Empowering Children as Resilient Digital Citizens: Navigating the Challenges of the Digital Media Landscape

Romy Di Putra[1], Irwansyah[2]

[1]Romy Di Putra, Master Student of Communication Science FISIP University of Indonesia

[2]Irwansyah, Teaching Staff of Communication Science FISIP University of Indonesia

ABSTRACT

The research "Empowering Children as Resilient Digital Citizens: Navigating Challenges in the Digital Media Landscape" aims to understand the impact of digital technology on children's development and equip them with the skills necessary to become resilient digital citizens. The focus is on 5-18 year olds, highlighting the important role of media literacy in creating a safe online environment. Using PRISMA's 2020 systematic literature review and a survey of 58 parents, the study identified key challenges such as online safety risks and lack of digital literacy, and emphasized the important role of parents, educators and policymakers. The survey results showed 82.8% of respondents were women aged 35-44 years. Most children use smartphones (65.5%) for educational and entertainment purposes. Common digital activities include watching videos (43.1%) and playing educational games (34.5%). Parents teach digital etiquette through regular discussions (69.0%) and monitoring children's online activities. Effective monitoring methods include parental control apps (41.4%) and online activity discussions (39.7%). A literature review revealed clusters of keywords such as "Digital Citizenship," "Social Media," "Digital Education," and "Media Literacy," demonstrating the importance of digital literacy and education. Developed countries such as the US, UK, Australia, Spain, and Canada are showing great attention to digital literacy and child protection. The discussion emphasized the need for a holistic approach involving media literacy, the role of parents, and strong government policies. Parents should be actively involved in children's use of technology, educators need to integrate media literacy into curricula, and policymakers should enforce strict regulations to protect children in the digital world. This approach ensures children are ready to face and use the digital world safely and responsibly.

Keywords: Children, Digital Media, Digital Literacy, Digital Citizen, Online Safety.

1. Background

The title of this study is "Empowering Children as Resilient Digital Citizens: Navigating Challenges in the Digital Media Landscape" which aims to examine the use of communication technology in the digital era, especially in children, and discuss the digital media landscape that is safe for them through a systematic literature review. In this digital age, technology is increasingly integrated in everyday life, and children are growing up in an environment heavily influenced by digital media. It is important that we understand how these technologies affect children's development and how we can equip them with the skills and knowledge necessary to become resilient and empowered digital citizens.

This study focused on children of elementary school age (5-11 years) and adolescents (12-18 years), in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014 concerning Child Health. Media literacy education is essential in promoting a safe online environment for children. Parents, educators, and policymakers play a crucial role in empowering children to be responsible users of media and technology. (RI B. , 2014)

The concept of the digital citizen of the future is very important as digital technology is increasingly integrated in everyday life. Children who will become digital citizens of the future must have a deep understanding of technology as well as the skills and awareness necessary to use it responsibly. In this context, the concept of empowering children as strong digital citizens involves media literacy education which includes teaching about critical thinking, privacy protection, awareness of cyberbullying, and online etiquette. Children need to be equipped with the skills to critically analyze and evaluate media content, manage their digital identities, and interact safely and ethically in the digital world.

To support this study, the methods used include systematic literature reviews and surveys. A systematic literature review using the PRISMA 2020 approach to screen, evaluate, and synthesize a range of relevant academic literature sources. In addition, the survey was conducted to collect data from parents who have children of elementary, junior high, and high school age. The survey questions were made using keywords obtained from the results of a systematic literature review, with a total of 58 respondents. The survey provides empirical insights into parents' views and experiences in supporting their children in the digital world, as well as the challenges and solutions they encounter.

The digital citizens of the future are individuals living in the era of digital technology that is increasingly integrated in everyday life. The Big Five Factors model describes key characteristics of the digital citizen of the future, including openness to experience, conscientiousness, extroversion, understanding, and neuroticism. This model, also known as the Five Factor Model (FFM) or the OCEAN model, is a widely accepted framework in psychology used to describe the human personality (de Raad, 2015)

Media literacy education is essential to promote a safe online environment for children. Parents, educators, and policymakers play an important role in empowering children to be responsible users of media and technology. Educating children about critical thinking, privacy protection, awareness of cyberbullying, and online etiquette is essential to empower them to engage in responsible digital practices. The role of media in shaping children's perceptions, attitudes, and behavior is also very significant. Therefore, media literacy programs should aim to instill ethical values and responsible use of media and technology.

