning and the viability of incorporating low-cost play materials to improve the quality of instruction. As a follow-up to this initial meeting, the implementing partner proposed a scoping visit to Lufwanyama district to engage with stakeholders at the community level to gain a deeper understanding of the implementation context of ECE and explore the potential entry points for the promotion of low-cost play materials. The visit served as a needs assessment for the research team to better understand the community's goals, challenges, and aspirations regarding ECE services being provided in their respective communities. Community stakeholders recognised the efforts to promote ECE but acknowledged the significant challenge of the non-availability of play materials and age-appropriate textbooks. The reflections from the meetings were collaboratively reviewed by the research team and community stakeholders to prioritise the research focus.

During the second visit, meetings were scheduled by the Centre Management Committees to discuss potential solutions. As regards to non-availability of books, the implementing partner pursued the issue with the Ministry of Education as the service provider. However, the absence of play materials prompted the need for community-driven solutions as the ECE centres had no financial resources to procure play materials. Community stakeholders, included members of the Centre Management Committee, were prompted to engage in intercultural conversations to reflect on their childhood experiences as a way of encouraging participation in decision-making. Their vivid recollections of the games, songs, stories, and dances they played as children struck a chord in their reflections. Based on the knowledge that emerged during inter-cultutal dialogue, community stakeholders were asked to reflect on whether the recreational activities they remembered would still be appropriate for children. Participants recalled their grandparents' historical role in storytelling, suggesting their involvement has an intercultural indigenous recourse. Furthermore, the intercultural reflections in community communal spaces were primarily dominated by outdoor indigenous games played by pre-adolescents. Based on this, the participation of grandparents and preadolescents in the implementation process was regarded as essential.

As part of capacity building, all the participants and research assistants completed a capacity-building process which was facilitated by the research team from the University of Zambia. This training aimed at empowering community members by providing them with the necessary knowledge, skills, and tools to actively participate in the data collection and implementation process, thereby fostering ownership and culturally relevant and sustainable outcomes. Participants were taken through the data collection tools and oriented on documentation using tape recorders and notes. Community members through the Centre Management Committee volunteered to oversee some of these activities and report on the outcomes to the implementing partner community-based staff. The capacity-building approach was viewed as part of the policy for the implementing partner, aiming for communities to eventually become self-sustaining.

The next stage involved collaborative documentation of games, songs, and stories by ECE teachers and community stakeholders using books and tape recorders provided by the research team. The documentation process was completed within six months. The activities were then collectively reviewed by community stakeholders, the implementing partner staff, and the research team to identify activities that were developmentally appropriate. The ultimate goal of the action research cycle is social change by working together with the community to address an agreed-upon goal (Kelly, 2005). Thus, the next stage

was the integration of indigenous games into play-based learning both at ECE centres and at home.

Participants

Participants comprised the implementing partner office staff**,** including the Sponsorship Manager, the two Community mobilisers (community-based staff), one Desk Officer, and one implementing partner ECE Facilitator. The key informants from the local community comprised: eight ECE teachers drawn from five centres were involved in the study; twenty-five parents, some of the preschool children, a hundred preschool children enrolled in the ECE centres; fifteen grandparents; and twenty-five pre-adolescents between the ages of 10 and 12 were purposefully selected from the neighbouring primary schools, five of whom were attached to each centre.

Participant Selection

The key informants who were believed to be repositories of indigenous knowledge and traditions were purposefully selected by the ECE Center Management Committees (Kjorholt et al., 2019). These included parents and grandparents. Others included ECE teachers, children from the ECE centres, pre-adolescents, and some members of the Centre Management Committee. The inclusion of teachers in the study was seen as a strategic approach to ensure the sustainability of the intervention. Mtonga (2012) asserts that schools serve as channels for the spread and enculturation of indigenous knowledge and practices. Parents and grandparents were considered to be an important source of indigenous knowledge and practices. Pre-adolescents with siblings in or near ECE centres were primarily targeted. Pre-adolescent children were a strategic addition to the sample as they play a crucial role in providing daily mentoring to their younger siblings during indigenous play activities. These preadolescents sometimes serve as peer models who could demonstrate complex games to their younger learners. The ECE teachers worked closely with the members of the Centre Management Committee in the selection of pre-adolescents. Vaughn and Jacquez (2020) highlight the importance of community co-researchers in empowering indigenous people through shared decision-making, resulting in sustainable practices and social change. Community involvement in participant selection ensured a culturally sensitive selection process and reduced the risk of excluding or marginalising certain community members, such as grandparents and children.

