

THE UTILIZATION OF TRADITIONAL GAMES BASED ON LOCAL CULTURE TO OVERCOME GADGET DEPENDENCY AMONG CHILDREN IN THE DIGITALIZATION ERA

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Abstrak

Keywords:

Local Culture,
Traditional Games,
Gadget Dependency,
Children,
Digitalization Era.

The development of digital technology has a significant impact on children's lives, especially the increase in excessive use of gadgets which has the potential to cause dependence. Dependence on gadgets in children can hinder social, emotional, and physical development, as well as reduce interaction and creativity skills. This study aims to examine the use of traditional games based on local culture as an alternative solution in overcoming gadget dependence on children in the digitalization era. The research method used is library research by examining five relevant scientific articles published in the range of 2020–2025. Data collection was carried out through Google Scholar searches using keywords related to traditional games, gadget dependence, and the digitalization era. The results of the study show that traditional games based on local culture are effective in reducing the intensity of gadget use in children, while increasing physical activity, social interaction, creativity, and character building. Thus, the use of traditional games based on local culture has great potential as an educational and preventive strategy in balancing children's development in the midst of digitalization through the involvement of families, schools, and communities.

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INTRODUCTION

The development of technology in the 21st century has shown rapid progress, particularly in the fields of communication and information. These advancements have brought positive impacts on human life (Rini et al., 2021). Innovations in communication and information technology have led to various changes, ranging from



the evolution of computer devices to the emergence of modern gadgets that are practical and easy to use. Gadgets such as smartphones, tablets, and other digital devices have now become an inseparable part of children's daily activities. However, excessive gadget use without proper supervision can lead to various problems, one of which is gadget dependency among children. This condition has the potential to inhibit their social, emotional, and physical development, as well as reduce direct interaction with the surrounding environment. Therefore, the role of parents is crucial in supervising and regulating children's gadget use at home, considering that parents are the primary figures responsible for the child's development and character formation (Afriantoni et al., 2025).

The use of gadgets has both positive and negative effects. On the positive side, gadget utilization can influence students' academic performance (Hidayat & Erfian Junianto, 2017 in Kurniawati, 2020). Learning achievement is the level of competency attained by students after participating in a learning process for a certain period, which is reflected through changes in behavior, improved skills, and increased knowledge. However, excessive gadget use brings negative impacts, including delays in cognitive and emotional development (Wahyudin et al., 2024). Moreover, such conditions may hinder the development of 21st-century skills, such as collaboration, which begins with the ability to communicate, express opinions, and present arguments critically and creatively.

Children who frequently use gadgets tend to experience anxiety and stress, especially due to exposure to age-inappropriate content and social media pressure. Limited direct interaction with others also hampers the development of empathy, making children less sensitive to others' feelings and less able to respond appropriately to emotional cues. Socially, gadget dependency causes children to withdraw from their surroundings because they spend more time playing games or watching videos rather than interacting with friends and family. This may lead to social isolation and hinder communication skills development, such as understanding facial expressions, tone of voice, and body language (Uttami, 2024). Furthermore, uncontrolled gadget use affects academic aspects by reducing concentration, disrupting sleep patterns, and decreasing study time and quality, which ultimately lowers academic achievement.

One of the efforts to overcome gadget dependency among children is utilizing local culture as an educational and enjoyable alternative activity. Local culture contains noble values and traditional wisdom that encourage children to move actively, interact with others, and learn from their environment. A tangible form of local culture that can be utilized is traditional games. According to Kotakulon et al. (2025), traditional games can enhance various types of intelligence, such as linguistic, logical, visual-spatial, kinesthetic, musical, and interpersonal intelligence. In addition, traditional games contribute to developing values such as integrity, sportsmanship, responsibility, and cooperation (Damayanti & Tiaraningrum, 2023). From a motoric perspective, traditional games improve physical endurance through locomotor movements (running, walking, jumping), non-locomotor movements (landing, turning), and manipulative skills (hitting, catching, throwing).