Policymakers play an important role in shaping the regulatory framework for online platforms and content aimed at children. By implementing and enforcing strong policies, they can ensure that children are not exposed to harmful or inappropriate content, and that their privacy and security are effectively maintained. Educators can incorporate media literacy into school curricula, providing learning experiences that equip children with the skills necessary to critically analyze and evaluate media content. By integrating media literacy education across a wide range of subjects, schools can contribute to the development of knowledgeable and intelligent digital citizens.

Digital citizenship is a concept that refers to the skills, behaviors, and attitudes of individuals in using digital technology responsibly, ethically, and safely. This involves awareness of online privacy and safety, participation in digital culture, as well as addressing cyberbullying. Aspects of digital citizenship include awareness of personal data as well as online safety, participation in digital culture, avoiding harmful behavior, as well as understanding the importance of respecting intellectual property rights and avoiding the spread of false or harmful information. The concept also includes the ability to collaborate positively,

communicate effectively, and build healthy relationships in a digital environment. In summary, digital citizenship is about being a responsible and intelligent citizen in an increasingly digitally connected world. The context of this study is important in guiding children to interact in the digital world safely. Digital literacy preparation needs to be given early to protect them from various online risks and prepare them to become healthy and safe future digital citizens. By teaching digital resilience, children will be able to make the most of the digital world and safely. Children who understand digital resilience will be able to make wise decisions when interacting in the digital world, manage their digital identities, and interact safely and ethically. This is a provision to become a healthy and safe future digital citizen.

The relationship between the concept of the digital citizen of the future and the context of children in the digital media landscape is to ensure that children not only understand the potential risks of the digital world but also develop the necessary skills to mitigate these risks and take advantage of the positive aspects of the digital world. This empowerment goes beyond simple awareness of cyber threats; This includes instilling critical thinking, empathy, and respect in their online interactions.

The purpose of this paper is to provide a deeper understanding of the challenges, strategies, and various factors that influence children's experiences in the digital media landscape centered on them. In addition, this paper aims to provide comprehensive guidance for practitioners, educators, and policymakers in empowering children as resilient and empowered digital citizens of the future. The study also seeks to identify key factors such as media literacy, the role of parents, government policies, and digital connectivity that influence children's development in the digital age.

The questions or problem formulations in this study are: How do challenges, solutions, and various factors identified through literature and surveys affect children's experiences in their centered digital media landscape, and how can the guidance provided empower them as resilient and empowered future digital citizens?

2. Literature Study

Empowering future digital citizens, especially children in the age range of 8-18 years, is becoming increasingly important because of the dangers caused by technological developments that threaten them. The development of the industrial revolution, especially in the field of communication industry, has given birth to a series of revolutions, ranging from mechanization to the era of artificial intelligence and digital manufacturing. It has affected the way humans work, communicate, and live as a whole. In general, the Industrial Revolution included several important stages:

1. **Revolution 1.0 (Mechanization):** Occurred in the era of 1750-1850 which was marked by the invention of the steam engine, changing production processes in various fields such as agriculture, manufacturing, mining, transportation, and technology.
2. **Revolution 2.0 (Electrification):** The beginning of the 20th century with the discovery of electric power that facilitates human accessibility through the development of machines.
3. **Revolution 3.0 &; 3.5 (Automation &; Globalization):** Occurred in the late 20th century with the invention of computers, robots, semiconductors, transistors, and integrated chips.
4. **Revolution 4.0 (Digitalization):** The beginning of the 21st century with the merging of automation technology and cyber technology.
5. **Revolution 5.0 (Personalization of Digitalization):** Currently still underway with a focus on merging technology and humans to develop systems that are more adaptive and responsive to changes in the production environment.

6. Revolution 6.0 (Artificial Intelligence, Digital Manufacturing, IoT, Big Data, and Robotics):
Bringing more sophisticated innovations in various fields of technology.

Industry and communication technology play an important role in human life, both developing to ease life and facilitate connections between people. This industry covers various aspects such as media, telecommunications, information technology, and digital platforms. "People design and use technology to work. In return, technology shapes jobs and people." (Bin Wang, 2020)

To understand the development of industry and communication technology, starting from understanding the concept of technology as an extension of humans, mediamorphosis (media change), technological freedom, technological culture, meaning in technology, the influence of technological development (technological determinists), and social construction of technology.

