



CULTURAL ANTHROPOLOGICAL FACTORS IN ELEMENTARY SCHOOL STUDENTS' PHYSICAL LITERACY IN THE DIGITAL ERA

Mohamad Syarif Sumantri ¹, Uswatun Khasanah ², Mastri Juniarto ³

¹²³ Program Studi Pendidikan Guru Sekolah Dasar, Universitas Negeri Jakarta

Jl. Taman Setia Budi I No.2, RW.2, Kuningan, Kecamatan Setiabudi, Kota Jakarta Selatan, Daerah
Khusus Ibukota Jakarta 12910

E-mail: syarifsumantri@unj.ac.id

Corresponding Author:

Mohamad Syarif Sumantri

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Abstract

Currently, children's physical literacy faces a crucial problem due to increasing sedentary behavior caused by excessive gadget use, limited play spaces in urban areas, and sports learning that hasn't fully motivated children to move. This situation contributes to a higher risk of an inactive lifestyle, which affects children's physical, social, and emotional health. Previous research on physical literacy has generally focused on biological, pedagogical, and health aspects, such as fitness and the effectiveness of learning. However, studies from a cultural anthropology perspective that examine the meaning of the body, movement, and play within the context of family values, school culture, and children's daily practices are still limited. To fill this gap, this study explores the factors influencing physical literacy in elementary school students from a cultural anthropology perspective using a qualitative approach with students and parents in urban areas. The findings show that physical literacy is a socio-cultural construct influenced by academic pressure, digitalization, and space limitations. This study emphasizes the importance of contextual and culturally sensitive physical education in urban communities.

Keywords: Cultural Anthropology; Physical Literacy; Elementary School.

INTRODUCTION

Digital transformation has fundamentally changed the life patterns of elementary school children, especially in their learning, playing, and moving activities. The increased use of gadgets and digital media has led to a decrease in children's daily physical activity,

which in turn promotes a sedentary lifestyle from an early age. Various education and health reports show that children in urban environments have increasingly limited space, time, and opportunities for physically active play. This situation raises a controversy between the demand to adapt to technological advancements and the basic need of children to move as part of their growth and development. Therefore, a study that examines this phenomenon comprehensively is needed so that the solutions produced are not merely normative, but contextual and rooted in the social-cultural realities of children.

Literature shows that physical literacy is a multi-dimensional concept that includes motivation, self-confidence, physical competence, knowledge, and active participation in lifelong physical activities (Whitehead, 2023). In physical education studies, physical literacy is often linked to motor learning, fitness, and children's health (Kirk; Ennis, 2001). Meanwhile, the cultural anthropology perspective emphasizes that human body practices and movements are shaped by the values, norms, and social habits that exist within a community (Bourdieu; Mauss, 2011). However, most research on physical literacy still focuses on pedagogical and physiological aspects, with limited studies that integrate cultural and digital dimensions simultaneously. The novelty of this study lies in its effort to understand students' physical literacy as a socio-cultural practice negotiated within the context of contemporary digital life.

This study aims to analyze the cultural anthropological factors that influence primary school students' physical literacy in the digital age. Specifically, the research is focused on answering the following questions: (1) how do cultural changes resulting from digitalization affect students' movement and physical play habits? (2) what cultural factors-including family upbringing, social environment, and community values shape students' physical literacy? and (3) how does the interaction between local culture, school environment, and digital technology affect children's physical activity practices in daily life?

This study argues that students' physical literacy cannot be understood in a partial way as an individual issue or a direct result of gadget use, but rather as the outcome of a complex interaction between cultural structures, social practices, and technological changes. By using a cultural anthropological approach, this study is expected to provide

theoretical contributions in expanding the study of physical literacy into social and cultural realms, as well as practical contributions for PE teachers, parents, and policymakers in designing learning strategies and physical activity interventions that are sensitive to cultural contexts and the challenges of the digital age. In this way, the study is relevant for developing more adaptive, inclusive, and sustainable physical education at the elementary school level.