Traditional games hold potential as a medium to preserve local wisdom while fostering character education. Various traditional games include bakiak racing, congklak, stilts, galah asin, gatrik, hopscotch, perepet jengkol, and oray-orayan (Hadyansah et al., 2021). In line with Dalimunthe & Frinaldi (2025), traditional games

not only serve as entertainment but also act as an effective alternative to reduce excessive gadget use among children. Besides minimizing gadget dependency, traditional games cultivate local cultural identity and enhance the quality of children's social interactions. On the other hand, technological advancement has also introduced adaptive learning and learning analytics, enabling schools to provide more personalized and effective learning (Ang & Goro, 2025; Siemens & Long, 2021).

Thus, the utilization of local culture to address gadget dependency among children in the digitalization era is highly relevant to be examined and applied. Local culture offers great potential as an educational and engaging activity alternative that aligns with children's developmental characteristics, thereby helping divert attention away from excessive gadget use. Beyond serving as a medium for cultural preservation, integrating local culture particularly traditional games can foster social interaction, increase physical activity, and develop children's social and emotional skills. Collaboration among families, schools, and communities in presenting appealing and context-based cultural activities is expected to help reduce uncontrolled gadget usage. Consequently, children can grow and develop optimally, possess strong character, and master 21st century skills such as collaboration and communication, while maintaining cultural values and national identity.

LITERATURE REVIEW

1. Digitalization Era and Gadget Dependency Among Children

The digitalization era has brought significant transformations to human interaction, learning, and communication processes, especially among younger generations. Children today are growing up in an environment where access to digital devices such as smartphones, tablets, and gaming consoles is highly prevalent. The widespread availability of digital technology has made gadgets essential tools for communication, entertainment, and education. However, while the integration of digital technology contributes positively to children's cognitive stimulation and creativity development, it also raises concerns regarding excessive screen time and dependency. Gadget dependency among children is characterized by a strong urge to continuously use digital devices, accompanied by reduced interest in physical, social, and outdoor activities. Prolonged exposure to screens has been associated with decreased attention span, reduced interpersonal interaction, impaired sleep patterns, and emotional instability. Researchers argue that gadget dependency may hinder the development of crucial social skills, particularly the ability to communicate effectively, collaborate, and empathize with others skills that are fundamental in supporting children's future readiness (Wahyudin et al., 2024). The digitalization era also reinforces sedentary lifestyles, increasing the risk of obesity and weakening children's motor development. Although digital learning platforms offer valuable educational benefits, excessive gadget usage without parental supervision contributes to reduced creativity and imagination because children become passive receivers of information rather than active learners. Therefore, researchers have emphasized the need for balanced exposure by integrating both technological and non-technological activities in children's routines. Physical activities, interactive play, and cultural engagement are seen as alternative approaches to reduce screen dependency while maintaining children's holistic development. This context highlights the urgency of reintroducing traditional games rooted in local culture as a counterbalance to digital immersion, providing a pathway for

children to reconnect with their environment, enhance physical engagement, and rebuild social interaction skills crucial for their overall growth.

2. Local Culture as a Foundation for Character Development in Children

Local culture embodies values, norms, customs, and traditions that reflect the identity and historical heritage of a society. It plays a crucial role in transmitting moral values and shaping children's character through experiential learning and cultural exposure. In many communities, local cultural activities serve as platforms through which children learn respect, cooperation, empathy, and responsibility values that support the holistic development of personality and identity. Researchers argue that integrating cultural-based experiences in children's daily environments strengthens moral reasoning and emotional awareness, enabling them to internalize social norms through observation and participation. Local cultural practices also foster a sense of belonging and collective identity, which are essential for emotional stability, resilience, and self-esteem. When children engage with cultural traditions, they develop pride in their heritage and learn to preserve the values embedded in their environment. Furthermore, cultural activities encourage social cohesion by facilitating meaningful interactions among peers, family, and community members. Studies show that cultural-based education contributes to positive behavioral outcomes, such as respect for diversity, cooperation, and adaptability, which align with the competencies needed in modern society (Damayanti & Tiaraningrum, 2023). Through cultural immersion, children also acquire language expression, creativity, and symbolic thinking skills, particularly when involved in activities that require storytelling, role-play, or traditional performances. In the digitalization era, local culture acts as a protective buffer against cultural erosion and identity loss caused by global digital exposure. By prioritizing cultural-based engagement, educators and parents can counteract the negative effects of overreliance on digital devices. Local culture not only nurtures cultural literacy but also supports character formation, emotional maturity, and social responsibility. Thus, leveraging cultural heritage through child-centered activities, including traditional games, becomes a strategic approach to fostering character and reducing unhealthy digital dependence.