The concept of "Extension of Man" describes how communication technology expands human abilities in communicating, interacting, and collaborating. With communication technology, humans can reach out and connect with others across great distances, share information instantly, and access a wide range of knowledge and resources. Marshall McLuhan, in his book (Liu, 2022)Understanding Media: The Extensions of Man (McLuhan, 2003), widely known as the introduction of the concept of "media as an extension of human beings."

The evolution of media has affected human civilization in many aspects, including culture, language, and mindset. Marshall McLuhan in his book The Gutenberg Galaxy (1962) divides human history in several eras and changes in behavior: Tribal Age, Literacy Age, Print Age, and Electronic Age.

The revolution of the communication industry also had an impact on the development of freedom technology that freed humans from communication difficulties. This technology provides an opportunity for individuals to access and share information freely, enabling freedom and wider utilization of technology. In his book Technologies of Freedom, Ithiel de Sola Pool (1983) said that freedom technology is a form of using new technology that makes it easier for people to communicate and convey messages.(Pool, 1983)

Technology culture, as described by Boyd, refers to the ways in which technology is embedded and interwoven in society, influencing and shaping values, beliefs, practices, and norms. The development and adoption of technology is shaped by cultural, social, economic, and political factors.(Boyd R. , 1988)

The industrial revolution also caused humans to be determined to continue to develop communication technology and form new social constructions of technology. The development of communication technology covers various fields, the largest of which is the development of reading culture and audio and video communication technology. In Indonesia, the reading industry has faced various changes along with the advancement of communication technology. For example, Data Reportal 2023 reports that there are 212.9 million internet users in Indonesia as of January 2023, revealing that 63.51 million people do not use the internet, indicating 23.0 percent of the population remained offline at the beginning of the year (Kemp, 2023)

The shift in reading culture from printed books to digital books also applies to the use of newer media, such as audio, video, advertising, marketing, and corporate communication and public relations. Audio communication technology, for example, allows all participants to hear and speak in real-time regardless of their physical location. A podcast, as one example of an audio medium, is a digital audio program consisting of a series of audio episodes that can be downloaded or streamed from the internet. As of November 1, 2022, Indonesia is in the top 10 countries with the most podcast listeners globally (Insider, n.d.)(Castos, 2024)(RI K. , 2023)

Audio visual media, as described by Henderson, are media formats that contain sound and/or images that require electronic devices to enjoy their content. Technological developments in this area have changed the entertainment and media landscape, enabling content creators to deliver high-quality content to audiences around the world through streaming platforms.(Henderson, 2010)

Vodcasting, a blend of video and podcasting, delivers rich, on-demand content to viewers. Advances in communication industry technology also affect the way society communicates in commercial fields, such as product marketing and advertising.(Herbert, 2024)

The definition of advertising according to is "the communication of typically paid and persuasive non-personal information about a product, service, or idea by an identified sponsor through various media." According to the American Association of Marketing (AAM), advertising is "any form of non-personal presentation and promotion of ideas, goods, and services paid for by an identified sponsor" (Bovee, 1992)(Reeves, 1961)

The development of industry and communication technology in the field of advertising brings many advantages, such as more targeted advertising targeting, increased engagement between producers and consumers, advertising cost efficiency, improved measurement and analysis, and access to a global audience. However, there are also negative impacts such as security threats, data theft, brand image manipulation, the spread of negative content, the digital divide, and dependence on certain platforms.(Kussusanti, 2021)

The development of communication industry technology also affects corporate communication and public relations activities. John Doorley and Helio Fred Garcia in their book Reputation Management: The Key to Successful Public Relations and Corporate Communication Illustrate that corporate communication and public relations complement each other in an effort to build and maintain an organization's reputation. Paul A. Argenti in his book (John Doorley, 2007)Corporate Communication Emphasizes the importance of coordination between corporate communication and public relations to achieve organizational goals (Argenti, 2016)

In the context of empowering future digital citizens, it is important to navigate the child-centered media landscape. A systematic literature review on this topic highlights the impact of the communications industry revolution on young people and the importance of preparing them to become digital citizens ready for the challenges of tomorrow. The communication industry revolution has changed the way children interact with media, from reading culture to audiovisual media. Technological developments such as the internet, smartphones, and social media have given children wide access to a variety of digital content, changing their reading patterns and providing new challenges in managing information.