LITERATURE REVIEW

Cultural Anthropology

Cultural anthropology is a branch of social science that studies humans as social beings, focusing on aspects that shape social life and culture, such as physical conditions, production systems, traditions, and values that distinguish one community from another (Zea et al., 2025). Conceptually, anthropology is understood as the study of humans, which aims to explain how people create meaning, social relationships, and ways of living together within a specific cultural context (Jolie, 2025). Within this framework, cultural anthropology places intersubjectivity as the main foundation of culture, which is the process where individuals and groups share, interpret, and negotiate meaning in everyday life (O'Donnell & Tharp, 2012). Through a comparative approach, cultural anthropology helps identify similarities and differences in behavior patterns, values, and social systems across different communities (Krpan et al., 2025). This field has several branches of study, such as prehistory, which examines past human life, ethnolinguistics, which looks at the relationship between language and culture, and ethnology, which studies the social structures and cultures of various ethnic groups.

In recent literature, cultural anthropology no longer views culture merely as a collection of traditions or static symbols, but rather as a dynamic social practice, where meaning, values, and identity are continuously produced and negotiated through everyday interactions full of power relations and certain structural contexts (Setiawan et al., 2024). This perspective emphasizes that culture is shaped through embodied practices, the use of space, technology, and media, so that an individual's physical experience cannot be separated from the social and cultural environment they are in (Dwivedi et al., 2024).

In the context of elementary education in the digital era, a cultural anthropology approach allows for a more comprehensive understanding of students' physical literacy as a result of the interaction between family values, school practices, digital media influences, and social norms that govern children's bodies, health, and physical activity (Irmansyah et al., 2021). Thus, physical literacy is not just understood as motor skills or health knowledge alone, but as a cultural construct shaped through social, symbolic, and technological practices that are interconnected in children's daily lives.

Physical Literacy

Studies on physical literacy in the context of education in Indonesia show a connection between knowledge of physical literacy and various health outcomes and behaviors. Higher levels of physical literacy knowledge are linked to increased participation in physical activities, especially during the adaptation to new habits (Ying et al., 2025). A review of the components of physical literacy shows variation in achievement across its dimensions. Elementary school students generally show high levels of motivation and active participation, while aspects of physical competence and cognitive understanding still need to be strengthened (Zhang et al., 2023). Physical education programs are considered relatively effective in developing the affective dimension, but not yet fully optimal in strengthening the cognitive dimension (Shearer et al., 2021). Additionally, physical literacy is also related to body composition, where higher levels of physical literacy tend to be associated with lower body mass index, although the strength of this relationship is considered weak (Fortnum et al., 2025). Various forms of educational interventions designed in an engaging way have been shown to improve students' understanding and readiness to implement physical literacy, highlighting the strategic role of physical education in enhancing physical literacy in schools.

In the framework of cultural anthropology, elementary school students' physical literacy cannot be understood simply as the result of individual ability or curriculum intervention, but rather as a social practice shaped through layered interactions between family values, school culture, and the dynamics of everyday digital life (Ha et al., 2022). A child's body becomes a space where health norms, discipline, and physical activity are continuously negotiated through household routines, parenting patterns, and school

institutional expectations (Zeng et al., 2024). At the same time, digital media presents representations of the body, active lifestyles, and sports practices that shape both aspirations and new limitations for children in understanding physical activity (Cui et al., 2024).

Physical literacy thus emerges as a cultural process that is situational and contextual, where motivation, competence, and understanding of movement are closely tied to social relations, symbols, and discourses that govern children's bodies in family spaces, schools, and digital spaces (Valle-muñoz & Mendoza-muñoz, 2025). A cultural anthropology approach allows for a more comprehensive reading of this process by positioning physical literacy as the result of dynamic social negotiation, rather than as a universal technical achievement.

Elementary School Students

Elementary school students have unique developmental characteristics, so they need learning approaches that are designed contextually and suited to their growth stage (Z et al., 2024). In general, elementary school students are divided into lower and upper grades, each showing differences in thinking ability, emotional control, and learning independence (Webb-Williams, 2021). From a cognitive perspective, students are at the concrete operational stage, where logical thinking abilities still rely on direct experiences and real objects around them (Imjai et al., 2024). Therefore, the learning process needs to include activities that are concrete, contextual, and meaningful. To accommodate the diverse abilities and learning needs of students, differentiated learning becomes a relevant approach, with adjustments in aspects of content, process, and learning products (Tajik et al., 2024). In addition to cognitive aspects, elementary school students are also at an important phase in shaping attitudes and values, including the ability to distinguish between good and bad behavior (Agustin & Supriatna, 2025). In this regard, the school environment plays a strategic role as a social space that supports students' academic, social, and emotional development in a holistic way.