3. Traditional Games as Tools to Improve Social and Emotional Development

Traditional games, which are passed down across generations, provide opportunities for children to develop essential social and emotional competencies through direct interaction and cooperative play. Unlike digital games that often fragment social experiences, traditional games require players to communicate, negotiate rules, collaborate, and resolve conflicts, making them valuable pedagogical tools for interpersonal development. Researchers highlight that traditional games nurture empathy, patience, self-control, and sportsmanship because children must manage emotions such as excitement, disappointment, and frustration within a shared social environment. These experiences contribute to emotional regulation, resilience, and the ability to build meaningful relationships. From a social perspective, traditional games encourage group participation and strengthen peer bonding, which are vital for enhancing communication skills and reducing social isolation caused by excessive gadget use (Hadyansah et al., 2021). Furthermore, the interactive nature of traditional games supports verbal and non-verbal communication through gestures, facial expressions, and vocal cues skills often diminished when children engage predominantly with screens. Studies indicate that children who actively participate in

traditional games exhibit improved social adaptability, reduced anxiety levels, and higher confidence in interacting with peers. Traditional games also promote inclusive participation, as they do not require advanced technology or special equipment, allowing children from diverse backgrounds to engage equally. Emotional intelligence, such as recognizing and respecting differences, emerges naturally during gameplay that emphasizes teamwork and role-sharing. In educational settings, traditional games can be integrated into learning strategies to strengthen classroom engagement and reduce behavioral issues associated with digital dependency. By providing structured yet enjoyable opportunities for emotional and social learning, traditional games serve as culturally grounded interventions that counterbalance the negative impacts of excessive gadget usage, fostering healthier emotional well-being and social competence among children.

4. The Physical and Cognitive Benefits of Traditional Games

Traditional games contribute significantly to children's physical and cognitive development through activities that require movement, strategy, and problem-solving. Unlike sedentary activities associated with gadget use, traditional games stimulate motor skills and physical fitness by promoting locomotor actions such as running, jumping, balancing, and throwing. Physical engagement in such games enhances muscle strength, coordination, flexibility, and endurance, thereby mitigating health risks related to inactivity, including obesity and reduced cardiovascular capacity. Motor-based participation also encourages spatial awareness and body control, which are essential for overall physical growth. Cognitive benefits are equally profound, as traditional games require children to make quick decisions, analyze patterns, and apply strategic thinking to succeed. Studies indicate that the integration of physical and cognitive tasks enhances neurodevelopment, improves memory retention, and fosters executive functioning skills such as planning, attention control, and cognitive flexibility (Kotakulon et al., 2025). Traditional games often incorporate numerical concepts, symbolic thinking, and language expression, offering natural pathways for cognitive enrichment without reliance on technological tools. Additionally, these games encourage creativity and imaginative thinking, allowing children to explore problem-solving processes collaboratively. Through trial-and-error learning embedded in gameplay, children become more adaptable and confident in tackling challenges. The absence of digital distractions enables deeper focus and sustained engagement, contrasting sharply with multitasking behaviors reinforced by digital environments. Traditional games also support multi-sensory learning, particularly when played outdoors, where exposure to nature positively influences mood and cognitive performance. Overall, the physical and cognitive advantages offered by traditional games provide meaningful alternatives to screen-based activities, helping children maintain a balanced lifestyle while developing core intelligence domains crucial for academic readiness and lifelong learning.