In the midst of these developments, the role of parents and educators is crucial in guiding children through the complex media landscape. They need to provide an in-depth understanding of the wise use of technology, information management, and digital skills necessary to participate positively in the digital world. In addition, it is necessary to understand the psychological impact of excessive media exposure or content that is not age-appropriate for children.

The main proposition of the study is that developments in communication technology are changing the way children interact with media, so digital literacy is essential to prepare them as digital citizens of the future. Key indicators used include access to technology, digital literacy skills, the psychological impact of media, and the role of parents and educators.

A systematic literature review can provide in-depth insight into the risks and benefits of digital media for children's development globally. Thus, research focused on empowering future digital citizens,

particularly children, needs to pay attention to the important role of literature in understanding the impact of the communications industry revolution and how best to navigate the child-centered media landscape. This will help prepare the younger generation for the challenges and opportunities of the ever-evolving digital age.

3. Methodology

Methods and strategies

This study used a combined method of systematic literature review and surveys to identify and understand challenges, solutions, and various factors that influence children's experiences in the digital media landscape. The systematic literature review follows PRISMA 2020 standards to identify criteria, sources of information, literature search strategies, data selection processes, data collection, and data preparation. Researchers used the PRISMA 2020 checklist guide to organize the framework of this study and the order in which it was written (M. J. Page, 2021)

Stages of Research

1. **Research Questions (PP):**
   o Collection of Scopus journals (PP1), documentary characteristics based on geographical location (PP2), data search process (PP3).
   o Formation of domains and dimensions of research objectives (PP4).
   o Contributing factors to implementation (PP5).
   o Research output results (PP6) and impact of research (PP7).

2. **Eligibility Criteria and Information Sources:**
   o English or Indonesian articles published in scientific journals between January 2021 and Mid-2023 that have the terms "Child Development," "Parental Guidance," "Media Literacy," "Digital Citizenship," "Technology Education," and "Government Policies &; Regulation" in their titles, abstracts, keywords, or key phrases.

3. **Keyword Search:**
   o Using six keywords from the UNICEF Policy Guide on Children and Digital Connectivity handbook and searching literature journals using Scopus.(Jasmina Byrne, 2018)

4. **Journal Selection Process:**
   o From the keywords entered, researchers obtained nearly 700 global journals and selected the first 68 relevant journals for systematic literature review.

5. **Data Coding and Synthesis:**
   o Data collection using Zotero's bibliographic database and conceptual analysis of networks using VOS Viewer.(N. J. Van Eck, 2022)

Variable Operationalization / Conceptualization and Indkator

This study focuses on variables of children's use of digital media, children's media literacy, the role of parents and educators, and government policies and regulations. Digital media use variables were measured through surveys to parents about the frequency and type of digital media used by their children. Children's media literacy is measured through indicators such as children's understanding of digital content, critical ability to online information, and awareness of digital risks. The role of parents and educators is measured through surveys of their views and actions in supporting children's media literacy and digital safety. Government policies and regulations are identified through a literature review of existing policies and regulations related to child protection in the digital world.

Data Collection and Processing Techniques

Literature Review: Using the keywords "Child Development," "Parental Guidance," "Media Literacy," "Digital Citizenship," "Technology Education," and "Government Policies &; Regulation" in the Scopus database. Of the 700 journals found, 68 journals were selected based on relevance to the research topic.

Survey: Conducted with 58 parents of elementary, middle and high school education levels to obtain data on children's digital media use, parents' views on media literacy, and their role in supporting children's digital literacy.

Data Analysis Techniques.

Literature: Data from the literature are analyzed using VOS Viewer to construct a conceptual analysis of the network. This technique helps to identify relationships between various concepts and indicators found in the literature.

Surveys: Survey data is analyzed using descriptive statistics. Analysis was performed manually using the pivot function in Microsoft Excel to identify general trends and patterns in digital media use and children's media literacy.

Data Triangulation and Confirmation Techniques

To ensure the validity of the findings, this study used triangulation, which is a combination of survey data and literature review. Surveys provide quantitative data from direct respondents, while literature reviews provide context and support qualitative data. Using reliable references such as guidelines from UNICEF and PRISMA 2020 standards, researchers ensure that the methodology used follows internationally accepted best practices.