In this context, cultural anthropology provides an important analytical framework for understanding the learning process of elementary school students as a social practice influenced by the values, habits, and cultural environment in which the child grows up

(Sandora, 2025). This approach sees learning activities, including physical activities, as part of cultural experiences shaped through interactions between students, teachers, families, and digital media. Physical literacy, therefore, is not just about movement skills or understanding health, but also reflects how children make sense of their bodies, activities, and healthy lifestyles based on prevailing social norms (Vieira et al., 2025). In the digital age, exposure to technology and media also shapes students' physical activity patterns, both by encouraging a sedentary lifestyle and by opening up new opportunities through educational content and movement-based games (Pushkarenko et al., 2023). Cultural anthropology helps uncover how these factors interact with students' social, economic, and cultural backgrounds in shaping physical literacy (Fortnum et al., 2025). By understanding physical literacy as a dynamic cultural construct, primary education can design learning strategies that are more sensitive to students' social contexts, while also promoting the balanced development of physical skills, attitudes, and values.

METHODS

This research is qualitative in nature and relies on a case study. The case study was chosen due to the need for an in-depth understanding of the subjects being studied. With a case study, it is possible to capture the subjects' perspectives in their choices of actions and motives for certain actions. The case study begins by selecting cases from a population consisting of public and private elementary school students in the urban Jakarta area. Out of a population of 32 students, 8 children were selected with consideration for gender balance, the duration of social media use in learning, and tendencies of interest in physical activities or sports.

The research was conducted at an elementary school located in an urban area, where the environment is heavily exposed to digital technology. 1) Elementary school students (grades IV–VI) as the main actors in physical literacy practices; 2) Classroom and Physical Education teachers; and 3) Students' parents as representatives of family cultural values and their methods of upbringing. Purposive sampling was used to select participants who were directly involved in physical activities, education, and the use of gadgets in daily life.

The qualitative data in this study were obtained from various relevant informants, namely students, , and students' parents from three public elementary schools located in the urban area of Jakarta. The selection of data sources was done purposively, considering the informants' direct involvement in the educational process as well as their experiences related to the context being studied, so that the obtained data is expected to provide a deep, contextual, and comprehensive picture of the phenomenon being examined.

The data in this study were collected through questioner, interviews, and documentation to thoroughly explore the phenomena, context, and meanings that emerge from the research subjects. interviews were used to obtain detailed information and perspectives from the informants, while documentation was utilized as a supporting data source to reinforce the research findings.

Qualitative data is analyzed using an interactive model developed by Miles and Huberman, which consists of data collection, data redundancy, data analysis, and conclusions or data verification. Data analysis begins with data collection, where relevant information is continuously gathered, processed, and presented through the data reduction process. The collected data is then organized and presented in the form of tables or thematic illustrations to facilitate pattern analysis and comparison. After that, the results are analyzed through a rigorous process of interpretation and verification, where the data is continuously examined to ensure consistency, accuracy, and reliability. Quantitative data is analyzed simply using descriptive statistics.

RESULTS AND DISCUSSION

Low Physical Activity in Elementary School Children Physical activity

in elementary school children tends to have decreased in recent years, influenced by lifestyle changes, digital advancements, and learning patterns that increasingly demand sitting and using devices. Many students spend more time at home with gadgets, watching screens, or playing online games rather than moving around and playing outdoors. At school, PE time is often limited, so opportunities to run, play, or participate in traditional games are getting fewer. This situation can potentially reduce physical fitness, motor skills, and children's social-emotional development. Therefore, identifying students' activity

levels is an important step to understand these trends and design supportive strategies that can bring back a culture of movement in elementary school environments.