Data Collection Process

Data collection was done through unstructured interviews, Focus Group Discussions, and observations. Focus Group Discussions comprising 5-10 key informants were conducted at each of the five ECE centres. Focus group discussions fostered intercultural dialogue, involving parents, teachers, and grandparents sharing memories of indigenous games and cultural practices. Focus Group Discussions were also conducted with the ECE learners to discuss their experiences at the ECE centres and the games they played. Researchers observed children playing games in and outside the classroom, using observation guidelines and documented their interactions with teachers and parents. The observational approach allowed for a comprehensive observation of children's participation in outdoor games, both individually and in social contexts with peers. The community members and the research team collaboratively documented responses from the Focus Group Discussions and Observations. In-depth interviews were conducted with the implementing partner staff and ECE teachers.

Analysis

Data analysis was done using framework analysis**.** The participants and researchers focused on a wide array of experiences to construct an in-depth understanding of how indigenous knowledge can inform child development and ECE practices. At each centre, a data analysis committee comprising the implementing partner, academic researchers, ECE teachers, parents, grandparents, and pre-adolescents was formed as part of the data analysis team. The first step was for researchers, teachers, and community members to familiarise themselves with the data. Secondly, all audio-recorded transcripts for the focus group discussions were professionally transcribed into the local language, Bemba. Thirdly, emerging themes were identified. After completing this process at each centre, there was a collaborative meeting of

all five centres with representation by an ECE teacher, a core group member, a few parents, grandparents, and the implementing partner staff and academic researchers. All identified themes were discussed at this collaborative meeting, which deliberated on the findings from each centre. Some of the emerging themes were the benefits of indigenous games in the development of children; the role of grandparents as reservoirs of indigenous knowledge (games, stories, and songs) and indigenous games played in the centres. These emerging themes were further consolidated in relation to the child developmental outcomes the game or song was promoting. Community representatives from each centre were involved in the final analysis to ensure their input in the intervention and collective responsibility in ECE practices and sustainability of the ECE centres.

Ethical Consideration

Ethical requirements were adequately addressed in the implementation process. Ethical approval was sought from the University of Zambia Research Ethics Committee. At the community level, community consultations were undertaken to ensure the research's alignment with the community's norms, values, and beliefs. Through Participatory Action Research, community members were actively involved in the research design and implementation. Informed consent was obtained from community leaders, the implementing partner, parents, grandparents, and children prior to implementation of the study. Utilising a variety of data sources, together with active community participation at each level of data collection and analysis, helped minimise researcher bias. In order to ensure confidentiality, participants' names were kept anonymous, and labels were assigned for reporting purposes.

Findings

The programme was evaluated one year after the implementation of the project. This section presents the findings of the study.

Perceptions of Grandparents, Parents and teachers on the Value of Outdoor Indigenous Games

Through inter-cultural dialogue, grandparents were asked to reflect on their early years, their early experiences, the indigenous games they played as small children, and the cultural significance of these games to delve deeper into intergenerational practices. Grandmother A recollected her childhood memories as follows:

> When I was young, in 1966, I moved to this region. Playing netball was something we used to do after school. Even though I was terrible at netball. Because I had trouble sprinting, I was never any good at netball. ….. We used to get together in the evenings and play "kambushi kalilalila, Leya Leya, Nambushi" and "nakabwambe" to pursue each other. We used to play that way.

Grandfather A recounted:

> My upbringing was in the village at Chilubi Island in the Bangweulu swamps of the Northern Province of Zambia. We once incorporated games that encouraged both boys and girls. We used to play tug of war when we got off school. The boys would be on one side of the rope, and the girls would be on the other until a single party prevails when they would begin pulling the rope.