5. Strategies for Integrating Traditional Games to Reduce Gadget Dependency

Integrating traditional games into children's daily routines serves as an effective strategy to reduce gadget dependency while promoting balanced development. Successful implementation requires collaboration between families, schools, and communities to create structured opportunities for traditional gameplay. Parents play a central role by setting screen-time boundaries, offering consistent guidance, and modeling positive engagement through participation in cultural-based activities. Schools

can incorporate traditional games into physical education, extracurricular programs, and character-building curricula to provide regular exposure and reduce reliance on gadgets during learning hours. Community involvement is equally essential, as cultural festivals, local competitions, and public play spaces encourage collective participation and revitalize interest in traditional games as part of social identity. Researchers assert that structured scheduling, rule-based gameplay, and peer interaction provided through traditional games can gradually shift children's attention away from digital devices by supplying enjoyable and socially rewarding alternatives (Dalimunthe & Frinaldi, 2025). Motivational approaches such as reward systems, gamification elements, and storytelling can be employed to enhance children's enthusiasm without conflicting with educational objectives. Additionally, integrating traditional games with modern educational themes—such as numeracy, literacy, and teamwork provides contextual learning experiences that support academic goals while limiting passive screen exposure. Awareness campaigns and parental education programs also help families recognize the risks associated with excessive gadget use and the benefits of cultural engagement. Teachers and caregivers can adopt blended approaches that balance digital learning with traditional play, ensuring that children receive the benefits of technology without falling into dependency. By revitalizing traditional games as meaningful activities within children's socio-cultural environments, stakeholders can promote sustainable behavioral change, thus reducing gadget dependency while preserving cultural heritage and strengthening children's emotional, cognitive, and physical development.

RESEARCH METHODS

This study employs a library research method, also known as a literature review. A literature review is an activity that involves tracing and examining various written sources, such as books, journal articles, and other relevant scientific publications, with the aim of producing a scholarly work that discusses a particular topic or issue in depth (Solikhah et al., 2024).

This literature-based study seeks to elaborate key theories, concepts, and previous research findings relevant to the research topic as reference material. According to Marzali, as cited in Solikhah et al. (2024), one of the primary purposes of a literature review is to introduce the latest scientific insights within a particular field to academics or practitioners working in that field. Furthermore, previous research findings may serve as comparative material and references in the development and analytical process of the current study.

Data collection in this research was conducted by selecting five scientific articles, most of which were written in Indonesian. The data were obtained through searches on the Google Scholar database using keywords aligned with the research topic, such as “utilization of local culture,” “overcoming gadget dependency,” and “digitalization era.” Literature selection followed strict criteria, focusing on the relevance of articles to the research scope: studies discussing the use of local culture in the context of education or character formation, research on gadget dependency particularly among children or students, and discussions relevant to the digitalization era and its impacts on behavior and learning patterns. Additionally, selected articles were limited to those published between 2020 and 2025 to ensure the novelty and reliability of the information. Articles that did not meet these relevance criteria were

excluded from analysis.

The stages of the literature review refer to Marzali as cited in Solikhah et al. (2024), encompassing several steps. The first stage involves collecting articles through systematic searches and downloading relevant scientific sources using Google Scholar. The next stage is the reduction of articles, which consists of selecting literature that aligns with the research variables and scope while excluding less relevant sources. This reduction process includes summarizing, highlighting essential information, focusing on key aspects, identifying themes and patterns, and eliminating unnecessary data. The following stage is the presentation of selected articles in the form of tables, concise descriptions, and variable mapping. The process then continues with organizing and discussing the findings, which are centered on theoretical analysis. The type of literature review applied in this study is a theoretical review, which presents and compares various theories or concepts focused on a specific topic based on their underlying assumptions, logical consistency, and explanatory scope. The final stage involves drawing conclusions based on the organization and discussion of the reviewed literature.

RESULTS AND DISCUSSION

No	Researcher	Title	Results	Types of Culture
1	Reni Fatimatus Sa'diyah ¹ , Muhammad Fardhan Kusuma Atmaja ² , Zakaria Fajar Ramadhan ³ , Nurlaily Afifah ⁴ , Prisma Aulia ⁵ , Aisah Nur Prihatini ⁶ , Ringgi Candraning Prawerti ⁷	Revitalizing Traditional Games and Children's Creativity as an Effort to Reduce Gadget Dependence	Community service programs (PKM) are effective in introducing and re-practicing traditional games (such as gobak sodor, engklek, dragon snake). This activity has a positive impact on increasing children's creativity and social interaction, as well as an effort to reduce gadget dependence	Traditional Games (Gobak Sodor, Engklek, Dragon Snake)
2	Ira Shanty Dalimunthe ¹ , Aldri Frinaldi ²	The Role of Organizational Culture in the Implementation of Regional Innovation in the Program to Cultivate Traditional Games to Reduce the Use of Gadgets in Children: A Case Study in Tambangan District	A strong organizational culture (supported by the values of togetherness, openness, and active participation) is able to encourage the success of traditional game programs as an effective alternative to reduce the use of gadgets in children.	Budaya Organisasi, Permainan Tradisional
3	Ria Permata Sari ¹ ,	Traditional Game-	Traditional games that	Traditional Games