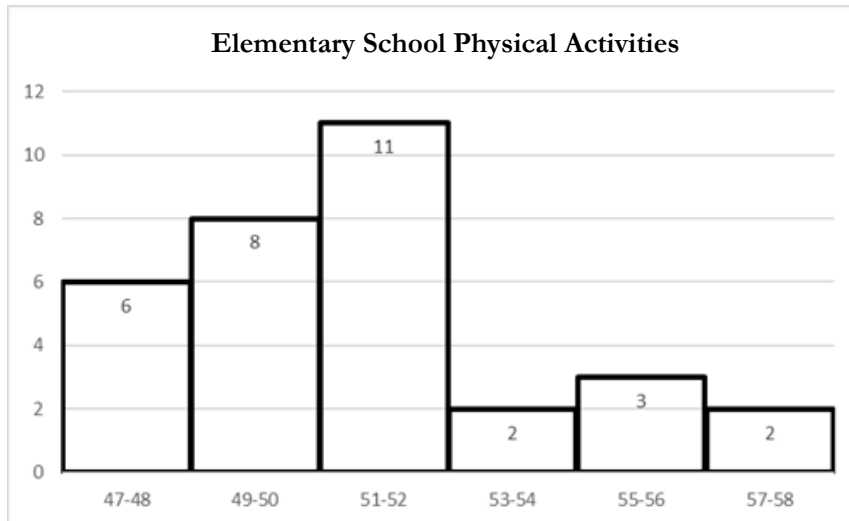


Figure 1. Elementary School Student Physical Activity Data

Table 1. The values used are: mean = 51.03 and standard deviation = 2.95

Category	Criteria
Lowest	$X < (\text{Mean} - 1,5 \text{ SD})$ $X < 46,6$
Low	$(\text{Mean} - 1,5 \text{ SD}) \leq X < (\text{Mean} - 0,5 \text{ SD})$ $46,6 - 49,6$
Currently	$(\text{Mean} - 0,5 \text{ SD}) \leq X \leq (\text{Mean} + 0,5 \text{ SD})$ $49,6 - 52,5$
High	$(\text{Mean} + 0,5 \text{ SD}) < X \leq (\text{Mean} + 1,5 \text{ SD})$ $52,5 - 55,5$
Hights	$X > (\text{Mean} + 1,5 \text{ SD})$ $X > 55,5$

Average = 51.03

falls into the moderate category

meaning: the condition of the variable is at a fairly low level

Based on the descriptive analysis of 32 elementary school students, their overall physical activity level is generally in the moderate category. The average score of 51.03 indicates that most students are fairly active, although their physical activity has not reached an optimal level. A small portion of students are still in the slightly low moderate category, so they need encouragement and intervention to be more active in daily activities.

From the chart in Figure 1 that explains the suboptimal condition of most students' physical activity in participating in Physical Education classes, three important points can be shown (conclusions from the data). First, the physical activities involving students in various activities are not yet optimal, as reflected in the movement activity questionnaire scores from 32 students, indicating that the time they spend on physical activity is lacking. Second, the lack of student activity is due to insufficient support from facilities for adequate exercise space, such as an inadequate ratio of students to field size. Third, physical activity is also related to teachers' understanding of physical literacy carried out during the teaching and learning process. In other words, the teacher factor is very crucial in determining the adequacy of students' physical activity. Therefore, students not reaching their physical activity targets is determined by various complex factors, both cultural and structural. (to be integrated with the material below/others).