Triangulation is a technique used in research to improve the validity and reliability of findings by combining various methods of data collection and analysis. In this study, triangulation was performed using two main types of data: quantitative data from surveys and qualitative data from systematic literature reviews.

Triangulation Implementation

A. Collection of Quantitative Data through Surveys:

1. **Survey Design:** The survey is designed to collect data on children's use of digital media, parents' views on media literacy, and their role in supporting children's digital literacy.

2. **Survey Distribution:** The survey was distributed to 58 parents of elementary, middle and high school education levels.

3. **Survey Data Analysis:** Data is analyzed using descriptive statistics from manually processing survey data using the pivot function in Microsoft Excel to understand patterns of digital media use and media literacy among children.

B. Qualitative Data Collection through Systematic Literature Review:

1. **Literature Selection:** Relevant literature is identified using the keywords "Child Development," "Parental Guidance," "Media Literacy," "Digital Citizenship," "Technology Education," and "Government Policies &Regulation" in the Scopus database.

2. **Selection Criteria:** English or Indonesian articles published between January 2021 and mid-2023 are selected based on relevance to the research topic.

3. **Literature Analysis:** Data is analyzed using VOS Viewer to build a conceptual analysis of the network. This technique helps to identify relationships between various concepts and indicators found in the literature.

4. Research and Discussion Results

This research aims to provide a deeper understanding of the challenges, solutions, and various factors influencing children's experiences in the digital media landscape. Based on the results of a survey involving 58 participants, as well as systematic literature analysis, the study illustrates how children use digital media in their daily lives, the challenges they face, and the important role parents and policies play in guiding and protecting them. The findings not only provide insight into children's digital behavior, but also emphasize the importance of digital literacy and online safety to empower them as resilient and empowered digital citizens of tomorrow.

Findings

The survey involving 58 participants showed that the majority of respondents were women (82.8%) aged between 35-44 years (63.8%). Most respondents have a higher education background and work in the formal (43.1%) and informal (41.4%) sectors. Most children of respondents use smartphones (65.5%) to access digital media on a daily basis (69.0%), especially for educational (46.6%) and entertainment (32.8%) purposes.

The most frequent digital activities by children are watching videos (43.1%) and playing educational games (34.5%). Children frequently engage in online interactions several times a week (39.7%) and daily (22.4%). Parents teach digital ethics through regular discussions (69.0%) and providing direct examples (20.7%). Most parents rated their children's media literacy as good (65.5%) and frequently monitored their children's online activities (50.0%).

The most effective monitoring methods were using parental control apps (41.4%) and discussing online activities with children (39.7%). The duration of social media use per day by children varied with most spending 1-2 hours (39.7%). Social media banned include adult gaming or violence (62.1%) and unsupervised video sites (17.2%). The top reasons for banning social media use were potential addiction (46.6%) and privacy and security risks (29.3%). In her book explaining how teens use social media and networking technologies, as well as uncovering the complexities of their interactions online and offline, teens explore online spaces to connect with peers, seek information, express themselves, and explore their interests, which contributes to the construction of their digital self. Networked teens face issues such as privacy concerns, cyberbullying, digital literacy gaps, and social inequalities that affect their online experiences and well-being. It is important for adults, including parents, educators, and policymakers, to understand and support adolescents in their digital lives, encouraging meaningful dialogue and collaboration to promote positive online behavior and safety.(Boyd D. , 2014)

Through systematic literature analysis, the study found several major clusters of keywords that often appear together in related articles. The analysis showed the largest clusters involved themes such as "Digital Citizenship," "Social Media," "Digital Education," and "Media Literacy." This cluster indicates that much research focuses on digital education and how social media can be used to teach digital citizenship. Other clusters include keywords such as "Childhood," "Early Childhood," "Instructional Strategies," and "Digital Media Literacies and Materials," which show attention to instructional strategies and digital media literacy in early childhood.

The study also found that the United States is the country with the highest number of journals on this topic (32%), followed by the United Kingdom (15%), Australia, Spain, and Canada at around 5% each. This shows that developed countries have greater attention to digital literacy and child protection in the digital world.