	Achmad Syauqi Bacht ² , Andy Firmansyah ³ , Deby Arsita ⁴ , Eko Yulianto ⁵ , Dhita Nur Fadila ⁶ , Muhammad Risky ⁷ , Prasetyo Ari Wibowo ⁸ , Yhogi Prananda ⁹ , Mia Aprilia Susanti ¹⁰ , Andi Kurniawan ¹¹ , Siska Septiana ¹² , Ahmad Royan Hanif ¹³ , Elma Meliana ¹⁴ , Muhamad Basori ¹⁵	Based Education to Reduce Gadget Dependence in Elementary School Students in Ngronggo Village	have high educational and social value are used as an alternative solution in the KKN Program to reduce the dependence on gadgets for elementary school students.	
4	Rizka Ausrianti ¹ , Rifka Putri Andayani ² , Peni Deka Putri ³ , Dindry Dinah Oswi ⁴ , Diva Salsabilla ⁵	"TAMAN" (Lestari Traditional Games) Program in an Effort to Reduce Gadget Addiction in Children	This program has succeeded in reducing gadget addiction in children. The average value of gadget addiction decreased from 45.07 (before) to 39.47 (after) traditional games ini	Traditional Games
5	Anggraeni Purnama Dewi ¹ , Ooh Hodijah ² , Onny Delisma ³	This program has succeeded in reducing gadget addiction in children. The average value of gadget addiction decreased from 45.07 (before) to 39.47 (after) traditional games. ini	PPM activities revive traditional games to minimize the negative impact of gadgets. Traditional games are useful in building character and stimulating children's growth and development (thinking, behaving, behaving).	Traditional Games

1. The Impact of Gadget Dependency on Children in the Digitalization Era

The first literature review was conducted by Fatimatus et al. (2025) titled "Revitalization of Traditional Games and Children's Creativity as an Effort to Reduce Gadget Dependency." The article shows that gadget dependency directly affects children's social interaction, creativity, and physical activity. Children become passive, less communicative, and experience psychosocial developmental barriers due to

prolonged screen exposure. Through the intervention of traditional games using the Asset-Based Community Development (ABCD) approach, there was a reduction of gadget usage by 37%, accompanied by increased creativity and social skills. This confirms that gadget dependency affects not only academic aspects but also character building and the development of social identity.

In the study by Dalimunthe and Frinaldi (2025) titled *“The Role of Organizational Culture in the Implementation of Regional Innovation Through a Program to Cultivate Traditional Games to Reduce Gadget Use Among Children: A Case Study in Tambangan District,”* the article highlights that gadget dependency leads to declining social quality of life, physical and mental health problems, and reduced participation in real-life activities. Children who frequently use gadgets are at risk of sleep disturbances, obesity, anxiety, and low social skills. The study emphasizes that without supportive organizational culture and community collaboration, gadget dependency is difficult to control. Thus, gadget-related impacts are not only individual but also influenced by children's social and institutional environments.

In the article by Sari et al. (2025) titled *“Education Based on Traditional Games to Reduce Gadget Dependency Among Elementary Students in Ngronggo Village,”* it is explained that gadget dependency decreases learning concentration, social skills, emotional development, and motor activities. Children become less physically active and more attracted to instant digital stimulation. Research findings indicate that traditional games can divert children's attention from gadget use and promote cognitive and motor development. This confirms that gadget dependency has multidimensional impacts on academic, social, and physical aspects of childhood development.

The article by Ausrianti et al. (2024) titled *“TAMAN Program (Sustainable Traditional Games) in Efforts to Reduce Gadget Addiction in Children”* emphasizes that gadget addiction may cause physical and psychological developmental disorders, such as emotional instability, aggressive behavior, difficulties in socialization, and decreased learning motivation. In the long term, gadget dependency may even contribute to an increased risk of school dropout. Results show a significant decrease in gadget addiction levels after children engaged in traditional games and parents received education. These findings highlight that gadget dependency is closely related to parenting patterns and lack of parental supervision.