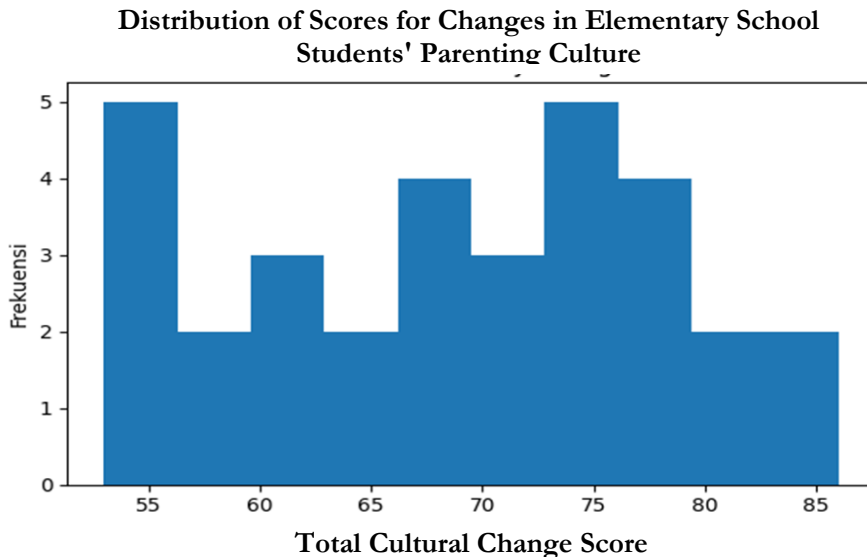
Changes in Parenting Culture

The shift in parenting culture in the modern era has had a big impact on the lives and development of elementary school kids. In the past, parenting focused more on togetherness, face-to-face interaction, and getting kids used to playing outside. Now, many parents have switched to a more practical, tech-based approach. Busy work schedules, academic demands, and the convenience of digital devices mean there's less time for direct supervision. Kids are more often guided toward safe, controlled activities, mostly done indoors. This shift not only affects family interactions but also changes how kids play, get physical activity, and develop socially.

By understanding the direction of changes in parenting, schools and communities can design collaborative efforts to maintain a balance between children's developmental needs and the demands of modern families. Based on a survey of students' perceptions of their parents' parenting styles at home, with 32 student respondents, the synthesis is as follows:

DATA: Visualize the survey on factors influencing changes in child-rearing culture.

Chart 1. Data on Changes in Parenting Culture Scores



Based on the results of a quantitative descriptive analysis from 32 respondents (4-point Likert questionnaire, 28 items) on the focus of changes in parenting culture for elementary school children with indicators 1) family communication patterns, 2) control and discipline, 3) academic support, 4) rewards & punishments, 5) child independence, 6) parental role model, 7) emotional warmth. The average score was 68.59 out of the theoretical maximum score of 112 (28×4). Most students scored between 60–78, indicating that changes in parenting culture tend to occur at a moderate level. Low scores (52–58) appeared in a small number of students, indicating more traditional or unchanged parenting patterns. High scores (80 and above) were found in a small number of students, suggesting a more modern/adaptive family environment.

The score distribution on the histogram shows a relatively even spread but is concentrated in the middle range, so it can be concluded that changes in parenting culture are happening, but they're not yet dominant across all student families. This suggests that the influence of modernization, digitalization, and social dynamics varies in intensity in each parenting environment.

Table 2. Interview with students focusing on Parenting Styles

Source: 2026 Research Data

No	Informant Name, grade. School	Statement	Coding
1	Mohamad Ghazi, fifth grade. SDN Gunung 01 Jakarta Selatan	"Only sometimes. If the parents are off or not tired, then they are invited."	The frequency of physical activity depends on the condition of the parents
2	Siti Khadijah, sixth grade. SDN Gunung 01 Jakarta Selatan	"Rarely, my parents are busy. I usually play by myself or play on my phone."	Using a cell phone as an activity choice
3	Maria Puspita, sixth grade, SDN Duren Sawit 03 Jakarta Timur	"Parents say playing games is also good because you can learn and think quickly."	Digital activities are seen as educational
4	Ratna Wulandari, fifth grade SDN Duren Sawit 03 Jakarta Timur	"No, my parents prefer that I just play at home."	Physical activity could decrease
5	Dessy, fourth grade SD Kebon baru 11 Jakarta Timur	"You can't do it too often because I'm afraid it'll get dirty and tiring."	Reason for the ban: afraid of getting tired

Parental parenting styles play a big role in shaping children's physical literacy, which includes knowledge, attitudes, self-confidence, and movement skills needed to lead a healthy lifestyle. Findings from five informants showed varied parenting styles and their direct impact on physical activity levels. The first informant only played actively when friends were around or when parents invited them, showing the need for environmental support to be active. The second informant spent more of their free time on gadgets because their parents were busy working and provided little support for physical activities.

The third informant gets a lot of freedom to use gadgets because their parents think digital games are good for cognitive development, making physical activity less of a priority. The fourth informant is limited from playing outside for safety reasons, so they spend more time doing activities at home. Meanwhile, the fifth informant is restricted because their parents worry about hygiene and schoolwork if they get too tired. These differences in parental views also shape the kids' lifestyles, especially whether they tend to be active or sedentary. The second set of data shows, based on the graph, that the score

distribution on the histogram is relatively even but concentrated in the middle range, so it can be concluded that changes in parenting culture are happening but are not yet very dominant in all student families. This suggests that the impact of modernization, digitalization, and social dynamics varies in intensity across different parenting environments.

