



Navigating children's digital world safely: The role of positive parenting through digital literacy in densely population villages

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ABSTRACT

The development of the internet has provided easier access to information, entertainment, and communication. However, its use among the public has remained unstructured, particularly in supporting educational activities and positive parenting in the digital era. Various cyber risks have emerged, potentially affecting family well-being, especially in densely populated urban areas. This study aimed to describe the role and interaction between parents, families, communities, and local policies in enhancing digital literacy and family cyber resilience. This research employed a qualitative phenomenological approach with 16 respondents. Data were collected through focus group discussions and analyzed using Parson's System Theory. The data analysis process followed the stages of open coding, axial coding, and selective coding. The validity of the data was tested through source triangulation, comparing FGD findings with in-depth interviews conducted with digital policy experts. The research showed that parents were concerned about their children's internet usage. Efforts to promote digital literacy were continuously carried out through collaboration among families, communities, government, and other stakeholders to strengthen cyber resilience in densely populated environments. The findings of this study could be utilized to support the development of effective empowerment and intervention programs to increase cyber resilience, enhance family welfare, and develop cyber resilience support systems in densely populated settlements.

Keywords: Cyber Resilience; Digital Literacy; Family Role; Positive Parenting.

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ABSTRAK

Perkembangan internet memberikan akses yang lebih mudah terhadap informasi, hiburan, dan komunikasi. Namun, penggunaannya di kalangan masyarakat masih cenderung tidak terarah, terutama dalam mendukung kegiatan edukatif dan pengasuhan positif di era digital. Muncul berbagai resiko cyber yang dapat mempengaruhi kesejahteraan keluarga, terutama di perkampungan padat penduduk. Penelitian ini bertujuan untuk mendeskripsikan peran orangtua dan mengeksplorasi interaksi antara keluarga, komunitas dan kebijakan lokal dalam meningkatkan literasi digital dan resiliensi cyber keluarga. Penelitian ini menggunakan pendekatan kualitatif fenomenologi dengan 16 responden. Data dikumpulkan melalui focus group discussion dan dianalisis menggunakan Teori Sistem Parsons. Analisis data dilakukan berdasar tahapan open coding, axial coding dan selective coding. Validitas data diuji melalui triangulasi sumber, membandingkan temuan FGD dengan hasil wawancara mendalam dengan para ahli kebijakan digital. Hasil penelitian menunjukkan orangtua memiliki kepedulian terhadap penggunaan internet oleh anak-anak mereka. Upaya literasi digital terus dilakukan melalui kolaborasi keluarga, komunitas, pemerintah dan pihak lainnya untuk memperkuat ketahanan cyber di lingkungan padat penduduk. Temuan penelitian ini dapat dimanfaatkan untuk mendukung pengembangan program pemberdayaan dan intervensi yang efektif guna meningkatkan ketahanan cyber, kesejahteraan keluarga dan sistem pendukung ketahanan siber di perkampungan padat penduduk.

Kata Kunci: Ketahanan Siber, Literasi Digital, Peran Keluarga, Pola Asuh Positif.

1. INTRODUCTION

Rapid technological development not only affects individuals but also family dynamics. Parents face significant challenges in raising children in their digital lives. Previous studies have discussed the importance of digital literacy in families (Mustofa & Budiwati, 2019). This study focuses on how parents build cyber resilience through digital literacy in densely populated areas. In contrast to previous studies (Al-abdulghani et al., 2021), which primarily highlights the digital education aspect, this study explored the interactions between families, communities, and local policies in shaping the cyber-resilience ecosystem. Building family cyber resilience requires synergy between families, communities, and local policies. Previous studies have shown that public spaces designed for shared caregiving can be an effective means of increasing community involvement in children's education (Istiadah et al., 2021). Community-based digital literacy initiatives in densely populated areas can be a solution for increasing family cyber awareness and resilience.

Although technology provides convenience and efficiency, there is also an increased risk related to cybercrime and the potential for children's development to be hampered by excessive use of technology (Rachmat & Hartati, 2020). Research conducted in Makassar City found that the use of gadgets in early childhood has both positive and negative effects, which require strict supervision and assistance from parents and the environment around the child (Junida & Mutmainnah, 2023). Cybercrime can also threaten the welfare of families,

especially in densely populated areas. Densely populated environments often lack playspaces or physical activity outside the home for children. Limited play space can increase the risk of stress and anxiety in children (Bao et al., 2022). Children are more likely to spend their time playing with gadgets as their main form of entertainment, reducing opportunities for interaction with their peers and family. Previous research has revealed that excessive use of technology can lead to social withdrawal in children (Saman & Hidayati, 2023). Some parents, grandparents, and caregivers have expressed concerns about the dangers of excessive gadget use, such as its potential to disrupt children's mental and physical health (Wang et al., 2024). The lack of parental understanding in regulating children's gadget usage patterns can increase the risk of technology addiction such as nomophobia. Children who use technology excessively tend to experience moral and behavioral changes, such as increasing frustration and aggression (Kamil et al., 2024).