The article by Dewi et al. (2023) titled *“Utilization of Traditional Games Amid the Widespread Use of Gadgets Among Elementary School Children”* explains that excessive gadget use affects children's thinking patterns, communication, and behavior. Children become more individualistic, have limited two-way communication skills, and display behaviors inconsistent with their developmental stage. Gadget dependency also leads children to become accustomed to one-way communication, reducing natural opportunities for social learning. Traditional games are seen as a solution to balance cognitive, emotional, and social development in the digital era.

Based on the five articles, it can be concluded that gadget dependency in children during the digitalization era creates complex negative effects, including reduced social interaction, emotional and psychological developmental issues, decreased physical activity, and lowered concentration and learning motivation. Gadget-dependent children tend to experience limitations in character development, communication abilities, and social skills. However, the articles unanimously agree that

traditional games and locally rooted cultural approaches are effective strategies to reduce gadget dependency. Besides reducing screen time, these approaches enhance creativity, physical health, social interaction, and character values. Therefore, mitigating the impact of digitalization on children requires sustained involvement from families, schools, and communities, rather than merely restricting gadget usage.

2. Variations of Local Culture and Its Potential in Reducing Gadget Dependency

In the article by Fatimatus et al. (2025b) titled “*Revitalization of Traditional Games and Children's Creativity as an Effort to Reduce Gadget Dependency*,” community resources in Widoro Village, Tulungagung, were strengthened using the Asset-Based Community Development (ABCD) method. As a result, mobile phone usage decreased by 37% through the optimization of village potentials such as Saung Ledokan and communal kinship. This approach demonstrates that revitalizing local culture through collective participation and internal community strengths is more sustainable and effective in fostering children’s creativity than solely prohibiting gadget use.

The article by Dalimunthe and Frinaldi (2025) titled “*The Role of Organizational Culture in the Implementation of Regional Innovation Through a Program to Cultivate Traditional Games to Reduce Gadget Use Among Children: A Case Study in Tambangan District*” explains that the regional innovation program “Marmayam keta, Marhape Emmajolo” was successfully implemented due to organizational culture prioritizing collaboration and public participation. This initiative combines the preservation of traditional games as a tourism attraction with local policies, aiming to build positive social environments and utilize local cultural identity to reduce gadget addiction among youth.

The third literature review by Sari et al. (2025) titled “*Education Based on Traditional Games to Reduce Gadget Dependency Among Elementary Students in Ngronggo Village*” highlights that the Dolanan Festival in Ngronggo, Kediri, effectively reduced screen time among elementary school students. The festival showcased various traditional games requiring physical coordination and social interaction, such as stilts, rubber band relays, and sack races. This program shows that providing engaging and healthy alternative activities can redirect children's interest away from digital devices and encourage outdoor physical activity.

The article by Ausrianti et al. (2024b) titled “*TAMAN Program (Sustainable Traditional Games) in Efforts to Reduce Gadget Addiction in Children*” implemented in Surau Gadang Village, Padang, demonstrated a reduction in gadget addiction scores from an average of 45.07 to 39.47 after interventions involving traditional games. The research emphasizes that addressing digital addiction requires synergy between educating parents on psychosocial development and aligning children's play activities across school and community settings.

In the article by Dewi et al. (2023) titled “*Utilization of Traditional Games Amid the Widespread Use of Gadgets Among Elementary School Children*,” character development at SDN 231 Suka Asih Bandung uses a holistic approach in which traditional games are essential in addressing the negative effects of prolonged gadget use following remote learning. This method is rooted in the philosophy of *ngerti, ngroso, nglakoni* to cultivate honesty and discipline, while simultaneously stimulating

physical development, cognitive abilities, emotional intelligence, and social interaction through direct activities such as congklak, kite flying, and jump rope.

From these five studies, it can be concluded that cultural diversity, particularly traditional games, holds significant potential to restore and enhance children's holistic development amid digital challenges. The reduction of gadget dependency can be effectively achieved by combining four key elements: innovative and culturally grounded local policies, utilization of community resources, enhanced parental understanding of child-rearing, and the availability of physical play spaces that stimulate social and cognitive development—dimensions that digital technology cannot replace.