Discussion

Analysis and discussion of these findings show that media literacy is a critical component of empowering children as resilient digital citizens. Media literacy enables children to develop critical skills in assessing online information and understanding digital risks. References from recent literature support the importance of media literacy in children's education in the digital age.(Livingstone, Kirwil, Ponte, & Staksrud, 2013)

In addition, the role of parents and educators is critical in supporting children's media literacy and digital safety. Parents who actively monitor and discuss online activities with their children can help reduce online safety risks and improve children's digital literacy. Research from the Pew Research Center shows that parental involvement in children's use of technology can improve digital understanding and safety. (Madden, Lenhart, & Cortesi, 2013)

Government policies and regulations also play an important role in protecting children in the digital world. Strict and effective policies can provide a safe framework for children to use digital technology wisely. References from UNICEF indicate that strong regulations are needed to protect children from digital risks and ensure their privacy and security.(Jasmina Byrne, 2018)

Key Challenges in Using Digital Media

The findings point to key challenges such as online safety risks, addiction, and lack of digital literacy. Online safety risks and potential addiction are top concerns for parents, as indicated by restrictions on social media and adult play or violence. This is consistent with the literature showing that child protection from digital harms is a major focus in digital literacy education.

Effective Solutions to Overcome Challenges

Parents are implementing a variety of strategies to address these challenges, including the use of parental control apps, regular discussions about digital ethics, and monitoring children's online activities. This approach suggests that active parental intervention is effective in reducing digital risks and improving children's media literacy. Research supports the importance of the role of parents in providing appropriate guidance and supervision.

The Role of Parents, Educators, and Government Policy

The role of parents is particularly prominent in the survey, with many actively teaching digital etiquette and monitoring their children's online activities. However, the role of educators and government policies are also important to support these efforts. The implementation of policies that protect children in the digital world and media literacy education programs in schools will strengthen parents' efforts. The literature supports the importance of strong and collaborative policies between families, schools, and governments to protect children from digital harm.

Factors Influencing Children's Experience in Digital Media

Factors such as media literacy, the role of parents, government policies, and digital connectivity significantly influence children's experiences in the digital media landscape. The survey results show that children with strong parental support have better media literacy and are better protected from online risks. Literature research underscores the importance of digital literacy and education focused on developing critical thinking skills and digital ethics.

Psychological and Sociological Perspectives

From a psychological perspective, children experience significant cognitive and social development when interacting with digital media. Piaget and Vygotsky's theory of cognitive development helps to understand how children process information and learn through technology, this theory discusses the theory of

cognitive development by Jean Piaget from a psychological perspective. With a focus on the stages of cognitive development in children, this article provides insight into how individuals build their understanding of the world.(Yasnitsky, 2014)

Bandura's social learning theory suggests that children model the behavior they see in the media. This is relevant to the survey results showing that the majority of parents (69%) teach digital ethics through regular discussions, demonstrating the importance of parents' role in digital literacy education. (Deaton, 2015)

Media Literacy and Children's Education

Media literacy theory emphasizes the importance of critical, analytical, and reflective skills in dealing with digital media. A well-rounded media literacy education can help children understand and critically evaluate media content. In the survey, 66% of parents rated their child's media literacy as good, indicating that media literacy is a key element in "Digital Citizenship." Children need to be equipped with the skills to critically analyze and evaluate media content, which can help them manage digital identities and interact safely in the digital world.(Livingstone, Kirwil, Ponte, & Staksrud, 2013)

Model of Ecology and Environmental Influence

Bronfenbrenner's ecological model suggests that children's media use is influenced by a variety of factors in their environment, such as family, school, and peers. The survey shows that 50% of parents often monitor their child's online activities, and 40% always do, which shows the importance of parental monitoring in children's use of digital media. This discussion highlighted that the role of parents is crucial in guiding children through the complex media landscape.(Sadownik, 2023)

Policy and Regulation

Research emphasizes the importance of policies and regulations that protect children in a digital world. Effective policies can reduce online safety risks and ensure a safe media environment for children 12% of journals highlight the importance of government regulation in protecting children, pointing out that policies and regulations are important factors in the protection of children in the digital world.(Steeves Ph.D, 2014)

Elaboration of Findings and Discussion

Conceptually and systematically, this study elaborates that empowering children as strong digital citizens requires a holistic approach involving media literacy, the role of parents and educators, and strong government policies. Media literacy not only assists children in understanding and assessing digital content, but also equips them with the skills to manage their digital identities and interact safely and ethically in the digital world. This approach is in line with media literacy theory which emphasizes the importance of critical and reflective skills in dealing with digital media (Hobbs, 1998)

The role of parents and educators is also crucial in guiding children through the complex digital media landscape. Their active involvement can provide the emotional and educational support needed to develop strong media literacy. In addition, strict government policies and regulations can provide a safe and supportive digital environment for children.