Grandfather B recounted:

> I was raised in a region where we kept animals in Mumbwa, in Zambia's Central Province. Therefore, most of the time when we were children, we would play while herding cattle, and the play activities would be based on everyday events to represent the daily lives of people in the community. We created numerous clay creatures, including cattle, dogs, rabbits, and possibly a hunter. We occasionally struggled to find water during the hot season, so we had to travel great lengths to reach water sources and animal grazing grounds. Young children would be placed at the rear of small cattle that were specially taught to transport children. Our nighttime activities were modelled after local pastimes, like boys playing with spears to imitate hunters.

The key informants in the focused group discussion reported that the programme positively impacted the community. The communities provided culturally appropriate insights into the relevance of the findings in their lives, such as expected mannerisms and proper use of language. Additionally, parents have since strengthened their participation in their children's education, and parents who previously did

not enrol their children in ECE centres began doing so. The implementing partner Staff member A at Lufwanyama noted that;

> Members of the community have appreciated the project, especially that the use of indigenous cultural games has improved the parent-child relationship. Parents are spending time with their children making play materials using locally available resources.

This corroborated with the observation by Grandmother B who noted that,

> Children are cleverer than they used to be because of the traditional games they are playing, songs, and storytelling. We have seen a lot of similarities between the games children are playing and those we played when we were young. For instance, moulding toys using clay and house play or pretend play. I remember when I was young, we used to do a lot of *house play* with some people pretending to be mothers while others pretended to be children, like in a home setting. At times we even used to cook real food. These used to be amusing and educative games. I am happy to see that even modern children are enjoying the same games. (Grandmother, at the ECE centre).

Teacher A also noted the following,

> Indigenous games, stories, songs, and proverbs were used as teaching methods as well as a means of passing on good morals and cultural norms from one generation to another. There was compartmentalisation of the home and school environments through indigenous games, stories, and participation of grandparents. Before project implementation, the use of indigenous resources was viewed to be more effective at home than at school, whereas play was also viewed as a domain mainly for children and not adults.

What Outdoor Indigenous Games and Songs Could Serve as a Resource Capital for Play-Based Learning at Early Childhood Centres?

ECE teachers and community members collaborated to systematically document indigenous games and songs. Among the documented outdoor play activities that stimulate various aspects of child development were *Chiyenga* (a hand-stone game without song), *Chidunu* (hide and seek), *Kanongo* (Clay pot-A hand and elbow game), *Kabushi kalilalila* (Bleating goat-A circle chasing game), *Kalenga mushalile* (A hand-stone game with a song), *Buunga Bwamale* (Millet meal-An imitation game), and *Espada* (pebble game)

Chidunu (Hide & Seek)

This version of hide and seek involves all players going into hiding while one player does the seeking. After that, a ball is centrally placed in an open area. The seeker must guard this ball as he or she seeks other players. This ball can redeem players seen by the seeker by a player running out of hiding as fast as possible to kick it before the seeker gets hold of it and counts to ten to validate that a player has been successfully seen. However, if the seeker gets to the ball faster, the player that's been seen stops participating in the game and patiently waits to be redeemed by other players still in hiding. The game ends upon the seeker successfully seeking out all players in their hiding places and ensuring that none manages to reach and kick the ball (if this happens, all players seen by the seeker re-join the game.) However, if players in hiding continue to redeem those seen by the seeker, the game goes on until the seeker gives up or players declare the game to end. These games stimulate the cognitive skills of the players in that tact is required in finding a hiding place that will not be easy to spot by the seeker. At the same time, those in hiding need to be very calculative of when they can leave their hiding spot and reach the ball to redeem others before the seeker gets to the ball. Equally, the seeker must be vigilant, especially when other players are spotted and need redemption. If the seeker wanders off too much, a player hiding nearby may reach the ball in time to redeem other players. This part of redeeming and safeguarding the ball requires the players and seeker to implore their cognitive skills. This game also promotes motor skill development, as both the player that has been spotted and the seeker must rush for the ball. On the social-emotional part, the seeker is supposed to be resilient and exercise self-regulation, especially in the event of many redemptions. Additionally, language and counting skills are stimulated through singing and counting.