3. Strategies for Utilizing Local Culture as a Solution to Gadget Dependency

The modern world is facing a profound shift from physical to virtual interaction spaces. Gadget dependency is no longer a technical concern but a behavioral crisis threatening human cognitive structures. This phenomenon triggers the degradation of social abilities and weakens focus on objective reality. According to Widiawati and Setiawati (2014), uncontrolled gadget usage at an early age negatively correlates with children's developmental capacity, as excessive screen stimulation hinders the maturation of executive brain functions responsible for processing real-world information.

As a counterbalance to physical stagnation caused by screen exposure, local culture through traditional games offers a dynamic and kinetic ecosystem. Unlike individualistic and static video games, traditional games such as hopscotch, top spinning, or block runs require full physical involvement and sensorimotor coordination. Nur et al. (2020) assert that revitalizing traditional games is both a preventive and curative strategy, as these activities help regulate the dopamine system typically overstimulated by digital notifications, replacing it with satisfaction derived from physical accomplishments.

Beyond physical activity, local culture functions as a medium for transmitting moral values and character traits often missing in anonymous digital interactions. Each traditional game or cultural art form contains collectively agreed-upon rules that teach honesty, sportsmanship, and conflict negotiation. Iswinarti (2017) states that traditional game procedures implicitly train higher-order cognitive functions such as strategic planning and impulse control. This is crucial because gadget addiction is often rooted in poor impulse inhibition, making it difficult for individuals to disengage from screens.

The sociological dimension of local culture also reinforces social cohesion, which is increasingly fractured by digital individualism. Community-based cultural activities such as traditional dances, karawitan, or communal work foster strong social capital. Research by Kovacevic and Opic (2014) shows that frequent engagement in traditional games and activities significantly improves interpersonal relationships. Face-to-face interaction provides emotional fulfillment far more stable and genuine than superficial validation through social media likes or comments, which often provoke anxiety.

Finally, utilizing local culture does not require opposing technology but rather redefining its role. The concept of cultural-based digital literacy encourages communities to become content creators who elevate local values, transforming gadgets from passive entertainment tools into creative documentation instruments. Sumbasari and Kusuma (2021) note that combining local creativity with outdoor activities can

significantly reduce symptoms of digital addiction. Thus, local culture acts as an anchor that keeps individuals grounded in their original identity amid boundless digital globalization.

CONCLUSION

Based on the results of the literature review, it can be concluded that gadget dependency among children in the digitalization era causes various negative effects, including decreased social interaction, emotional development, physical activity, as well as reduced concentration and learning motivation. The utilization of local culture, particularly through traditional games, has proven effective as an educational strategy to reduce gadget dependency, as it not only diverts children's attention from digital devices but also fosters character values, social skills, creativity, and appreciation for cultural heritage.

This study has limitations, as it relies solely on literature review methods with a limited number and scope of sources and is not supported by empirical field data. Therefore, future research is recommended to further investigate this issue using primary data. The findings of this study are expected to serve as a reference for elementary school teachers in integrating traditional games into learning activities, for parents in supervising and limiting their children's gadget use, and for governments and communities in supporting the preservation of local culture as an alternative, relevant educational activity in the digitalization era.