By integrating multiple perspectives and findings from literature and surveys, the study provides comprehensive guidance for practitioners, educators, and policymakers in empowering children as resilient and empowered digital citizens of the future. This empowerment involves not only awareness of digital risks, but also the inculcation of critical skills, empathy, and respect in their online interactions. Thus, children will be better prepared to face challenges and take advantage of opportunities in the ever-evolving digital era.

5. Conclusion

Conceptual Summary in conclusion

This research provides an in-depth understanding of the challenges, solutions, and various factors that influence children's experiences in the digital media landscape. Based on the results of surveys and systematic literature reviews, the findings of this study highlight the importance of digital literacy, the role of parents, and government policies in empowering children as resilient digital citizens of the future. Children who receive parental support and good media literacy education are better able to navigate the digital world safely and responsibly.

Theoretical Recommendations from Previous References

Previous literature suggests that media literacy is a key element in children's education in the digital age. emphasizes that media literacy helps children develop critical, analytical, and reflective skills. In addition, the cognitive development theories of Piaget and Vygotsky as well as Bandura's social learning theory suggest that interaction with digital media affects children's cognitive and social development. Parents who actively teach digital ethics through regular discussions can help children model the positive behaviors they see in the media.(Hobbs, 1998)

Methodological Recommendations from Previous References

The PRISMA 2020 approach in the systematic literature review used in this study is a widely accepted method and is considered a best practice for filtering, evaluating, and synthesizing relevant academic literature. In addition, the use of surveys to collect quantitative data from respondents provides strong empirical insights into parents' behavior and views regarding children's digital literacy and online safety.(M. J. Page, 2021)

Theoretical and Methodological Recommendations from Recent References

Recent references, such as from and , affirm the importance of well-rounded media literacy education to help children understand and critically evaluate media content. This study also supports the use of survey methods supported by triangulation techniques to ensure the validity and reliability of the findings. Integrating quantitative data from surveys with conceptual analysis from literature reviews provides a stronger holistic view of challenges and solutions in the digital media landscape.(Livingstone, Kirwil, Ponte, & Staksrud, 2013)(Jasmina Byrne, 2018)

Systematic Practical or Social Implications

For Parents: Parents should continue to be actively involved in their children's use of technology. Using parental control apps, discussing online activities, and providing first-hand examples of digital etiquette are all effective measures to improve children's media literacy and protect them from digital risks.

For Educators: Media literacy education should be integrated in the school curriculum. Educators can provide learning experiences that equip children with the critical skills to critically analyze and evaluate media content. A well-rounded media literacy program can help children manage their digital identities and interact safely in the digital world.

For Policymakers: Strict and effective policies and regulations are needed to protect children from digital risks. Policymakers must ensure that the digital media environment is safe and supportive for children. The implementation of media literacy education programs in schools and strict supervision of digital content aimed at children are essential.

For Society: Collective awareness of the importance of digital literacy must be improved. Social campaigns and community education programs can help spread information about the risks and

opportunities in the use of digital media. Support from various parties, including families, schools, and communities, is needed to create a safe and supportive digital environment for children.

Overall, the study emphasizes that a holistic and collaborative approach involving media literacy, the active role of parents and educators, and strong government policies are key in empowering children as resilient and empowered digital citizens of the future. With a deep understanding of technology and the risks that come with it, children can develop the skills necessary to navigate the digital world safely and wisely.