***Kanongo* (clay pot game)**

This game is played in pairs. A group of children come together and put themselves in pairs, with each player holding the other's elbow with the left hand. All players then sing together while rhythmically tapping and hitting each other's palms and elbows to a simple quadruple-time beat. Players must

concentrate during the tapping and hitting of palms and elbows. When a player misses, she or he falls out of the game. The winners of each pair play with each other until the last standing pair. This game requires a lot of coordination and concentration, thus promoting cognitive skills. Motor skills are also stimulated because of the tapping and hitting movements that must be done in rhythm. The singing promotes language and cultural practices relevant to the local setting. The song is a dialogue between the mother and child, where the child is telling the mother that the clay pot is broken, and the mother asks the child how the clay pot would have broken as that's where the father eats from. Song;

Mayo akanongo katobeka
Katobeka shani we mwana
Emwakulila bawiso
Fukula, fukula, namukatenta

***Kabushi Kalilalila* (Bleating goat)**

Players in this game form a circle and sit down. One player starts the game; with a ball in their hand, the player runs around the circle bleating like "mee mee mee" (making the sound of the goat), and those seated chant in response to the player with the ball. At some point, the player leaves the ball behind one of the seated players; s/he must run very fast to go and occupy the space where the other player was seated (where the ball was placed). Meanwhile, the latter picks the ball and tries to overtake the player who placed the ball behind him/her. Whoever sits in the vacant place first is the victor, while the other is a prisoner and sits in the middle of the circle. This goes on until only a few players remain; these are the winners. This game, just like most games, stimulates the cognitive skills of players in that they must pay particular attention to quickly notice on whose back the ball has been placed. In most instances, there is a lot of amusement as some players do not realise that the ball has been placed behind them until other players prompt them. Dropping the ball allows the player to run ahead, reducing chances of catching up or bypassing the player. Chasing enhances gross motor skills, while chanting promotes language.

Ichiyenga/Chiyato (Stone/pebble game)

This game stimulates visuomotor integration. To play the game, a circle is drawn on a flat, hard surface, and stones are put inside the circle. A few stones are placed in a shallow hole dug on level ground. One stone is thrown into the air by the first player, not too high, and while it is in the air, the player must carefully scoop a few stones from the hole before catching the stone. The stone is thrown in the air again, and the stones are returned but one in the hole or circle. This continues until the hole is empty. However, if a player fails to catch the stone, another player takes over. In the next round, the players return all stones but 2, then 3, then 4. In the second version, the player removes all stones from the hole and returns one stone at a time with each throw of the stone in the hand. When all the stones are successfully put in the grid, the player starts round 2, where two stones must be returned in the hole, then three, four, and five until all 10 (or whatever number) are returned at once. Focused concentration and a lot of eye-hand coordination are required for this game. Even some very young children can master the ability with practice. The hand scoops the stones, and at some times, only the fingers are needed to put certain stones back into the hole, which greatly stimulates fine motor skills. Additionally, in the second iteration, it is occasionally necessary that the other scooped stones be touched as they are being put back in the hole, so perhaps some kind of self-control is also required. This game is primarily played in silence; there is neither a song nor any form of conversation, probably because of the intense focus it demands. The chiyato game offers numerous benefits such as enhancing eye-hand coordination, teamwork, resilience, social-emotional skills, and problem-solving skills.

Kalenga Mushalile (Stone/pebble game with a song)

Players sit in a circle, each one holding a stone or similar object. The game starts with the song. Players hit the stones on the ground rhythmically. When the soloist comes to the prompting phrase, each person must pass the stone to the person on the right. The passing quickens as the pace of the song. Kalenga

mushalile is a verbal game where players must quickly pass stones while maintaining a rhythmic beat. It promotes social skills, cognitive, motor, and language development.

Waida (skipping game)

This skipping game promotes gross motor skills, coordination, and collaboration. There must be at least three players to engage in this form of skipping. Two participants hold a rope while one performs various skipping techniques. The last degree of support for the rope is around the armpits, followed by the ankles, calves, knees, and waist. The player advances to higher levels/heights as they effectively complete each level. This game involves skipping and jumping. The players must follow directions for the latter because there are various styles of skipping and jumping; if they commit even the smallest error, the turn passes to the following player. Some players may become stuck at a certain level as the height to jump/skip rises, forcing them to replay it repeatedly whenever it is their turn to play. To complete a difficult stage, it might take some players days or even weeks. The skipping technique, requiring coordination of gross motor skills, is intricate and challenging. Playing *Waida* encourages communication and vocabulary expansion in children. As the game progresses, players may encounter setbacks, but learning to make attempts can enhance persistence and resilience.