From graph 2 and table 1, it explains the changes in parenting culture. Based on the research data, parenting styles play an important role in shaping children's physical literacy through support, guidance, and providing opportunities for physical activities. Findings from five informants show variations in parenting styles that affect children's activity levels, ranging from reliance on social support, high gadget usage, to limiting outdoor activities due to safety, cleanliness, or academic reasons. These conditions contribute to differences in tendencies toward an active or sedentary lifestyle. Meanwhile, the score distribution being concentrated in the middle range shows that changes in parenting culture due to modernization, digitalization, and social dynamics have happened, but they are not yet uniform and haven't taken over all families. So, the impact of changes in parenting culture on children's physical literacy varies depending on the context and characteristics of each family.

Urbanization and Digitalization In Learning Culture

Table 3. Text Data on Urbanization and Digitalization in Learning Culture

Source: Online Media

News Title And Source	Narrative	Coding
Australia-larang-anak-di-bawah-umur-gunakan-media-sosial Sumber: https://lifestyle.kompas.com/read/2024/12/04/150300520/australia-larang-anak-di-bawah-umur-gunakan-media-sosial-ini-4-	Without social media, kids have the chance to build social skills directly, learn to interact, and expand their circle of real-life friends.	Healthy social relationships face-to-face interaction learning to get along real social circles

News Title And Source	Narrative	Coding
manfaatnya?page=2. Lahan untuk anak-anak bermain di Jakarta https://www.antarafoto.com/id/view/2564705/1 ahan-untuk-anak-anak-bermain-di-jakarta	A number of kids are playing in an empty lot in Boncos Village, Jakarta, Wednesday (7/2/2025). The lack of play areas in Jakarta has led many children to use open spaces to play, even though they are not meant for that. ANTARA FOTO/Bayu Pratama S/bar 	The physical condition of the urban environment that doesn't provide child-friendly facilities for physical activities
Pentingnya Taman Bermain Pada Aktivitas Fisik Anak-Anak dan Remaja. Sumber : 4th Wijayakusuma National Conference (WiNCo) 2023 e-ISSN: 2809-7785 Cilacap, Indonesia, 22 November 2023 pp.52-56	Children and teenagers need to engage in physical activities. So far, children's and teenagers' physical activity has been met through physical education. Playgrounds can be an alternative to increase physical activity for children and teenagers, but there hasn't been any serious action from the government in utilizing playgrounds. In areas with high and diverse population density, good environmental connectivity is needed to support children's physical activity behavior. The availability of playgrounds can be an interesting solution that should be tried to overcome the lack of	Optimizing public spaces and playgrounds as a solution for kids' physical activity needs in densely populated urban areas.

News Title And Source	Narrative	Coding
	opportunities for moderate to high physical activity experienced by children and teenagers who are more active.	
Meningkatkan Kesehatan mental siswa lewat Pendidikan olahraga di era digital. Sumber : https://iicls.org/index.php/jer/article/view/908 https://doi.org/10.1016/j.ijcci.2024.100652	The rapid development of digital technology has had a big impact on students' lifestyles, including increased sedentary activities and overexposure to gadgets. This can potentially harm students' mental health, shown by higher levels of stress, anxiety, and social isolation. Sports education is one effective way to tackle these issues. Even though digital games offer a new kind of interactive and engaging gameplay, global studies on digital gaming show that there are concerns that too much digital activity can replace time spent in physically active play.	Physical activity has decreased; sedentary activity has increased Shift from physical activity; Active playtime has decreased

Based on the five text documents above, the first text questions the role of social media on children's physical activities. It highlights that students without exposure to social media have the opportunity to develop direct social skills, learn to interact, and expand their physical network of friends. On the other hand, excessive continuous use can negatively affect their real social interaction skills. The second text explains about the limited play spaces, especially in urban areas, which causes elementary school children to utilize their play activities, particularly active play, even if it's not meant for that purpose. Next, in the third text, it seems to highlight the need for children to have adequate physical activity, which so far has been relatively regularly provided through physical education programs at school. However, playing in home environments, such as playgrounds, has not yet received serious attention from local governments as a solution to meet children's active play needs. The fourth text illustrates how students' lifestyles are influenced by rapid digital technology developments, including excessive exposure to gadgets and

increased sedentary activities. This situation can harm students' mental health, marked by higher levels of stress, anxiety, and social isolation. One of the best ways to address this problem is through physical education. Next, in the fifth text, it highlights how digitalizing children's games reduces opportunities for active physical play. There's a shift from playing actively in a physical way, which is being replaced by playing digitally.