References

1. Argenti, P. A. (2016). Corporate communication . New York: McGraw Hill.
2. AugustE.Grant, P. (n.d.). TheCommunication Technology Ecosystem. Commtechupdate.
3. Bin Wang, Y. L. (2020). How Does the Use of Information Communication Technology Affect Individuals? A Work Design Perspective. Journal of the Academy of Management.
4. Bovee, C. a. (1992). Contemporary Advertising. In C. a. Bovee, Contemporary Advertising. Boston: Richard D.
5. Boyd, D. (2014). "It's Complicated: The Social Lives of Networked Teens". Yale University Press.
6. Boyd, R. (1988). How to Be a Moral Realist. researchgate.net.
7. Castos. (2024, January 25). What is a Podcast? (Everything You Need to Know About Podcasting). Retrieved from Castos.com: https://castos.com/what-is-a-podcast/#:~:text=A%20podcast%20is%20a%20digital,to%20it%20anytime%20you%20want.
8. de Raad, B. M. (2015). Big Five Factor Model, Theory and. Elsevier, 559.
9. Deaton. (2015). Social learning theory in the age of social media: Implications for educational practitioners" . Journal of Educational Technology.
10. Henderson, D. S. (2010). Audio Visual media. In S. Moss, The Entertaintment Industry : an introduction (p. 112). Cambridge: CAB International.
11. Herbert, K. (2024, January 19). Vodcasting. Retrieved from Techtarget.com: https://www.techtarget.com/whatis/feature/Vodcasting-Everything-you-need-to-know
12. Hobbs, R. (1998). The Seven Great Debates in the Media Literacy Movement. Journal of Communication Oxford University Press.
13. Insider, L. (n.d.). Audio Communication Technology Definition. Retrieved from Law Insider: https://www.lawinsider.com/dictionary/audio-communication-technology
14. Jasmina Byrne, G. B. (2018). Policy Guide on Children and Digital Connectivity. New York: Unicef.
15. John Doorley, H. F. (2007). Reputation Management: The Key to Successful Public Relations and Corporate Communication. New York: Taylor & Francis,.
16. Kemp, S. (2023, February 9). DIGITAL 2023: INDONESIA. Retrieved from Datareportal.com: https://datareportal.com/reports/digital-2023-indonesia
17. Kussusanti, D. (2021, May 24). Digital marketing - integrated marketing communication. Retrieved from Youtube: https://youtu.be/hiywuqNhWHw?si=DKQSNLr2pyJrEGd2
18. Liu, A. G. (2022). Considering the Context to Build Theory in HCI, HRI, and HMC: Explicating Differences in Processes of Communication and Socialization With Social Technologies. Human Machine Communication vol 4.
19. Livingstone, S., Kirwil, L., Ponte, C., & Staksrud, E. (2013). In their own words: what bothers children. LSE Research Online.

20. M. J. Page, J. M.-W. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews, Syst. Rev. In J. M.-W. M. J. Page, The PRISMA 2020 statement: An updated guideline for reporting systematic reviews, Syst. Rev (pp. 10, 1-11).

21. Madden, M., Lenhart, A., & Cortesi, S. (2013). Teens, Social Media, and Privacy. Harvard University's Berkman Research Center.

22. McLuhan, M. (2003). Understanding Media: The Extensions of Man. California: Gingko Press.

23. N. J. Van Eck, L. W. (2022). Manual VOSviewer Univeristeit Leiden CWTS Meaningful metrics.

24. Novrizaldi. (2023, July 29). Digital literacy. Retrieved from Kemenkopmk.go.id: https://www.kemenkopmk.go.id/pentingnya-literasi-digital-untuk-anak-anak

25. Pacey, A. (2002). The Meaning of Technology. The MIT Press.

26. Pool, I. d. (1983). Technologies of Freedom. Harvard University Press.

27. Reeves, R. (1961). Reality in Advertising. New York USA: Alfred A Knopf.

28. RI, B. (2014, May 30). peraturan.bpk.go.id/datasbase. Retrieved from peraturan.bpk.go.id: https://peraturan.bpk.go.id/Details/117562/permenkes-no-25-tahun-2014

29. RI, K. (2023, December 7). variety-creative-economy. Retrieved from kemenparekraf.go.id: https://kemenparekraf.go.id/ragam-ekonomi-kreatif/perkembangan-tren-podcast-di-indonesia-yang-terus-meningkat

30. Sadownik, A. R. (2023). Bronfenbrenner: Ecology of Human. Western Norway University of Applied Sciences, Bergen, Norway.

31. Steeves Ph.D, V. (2014). Life Online. Ottawa: Media Smarts.

32. team, L. (2023, July 11). httpDigital Citizenship. Retrieved from Learning.com: https://www.learning.com/blog/what-is-digital-citizenship/

33. Yasnitsky, A. (2014). Vygotsky, Lev "Journal of Russian and East European Psychology.". Encyclopedia of educational theory and philosophy. Sage Publications: Thousand Oaks, CA.