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Online Games: Impact and Challenges for Children's Social Development

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ABSTRACT

Digital technology is developing very quickly and has made online games a growing part of the lives of children and adolescents. This article aims to analyze in depth the influence of online games on the social development of children and, at the same time, identify various challenges faced by parents, educators, and policymakers in responding to this phenomenon. This research uses library research by examining various scientific literature, including journal articles, books, and research report results published in the range 2015–2024. Study results show that online games have two-way consequences. On the positive side, online games can increase thinking ability, foster collaboration between players, and expand skills to interact in digital environments. However, the usage is not controlled and also has the potential to cause addiction, reduce social interaction intensity directly, lower empathic ability, and inhibit the formation of children's identity. This study also found several important findings, among others: still low levels of parents' digital literacy, insufficient supervision of game content, as well as limited digital parenting guidelines that can be used as a reference. Therefore, this article confirms that a comprehensive strategy is needed through synergy between the family, educational institutions, and the government so that the benefits of online games can be optimized, while the various risks involved can be minimized to support the healthy development of children.



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Introduction

Digital technology and information and communication have been developing rapidly for two decades and have finally brought fundamental changes in various aspects of life and society, including children's play, learning, and social interaction. Online games, which at the beginning of their emergence could only be enjoyed by users with advanced technological devices and relatively expensive internet access, can now be accessed easily through increasingly smart and affordable smartphones. This condition causes online games to become a part of daily activities for millions of children in various countries and presents various increasingly complex social implications.

Based on data from the Association of Indonesian Internet Service Providers (APJII) in 2022, internet penetration in Indonesia has reached 77.02% of the overall population, with the 13–18 age group as the most

dominant internet users. In addition, a 2020 survey by the Indonesian Child Protection Agency (KPAI) showed that around 79% of children in Indonesia play online games every day. This phenomenon is also seen globally. The Newzoo (2023) report revealed that the global digital games industry has produced more than 200 billion United States dollars, with player numbers increasing across age groups, especially among children.

Childhood is a period of decisive development because, at this stage, the formation process is underway: character, internalization of social values, development of empathy, as well as improvement in communication ability. Because of this, the intensity of using online games, especially without adequate assistance, can have a significant impact on children's social development. Various studies report that online games based on collaboration are capable of increasing work ability, building communication, and training coordination in virtual environments. On the other hand, several studies also show that using games excessively can trigger digital addiction, reducing direct social interaction quality, increasing exposure to content containing violent elements, as well as increasing the risk of cyberbullying.

Problems become more complicated because parents, educators, and policymakers do not yet have an adequate understanding of the development of the online games ecosystem, which has changed very quickly. Many parents face a dilemma between the desire to limit the use of digital games to protect children and limited knowledge regarding effective mentoring strategies. This digital literacy gap reduces the effectiveness of supervision, so children are more prone to various risks during identity formation and social development.

Based on the conditions mentioned, it is necessary to study the comprehensive literature to synthesize scientific evidence on the influence of online games on children's social development. Study results of this kind can become a basis for public policy compilation, development of educational programs, and development of a digital parenting strategy based on scientific evidence. Therefore, this article serves as an analysis of various research results and relevant literature resources to obtain a more comprehensive understanding of related impacts, challenges, and opportunities of using online games for children.

In line with background behind said, the article This aim to : (1) analyze various impact positive and negative online games against development social child ; (2) explain mechanism psychological and social influences emergence impact (3) identify various challenges faced by parents, educators, and makers policy in manage use online games for children; and (4) compiling recommendations based on findings empirical to support management use online games more effective. With this, the article is expected to enrich the treasury of studies about the development of children in the digital era and, at the same time, become a practical reference for families, educational institutions, and policy decision-makers.

Method

This study applies a library research approach (bibliography), namely a research method that utilizes various written sources as primary data, such as books, scientific journal articles, research reports, as well as relevant documents (Zed, 2014). This approach was chosen because the study focuses on conceptual and theoretical aims to integrate and synthesize findings from various previous studies, so that a more comprehensive understanding of the impact of online games on children's social development can be obtained. Research data sources consist of primary and secondary literature. Primary literature includes study results published in reputable journals, such as *Computers in Human Behavior*, *Journal of Adolescent Health*, *Cyberpsychology, Behavior, and Social Networking*, and various journals in the field of education and child development psychology. Meanwhile, secondary literature covers academic books, international institutional reports such as WHO and UNICEF, as well as policy documents of the Indonesian government related to the use of digital technology and child development.

The selection of literature was done based on inclusion and exclusion criteria that have been established. Inclusion criteria include: (1) publications published in the period 2015–2024 to ensure up-to-date information ; (2) research that specifically discusses online games and their influence on children aged 6–18 years; (3) literature in Indonesian and English; and (4) sources that have a clear and accessible methodology and research that is accountable in a scientific way. On the other hand, the literature that discusses offline games or digital technology in general without focusing on online games, articles that are not available in complete text form, as well as opinion writing that is not supported by evidence from an empirical analysis process.