Nsolo (board game)

This game is played extensively across the African continent and goes by various titles (*Mancala, Okwe, Mchobwa, Nchuwa, Bao, Bali, and Morabaraba*). Two people play this game. One or more people may carve twelve or more holes in the earth or a wooden board. In each cavity, two stones are inserted. Until the final stone is placed in an empty hole, the first player must take two stones from one hole and put one stone into each hole. A player must determine whether there are enough stones in a specific hole to approach a target hole by counting the stones there. It is the second player's turn if the first player has no stones remaining to move. The two continue trading rounds until the winner gathers every stone in a single hole. Each player in this game must mentally compute each move to decide which hole with stones they will use to advance. Nsolo enhances the child's physical prowess and self-control.

Gemu (Dodge ball game)

A minimum of three players are required to play this ball game, which has several variants. The most typical and fundamental variant is where the third player stands anywhere in between the two players, with the two players standing at opposite ends about five meters apart. The middle player attempts to dodge the ball as the other two players try to hit him/her with the ball. After being struck or hit, the middle player must move to one of the ends and concede control to another person. The player in the centre must consider the best way to avoid being hit by the ball; they may duck, jump over it, or use any other manoeuvre so long they stay within a certain distance. The players at the two ends need to focus and coordinate skillfully on how to hit their target, the player in the middle. Thus, this game draws on the cognitive skills of all players involved. Another variation of this game may involve two teams, where all members of one team are targets, and they are individually eliminated until the last player is eliminated. However, if the middle player accumulates a set number of points, the other team's players re-join. Points are awarded differently. For instance, merely dodging the ball attracts the least scores, followed by jumping over the ball, while catching the ball mid-air accumulates the most points. Another variation *Washomba wa Loba,* involves multiple players playing individually, the one that is hit goes to one end, while the one who hits a target joins other players in the middle. Some players are easy targets, while others are difficult targets to hit, which may sometimes be frustrating. *Gemu* enhances motor skills, spatial planning, and cognitive abilities through counting and memory retention of scores.

Ego/Kapendo/Espada (Hopscotch)

This game is played by children of all ages. However, it has more challenging variations for older children. It can be played alone, individually in a group or in teams. Children may draw a hopscotch court which is a geometric arrangement of shapes (squares, rectangles, triangles, a semi-circle) depending on the variation of hopscotch. The most basic court uses 8-10 squares, even 6 for very young children. Squares one

to four are arranged vertically attached to each other, then squares 5 and 6 are arranged side-by-side as a horizontal pair, then 7 and 8 are single squares, followed by another horizontal pair of squares 9 and 10. Having a pair at the end allows for turning around and hopping back. Alternatively, if the last cell is 8, a single shape, it may be drawn larger to allow for turning or a semi-circle is attached to it to allow the player to turn. The hopscotch court can be drawn using chalk on any flat surface (tarred road, concrete/pavers etc.). However, it is popularly drawn on the ground using a stick. In addition to the hopscotch court, a marker (small tossable rock or object) is required. Children must select this marker with care, it should be sturdy enough so that it does not easily roll over when throwing it into a cell/shape, and it should not be too light, as tossing it to the further cells/shapes may be a challenge. To play the game, the first player throws the marker into the first cell/square. This maker must land within the parameters of the target square. If it lands on the parameter line or outside the target square, then the player loses their turn. If the marker is successfully thrown in the first square, the player hops on one foot into the next empty square (they skip the square with the marker). The player must hop into every empty square/cell following the numerical sequence. When the player reaches a pair of shapes (in this case, 5-6 and 9-10), the player can land with both feet, one in each square. When the player reaches the last cell/square, the player turns around and heads back to the starting point, where upon reaching the square with the marker, the player picks it up while balancing on one foot and skips over the cell that had the marker. In the next round, the player aims for the second cell and repeats the course. The same is done for all cells. When a player completes a course, another player takes a turn. For older children, when a course is successfully completed, the player proceeds to round two, and the other players only take turns when the first player makes a mistake. Mistakes include falling, jumping outside the lines or on the line, missing a square or the marker. Additionally, a player should not alternate the leg for hoping within a course; they may do so only when starting another course. If a player makes a mistake in round 4, they wait their turn and restart at round four. The winner is the player who completes the whole course up to the final square. The game may continue to determine the second and third in place, or it can end with the first winner. Sometimes, the game is continued the following day. A variation for older children involves kicking the marker from one box to another while hopping. Overall, Hopscotch promotes agility, attention, visual-spatial, gross motor, cognitive, and kinesthetic skills in children.