BIBLIOGRAPHY

- Afriantoni, Avira, E., Fasari, F., Juniarti, D. A., & Mevu, P. A. (2025). Dampak Penggunaan Gadget dan Media Sosial Terhadap Perkembangan Karakter dan Emosi Siswa Madrasah Ibtidaiyah. *Jurnal Basicedu*, 9(6), 1729–1738.
- Ang, D. I. S., &goro, S.T., M.T., I. (2025). *Transformasi Digital Menuju Modernisasi Sekolah*.
- Ausrianti, R., Andayani, R. P., Putri, P. D., Oswi, D. D., & Salsabilla, D. (2024a). Program “TAMAN” (Lestari Permainan Tradisional) dalam Upaya Mengurangi Kecanduan Gadget pada Anak. 6(December 2023), 189–196.
- Ausrianti, R., Andayani, R. P., Putri, P. D., Oswi, D. D., & Salsabilla, D. (2024b). Program “TAMAN” (Lestari Permainan Tradisional) dalam Upaya Mengurangi Kecanduan Gadget pada Anak Rizka. *Jurnal Peduli Masyarakat*, 6(1), 189–196.
- Dalimunthe, I. S., & Frinaldi, A. (2025). *Peran Budaya Organisasi Dalam Implementasi Inovasi Daerah pada Program Membudayakan Permainan Tradisional untuk Mengurangi Penggunaan Gadget pada Anak: Studi Kasus di Kecamatan Tambangan*. 5(2), 342–350.
- Dewi, A. P., Hodijah, O., & Delisma, O. (2023). *Pemanfaatan Permainan Tradisional di Tengah Maraknya Gadget pada Anak Usia Sekolah Dasar*. 1(2), 75–81.
- Fatimatus, R., Atmaja, M. F. K., Ramadhan, Z. F., Afifah, N., Aulia, P., Nur, A., & Prawerti, R. C. (2025a). *Revitalisasi Permainan Tradisional Dan Kreativitas Anak Sebagai Upaya Mengurangi Ketergantungan Gadget*. 2(1), 70–79.
- Hadyansah, D., Septiana, R. A., & Budiman, A. (2021). Permainan Tradisional Sebagai Nilai-Nilai Kearifan Lokal. *Jurnal Aksara Raga*, 3(1), 42–46.
- Kotakulon, S. D. N., Al-ghozali, S., Mutaqoful, G. D., & Furqony, A. D. (2025). *Revitalisasi Permainan Tradisional untuk Mengurangi Ketergantungan Gadget*

- dan Meningkatkan Aktivitas Fisik Jurnal Pengabdian Nasional (JPN) Indonesia. 6(2), 545–555.
- Kovacevic, T., & Opic, S. (2014). Contribution of Traditional Games to the Quality of Students' Relations and Frequency of Playing Traditional Games. *Journal of Elementary Education*, 7(1), 93-112. ISSN: 1855-4431.
- Kurniawati, D. (2020). *Pengaruh penggunaan gadget terhadap prestasi siswa*. 2(1), 79–84.
- Nur, L., dkk. (2020). Traditional Games: A Strategy to Reduce Student's Gadget Dependency. *Journal of Physics: Conference Series*, 1477(2), 022026. IOP Publishing. doi:10.1088/1742-6596/1477/2/022026.
- Rini, N. M., Pratiwi, I. A., & Ahsin, M. N. (2021). *Dampak Penggunaan Gadget Terhadap Perilaku Sosial Anak Usia Sekolah Dasar*. 7(3), 1236–1241. <https://doi.org/10.31949/educatio.v7i3.1379>
- Sari, R. P., Bachtu, A. S., Firmansyah, A., & Arsita, D. (2025). *Pendidikan Berbasis Permainan Tradisional untuk Mengurangi Ketergantungan Gadget pada Siswa SD di Kelurahan Ngronggo. 1*.
- Solikhah, A. A., Nurlina, L., & Purwokerto, U. M. (2024). *Metafora : Jurnal Pembelajaran Bahasa Dan Sastra Pemanfaatan Media Digital pada Pembelajaran BIPA : Sebuah Kajian Literatur*. 11(1), 63–72. <https://doi.org/10.30595/mtf.v11i1.20746>
- Sumbasari, A. S., & Kusuma, A. R. (2021). Pelatihan Permainan Tradisional untuk Mengurangi Gejala Kecanduan Gadget pada Anak. *Jurnal Psikologi Konseling*, 18(1), 896-905.
- Wahyudin, D., Dasar, P., Mataram, U., & Dasar, S. S. (2024). *Dampak Negatif Penggunaan Gadget pada Anak Usia Sekolah Dasar Negative Impact of Using Gadgets on Elementary School-Age*. 1(2), 130–135.
- Widiawati, I., & Setiawati, A. S. (2014). Pengaruh Penggunaan Gadget Terhadap Daya Kembang Anak. *Jurnal Keperawatan Anak*, 2(1), 6-13.
- Yuniarni, D., dkk. (2022). Model Permainan Tradisional dalam Membangun Karakter dan Kedisiplinan Anak. *Jurnal Pendidikan Anak Usia Dini*.