The data collection process is carried out through systematic searches on various scientific databases, including Google Scholar, ERIC (Education Resources Information Center), PubMed, Garuda, and SINTA. Keyword combinations were used, such as online games AND children, social development AND gaming, game addiction AND adolescents, online games AND children development, and impact of online games AND social. From more than 200 literatures found at the initial stage, a filtering process was carried out in accordance with inclusion and exclusion criteria, so that approximately 60 sources were obtained and analyzed in an in-depth manner. Data analysis was carried out using the integrated content analysis technique with narrative synthesis. Every piece of literature was reviewed critically, examining the research methods, main results, and their contribution, then grouped thematically into several categories, namely positive

impacts of online games, negative impacts of online games, factors that influence the emergence of these impacts, as well as various challenges faced by parents, educators, and policymakers in managing the use of online games for children.

Discussion

Online Games Landscape and Characteristics of Child Users

Before discussing the influence of online games on children's social development, it is important to understand the characteristics of online games currently played by children and teenagers. Based on various research, online games can be grouped into several main categories, including Massively Multiplayer Online Role-Playing Games (MMORPG) such as Genshin Impact and Mobile Legends, battle royale games like PUBG Mobile and Free Fire, strategy games like Clash of Clans, as well as casual games with social elements like Among Us. Every game category has its own mechanism, communication patterns, and forms of interaction, so it produces diverse influences on players' social behavior (Granic, Lobel, & Engels, 2014).

Research results from Lemmens, Valkenburg, and Peter (2009) show that children play online games not only for entertainment, but are also driven by various psychological needs, such as a desire for social connection, achievement, reducing pressure or problems faced (escapism), as well as getting a more immersive experience. Findings indicate that online games have developed into a capable medium to fulfil children's emotional and social needs, so that their existence has more complex roles compared to just recreational activities.

Online game usage patterns are also influenced by demographic characteristics, in particular age and gender. Anderson et al. (2018) stated that male children are generally more interested in action-themed games and strategy games and tend to spend more time playing longer. On the other hand, children, Especially Women, more often choose games that emphasize social, narrative, and interaction between players. These differences in preference contribute to variation in the experience and psychosocial benefits obtained by each group of users.

Positive Impact of Online Games on Children's Social Development

1. Improvements in Social Skills in a Virtual Environment

The view that online games inhibit social interaction is not fully supported by empirical evidence. Various studies show that online games, in nature, are cooperative and involve lots of players; precisely, they can become a means for developing social competence. According to Squire (2006), multiplayer games require participants to communicate effectively, negotiate, work in teams, and distribute tasks according to each individual's abilities. These activities are forms of exercises that directly support the development of social skills.

Research by Prot et al. (2014), involving more than 3,000 teenagers in three countries, showed that individuals who often play games with prosocial elements are more likely to show help-related behavior (helping behavior) in everyday life. These results indicate that the values contained in games can influence the formation of players' social behavior. Games that feature work, caring, and mutual help potentially implant values through repeated play.

In addition, Kowert, Domahidi, and Quandt (2014) explain that online games can become a useful medium for children who experience difficulty in building social connections in a live setting. A virtual environment is safer and more anonymous, allowing children with social anxiety to practice interacting without great pressure. In such conditions, online gaming works as a helpful learning room; it increases self-trust and interpersonal skills.

2. Social Community and Relationship Formation

Modern online games do not only focus on game aspects, but also provide various social features, such as guilds, clans, discussion forums, and friendship systems that make it possible for players to build a sustainable social network. Participation in group games, for example in Mobile Legends or Clash of Clans, pushes players to practice a sense of responsibility, answer, build solidarity, as well as develop group identity as part of a community (Williams et al., 2006).

Findings: Ducheneaut et al. (2006) show that communities in MMORPG games are capable of forming close social connections even though their members may not yet meet in person. In fact, some relationships that began in the virtual world blossom into friendships in the real world through social media

and face-to-face meetings. This shows that online games do not always replace social interaction, but in certain conditions, they can become the initial medium for forming better interpersonal relationships.

3. Strengthening of Cognitive Capabilities Supporting Social Interaction

In addition to providing direct social benefits, online games also contribute to improving cognitive abilities, which are important in social interaction. Green and Bavelier (2015) explain that game action can increase selective attention, speed information processing, as well as the ability to do a number of tasks simultaneously (multitasking). This ability helps individuals understand various social signals more quickly and precisely when interacting with other people.

Besides, it is a strategy and simulation game proven capable of practicing problem-solving skills collaboratively. In game-based teams, players use it to analyze situations, predict the actions of members and opponents, and determine considered decisions for the interest group. The process contributes to the development of social intelligence, especially the ability to work together, make decisions collectively, and resolve conflicts effectively (Granic et al., 2014).

Conclusion

Study results from the literature show that online games have multidimensional influences on children's social development, depending on the type of game, duration of use, individual characteristics, parenting patterns, as well as the social environment that surrounds them. Cooperative games have the potential to increase communication ability, teamwork, problem-solving, and social interactions. In contrast, excessive use can trigger addiction, social isolation, cyberbullying, exposure to violent content, as well as disturbance in identity formation. Various challenges, such as low parents' digital literacy, weak regulations on game content, a potential monetization model that pushes addictive behavior, and limited readiness in educational institutions, require integrated handling. Therefore, it is necessary to collaborate between the government, schools, the game industry, and families through strengthening regulations, integrating digital literacy into the curriculum, developing more responsible game design, and implementing digital parenting programs. Furthermore, the research recommended using a longitudinal approach to study the long-term impact of online games and to evaluate the effectiveness of various intervention strategies in the context of Indonesian social and cultural aspects.

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