In-depth interviews with community members highlighted the potential advantages of indigenous outdoor games to child development. Parents and grandparents interacted across cultural boundaries by sharing similar games and memories from their youth. They acknowledged that engaging in indigenous outdoor activities is not only entertaining but can stimulate developmental outcomes. Community members recounted that outdoor indigenous games help improve linguistic, cognitive, social-emotional, psychomotor, teamwork, coordination, empathy, and self-regulation skills. The study further revealed that, prior to the implementation of this initiative, outdoor indigenous games were being underutilised as a pedagogical tool. However, upon exposure to indigenous games in ECE settings and at home, teachers and children began to embrace play-based learning. The game promotes empathy among learners, as knowledgeable children were able to assist their peers who struggled with understanding the concepts. For instance, there were instances where other learners would step in to console their peers when they lost a game, sometimes even assisting those struggling to grasp concepts behind various activities. Indigenous games instil values like patience, perseverance, respect, empathy, accountability, hard work, teamwork, cooperation, reciprocity, and obedience in children. There were also instances when children had sad, angry, and occasionally teary expressions when they lost a game or did not get something right the first time, but they understood that losing was part of the game.

Discussion and Conclusion

Findings underscore the significance of context-based early childhood experiences and call for the development of culturally sensitive programmes for cultural responsiveness. The study supports Serpell's (2009) argument that ECE should be culturally responsive. One key aspect was that community engagement and ownership in the intervention led to strengthened home-school partnerships and the revival of indigenous games. The study particularly highlights the significant role of grandparents, a

cultural resource often overlooked in ECE programming. Grandparents expressed pride in the continuation and revival of indigenous games they played in their childhood and celebrated their participation in the implementation process. Furthermore, children experience a stronger sense of identity and belonging when they play games that represent their cultural history or include components from their community. This aligns with Dunbar and Scrimgeour's (2006) ethno-ethical approach, emphasising the importance of community involvement in community-driven initiatives.

Outdoor indigenous games, documented in this study and highlighted in literature, share similarities with games across cultures, demonstrating the universality of indigenous games. For instance, *Chiyato* is documented across cultures such as Pakistan *Gittey* (Khalid, 2008); *Nhodo* in Zimbabwe (Mandondo & Tsikira, 2021); *Mdako* in Tanzania (Smørdal, 2012); and *Ondota* in Namibia (Utete et al., 2019). Other games such as *nsolo* in Zambia (Mtonga, 2012), Tsoro in Zimbabwe (Madondo & Tsirika, 2021; Moyo & Chinamasa, 2022; Nyanhongo, 2015); *Morabaraba* (Matsekoleng et al., 2022); and *Bao* in Tanzania offers feasibility for use by ECE teachers and parents to stimulate development of visual motor integration, social-emotional, and cognitive abilities in young children. Previous studies have also confirmed that *Nsolo* is a game that promotes socialisation, fine motor skills, and mathematical concepts in children, fostering logical and mathematical thinking from an early age (Mtonga, 2012). Indigenous songs are also vital for knowledge generation, and stimulation of language skills, as they expose children to new words, enhance vocabulary, and improve oral language skills. In the game of *Chidunu* (Hide and Seek) and hopscotch, children engage in physical activity while playing the game and observing the rules. What is clear is that children prize the suspense of the hunt. Although both games require resilience and perseverance, participants recognise that "this is play", and this recognition creates a secure environment in which emotions can be experienced in a playful way without the intense emotional drain of the "real" world (Lester & Russell, 2010).