All five texts show that urbanization and digitalization have a big impact on elementary school kids' play and learning culture. Exposure to gadgets and social media reduces their chances to interact directly with others, and using gadgets too much makes them sedentary and isolated. Limited play space in the city makes it hard for kids to do physical activities outside the house. This happens even though schools still provide regular playgrounds. However, the need for active play isn't met if there are no public facilities like parks. Digitalization also reduces mental and physical fitness by pushing people to switch from physical games to online games. Overall, digital culture and the limitations of urban space make kids more passive and lose opportunities to grow in the real world.

This study explains the relationships or factors that affect physical literacy in elementary school students, viewed from the perspective of students' cultural anthropology. Physical literacy comes from the interaction between a child's biological abilities and their norms, traditions, and cultural facilities. In the era of digital technology disruption, it is important to take advantage of it in the learning process as part of academic support, but on the other hand, digitalization in learning encourages a decrease in students' physical activities. At least four factors influence the low physical literacy when viewed from children's cultural anthropology. The findings from this research review are, first, (4.1) low physical activity in elementary school children, second, (4.2) habitus or sedentary lifestyle (E2), third, (4.3) changes in parenting culture, and fourth, (4.4) urbanization & digitalization in learning culture. Thus, these findings show that the cultural anthropology factors of students reflect aspects that influence their physical literacy. Children living in the metropolitan area of Jakarta face limited play space at school and in their home environment. This reduces their opportunities to exercise freely and spontaneously, according to Lynch (2023). On the other hand, digital technology

advancements have become a normal part of students' daily lives, both at home and at school.

Children's interaction spaces in the city are increasingly shifting from physical environments to virtual communities, as pointed out by Valentine (2002) and James & Prout (2015). According to this phenomenon, kids prefer participating in screen-based activities rather than physical games that require movement. In conclusion, therefore, the development of new technology, virtual interaction patterns, and urban environments all contribute to the decline in children's physical engagement. In addition, they challenge efforts to improve physical literacy among elementary schoolers in big cities.

Physical literacy is shown through dimensions like motor skills competence, motivation & confidence, knowledge & understanding. Research findings show that factors influencing low physical literacy are multilayered environments. As mentioned by Tong and Shidong An (2023) in their Ecological Systems Theory, a person is influenced by the Microsystem: family, school, peers; Mesosystem: connections between environments; Exosystem: school policies, parents' work; Macrosystem: culture, city economy; and Chronosystem: changes over time (digitalization). So it's quite understandable that elementary school kids in urban areas are exposed to technology, high mobility, and social pressure.

Gülden Demir (2024) explains that urban children are digital natives who have been exposed to technology since a very young age, making them quick to adapt to it. The Digital Native Theory is relevant to the finding that urban children of mothers in Jakarta tend to have low physical literacy due to a sedentary lifestyle and dependence on gadgets. Physical literacy in terms of motor skills can very likely lead to a decrease in overall movement activity. This result is due to a sedentary lifestyle (lazy or lying down). However, other dimensions like knowledge and understanding of healthy living might actually be better because this knowledge is gained through interaction with smartphone technology. So if managed wisely, it can lead to a balanced life for children between physical activity and interacting via technology or fulfilling academic and non-academic needs, as emphasized by Kardefelt and Winter (2025) when reviewing evidence on how

the time children spend using digital technology impacts their well-being across three main dimensions: mental/psychological health, social relationships, and physical activity. Next, Englund (2025) reported in his study that online games are not just entertainment, but also social spaces that can be used both positively and negatively. The current challenges in child protection are not only related to inappropriate content, but also to how organized actors with violent motives can exploit gaming communities for harmful purposes, which requires cross-stakeholder collaboration to effectively protect children. The implication of these findings emphasizes that children's worlds today are divided between physical and digital spaces. The solution is not to reject technology, but to manage digital use wisely, strengthen physical activity, build digital safety, and create a support ecosystem involving family, school, community, and policymakers.