Additionally, the indigenous games niche contributes to the ethno-theory of child development by promoting opportunities for engagement in intergenerational play activities, allowing children to interact with elders, and acquiring cultural knowledge, values, and practices through participation and learning (Röttger-Rössler et al., 2015). This interaction helps children and community members develop social ties, as noted by Johnson and Samuelsen (2018). Indigenous games also promote inclusive early childhood pedagogical practices, addressing barriers to inclusion for children with disabilities. Matafwali (2022) found that inadequate knowledge of inclusive pedagogical practices among ECE teachers was one of the barriers to the inclusion of children with disabilities in ECE. Cost-effective and utilisation of minimal resources and materials within the community make these games a valuable tool for promoting inclusivity and responsiveness to diversity. Incorporating indigenous games is also essential for establishing home-school partnerships and encouraging parental involvement. These outdoor activities foster creativity, critical thinking, and problem-solving due to their open-ended and unstructured character. Children gain the ability to weigh risks and come to decisions on their own, which can boost their resilience and sense of self-confidence. Indigenous games also provide an opportunity for children to enhance their linguistic competence, encouraging the use of a familiar language and therefore laying a foundation for the development of emergent literacy skills (Matafwali & Bus, 2013).

Documentation of outdoor indigenous games can be an important source of resource capital for advancing play-based learning strategies in ECE settings. Indigenous knowledge does not only offer a comprehensive approach to child development, but encourages responsiveness, inclusivity and preservation of the cultural hegemony in Early Child Development (Lester & Russel, 2008). Thus, documentation of indigenous games will create an opportunity for the Ministry of Education to incorporate indigenous play activities into the ECE curricula and teacher training for improved learning experiences in the early years. Literature suggests the need to create opportunities for capacity of teachers to equip them with knowledge and skills in various pedagogical approaches (Banja, 2022; Moyo & Chinamasa, 2022; Mwanza-Kabaghe & Mofu-Mwansa, 2018). Furthermore, indigenous games can foster home-school relationships by promoting cultural awareness, family involvement, and collaborative activities, ultimately improving children's educational experiences and outcomes (Epstein, 2018).

In conclusion, the study acknowledged the importance of indigenous games and songs in play-based learning in ECE centers for child development, promoting problem-solving, leadership, decision-making, teamwork, and critical thinking.Games enhance interpersonal skills, problem-solving, and reciprocity in children, providing valuable life lessons and fostering healthy childhood memories. They involve physical activity, songs, and motor activities, promoting vocabulary, oral language, and bodily-kinesthetic intelligence. Almost all games involve some aspect of self-regulation because of the aspect of winning and losing. Most importantly, children found these games to be fun, and for most children losing is part of the amusement of playing games. Overall, outdoor indigenous games and songs are significant components of ECE because they help improve quality by stimulating children's growth in various areas. The study suggests systematic documentation of indigenous outdoor games and songs as a valuable resource capital for play-based learning in early childhood education. The integration of indigenous games in play-based pedagogy can enhance cultural responsiveness of the Early Childhood Education (ECE) curriculum and promote collaborations between schools and the community. The development of teachers' capacity is crucial for them to be equipped with adequate knowledge and skills to effectively contextualize indigenous games for learning and create engaging teaching experiences for children.

Declarations

Authors' Declarations

Acknowledgements: We want to thank Professor Anne-Trine Kjørholt, from the Norwegian Centre for Child Research (NOSEB) at the Norwegian University of Science and Technology, NTNU, for setting up a multidisciplinary research group of researchers. We are also grateful for the professional guidance from Professor Anne-Trine Kjørholt and Professor Robert Serpell during the implementation of the project.

Authors' contributions: BM contributed the introduction, discussion and editing. MM contributed the methods and results sections.

Competing interests: The authors declare that they have no competing interests.

Funding: Gratitude goes to NORAD for financing the study. Through their financial and material support, we conducted fieldwork, whose data culminated in this finished report and some book chapters.

Ethics approval and consent to participate: This study was approved by the University of Zambia Research Ethics Committee. Informed consent was obtained from all the participants.

Publisher's Declarations

Editorial Acknowledgement: The editorial process of this article was carried out by Dr. Mehmet Mart, Dr. Helen Little, Dr. Helen Bilton & Dr. Michaela Kadury-Slezak.

Publisher's Note: Journal of Childhood, Education & Society remains neutral with regard to jurisdictional claims in published maps and institutional affiliation.

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