Research on physical activity among elementary school students has mostly focused on or only paid attention to: the physical education and sports curriculum, sports teacher competence, nutritional status, sports competitions, and factors in students' psychological and physiological development of physical movement. As Jay Coakley (2015) stated, studies on sports over the decades have been more focused on performance improvement, exercise science, and physiological benefits. Meanwhile, social and cultural issues related to children, identity, symbols, and the meaning of play in society have received little attention, so this writing offers a different perspective on physical literacy, namely from cultural anthropology, meaning that the quality of students' physical literacy needs to take into account cultural factors such as urban environments, digitalization, family parenting patterns, and a sedentary lifestyle, as emphasized by Pierre Bourdieu (1990) in *Cultural Capital & Sport*. Bourdieu pointed out that sports are not just physical activities, but cultural practices full of meaning, status, and habitus.

This study has contributed a new concept that is rarely used in analysis, namely how culture shapes children's physical behavior from an early age. These findings can be used as input for educational policy-making, especially in sports, about the importance of improving student well-being through opportunities for active play with enough playground space, particularly in urban communities, as well as the importance of balancing the use of digital technology and children's physical activity.

Overall, this discussion emphasizes that the factors affecting low physical literacy need to be addressed with the following recommendations:

To improve students' physical literacy, an integrated strategy based on the city and digital era is needed. So that gadgets don't just encourage a sedentary lifestyle, motion tracking apps and digital games should be combined with physical activities. By utilizing parks, public spaces, and local playgrounds, the limitations of urban space can be overcome. Sports education should be sensitive to sociocultural aspects through traditional games that align with the community's identity and values. Managing screen time, having regular movement routines together, and teaching an active lifestyle at home require school-family cooperation.

Special programs like traditional games week can help revitalize the value of traditional games as a means of cultural exchange and movement. Training in physical literacy and activity design for limited spaces is important for PE teachers to improve their teaching skills. All efforts are supported by eco-friendly school campaigns, short mental breaks, and opportunities for daily physical activity.

CONCLUSION

Protective-academic parenting as an urban cultural construct.

Urban parents tend to see an “active child” as one who is safe, calm, and focused on academics. Physical activity is often limited in the name of safety, academic achievement, and social control, so physical literacy grows in terms of knowledge but is weak in real movement experience.

The school culture implicitly restricts movement.

Schools don't explicitly ban physical activity, but cramped spaces, tight academic schedules, and discipline based on body order create a hidden curriculum that normalizes limited opportunities to move.

A sedentary lifestyle as a cultural practice, not just an individual choice

Students' sedentary behavior emerges as an adaptation to urban culture-due to limited play spaces, traffic, and social concerns-not simply because of laziness or low motivation.

Digitalization as a substitute for physical experiences.

Digital culture doesn't completely eliminate physical literacy, but it shifts it into symbolic knowledge (watching, knowing, discussing movement) without bodily involvement, creating physical literacy that is cognitive but not embodied. Students' physical literacy in urban areas is shaped as a result of the city's cultural construction, involving parenting styles, school culture, environmental conditions, and digitalization. Protective–academic parenting and the school's hidden curriculum indirectly limit children's movement experiences, while sedentary lifestyles emerge as a cultural adaptation to limited space and social concerns. On the other hand, digitalization doesn't erase physical literacy but shifts it to cognitive and symbolic forms with minimal bodily involvement.

Significance and Contribution of the Research

This study makes a significant contribution by showing that elementary students' physical literacy is influenced by family, school, and urban culture. Sedentary behavior develops through protective parenting, academic pressure, as well as limited space and opportunities for movement. School culture also reinforces passivity through disciplinary rules and tight study schedules. Digitalization shifts physical literacy to cognitive knowledge without sufficient movement experience, so developing physical literacy requires a contextual and culturally sensitive approach.

Limitations and Directions for Further Research

This study has a few limitations. First, the research context is limited to children in the urban areas of Jakarta, so the findings are heavily influenced by urban cultural characteristics and cannot yet be generalized to other regions. Second, the perspectives of informants are still dominated by teachers and students, while the roles of parents, the community, and school policies have not been explored comprehensively.

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