Children who spend their time with gadgets and the Internet are vulnerable to cybercrime, such as cyberbullying, online fraud, exposure to harmful content, and other forms online threats. The impact of cybercrime can include psychological pressure and physical complaints, leading to depression, anxiety, reduced life satisfaction, and suicide attempts (Giumetti, 2022). In addition, digital technology also contributes to moral decline among children, which manifests as aggressive and selfish behavior due to excessive exposure to online games and other negative content, including easy access to pornography, which has an impact on changes in children's sexual behavior and morality (Agustina et al., 2019).

Cybercrime not only harms children's growth and development but also puts parents in densely populated environments at risk of victimization, including online fraud, predatory lending, and online gambling. Families vulnerable to cybercrime must build resilience within their households and communities. Cyber resilience is the ability of individuals, families, and communities to confront, adapt, and recover from the negative effects of cyberbullying, online fraud, harmful content, and child sexual exploitation. Community capital and family support have a significant influence on cyber resilience (Al-abdulghani et al., 2021). Building cyber resilience requires not only knowledge about cyber security but also digital literacy.

Digital literacy refers to the ability to understand, use, and evaluate information wisely and responsibly from various digital sources. Individuals with strong digital literacy skills can distinguish between true and false information, make wise decisions, use technology safely and responsibly, and contribute positively to community involvement and national development (Neumeyer et al., 2021). Digital literacy influences happiness and subjective well-being (Wang, 2022). However, people living in densely populated environments have limited access to educational resources including digital literacy. This allows them to be unaware of cybercrimes and the importance of digital literacy. This lack of awareness makes them more susceptible to cyber threats and less equipped to protect themselves and their families.

2. LITERATURE REVIEW

2.1. Parenting in the Digital Era

Positive parenting focuses on developing healthy and supportive relationships between parents and children. In the digital era, where technology plays a significant role in everyday life, the implementation of positive parenting has become increasingly complex. According to

Rachmawati et al., (2022), today's children are not only exposed to interactions with the people around them but also to various digital platforms that can influence their emotional and social development. An essential aspect of positive parenting in the digital era is open communication, which requires parents to establish constructive dialogue with their children about technology use (Khoirroni et al., 2023). This discussion is important to help children understand the risks and benefits of digital media and to build trust between parents and children. However, setting boundaries on technology use is equally important. According to Handayani (2019), this limitation is not only related to time but also to the type of content consumed by children.

Positive parenting also emphasizes the role of positive examples from parents. When parents show a positive attitude towards technology, their children are more likely to adopt similar behavior. Pramudito et al. (2020) stated that parents need to help children develop skills to evaluate the information they encounter in the digital world. Positive parenting should foster children's social skills, including face-to-face interactions, which may be compromised if they spend excessive time in cyberspace (Arofah et al., 2019). Children's mental health is also a major concern in positive parenting. The negative impacts of social media can increase the risk of anxiety and depression in children. Therefore, parents must pay attention to their children's mental health in this digital era (Mardiyah et al., 2021).

In addition, character education through technology can be applied. Involving children in non-digital activities is also an important aspect of positive parenting. Engaging in outdoor activities allows children to develop social and physical skills that technology alone cannot provide (Novianti & Fatonah, 2018).

2.2. *Digital Literacy*

Digital literacy encompasses an individual's ability to locate, assess, utilize, and effectively communicate information from digital sources. Digital literacy is becoming increasingly important, especially with the increasing use of technology in the teaching and learning processes. According to Pramudiati (2018), digital literacy includes not only technical skills but also critical thinking and Internet ethics. The rapid growth of digital information can be challenging if students are not equipped with the ability to select appropriate and relevant information.

The public must be educated on how to distinguish reliable information from misleading sources. Digital literacy helps children learn how to filter information, so they can avoid fake news circulating on social media (Nurhadi, 2020). This is important for developing the analytical skills required in today's information society. Digital literacy must be designed using an interactive approach so that children are more actively involved in the learning process. This includes the use of relevant digital platforms and engaging methods (Suyadi, 2021). At the policy level, the Indonesian government has recognized the importance of digital literacy through various initiatives. One of them is the "National Digital Literacy Movement" which was launched to increase public awareness of the importance of digital literacy. This initiative aims to build a digitally literate society so that they can quickly adapt to changes in an increasingly digitalized world (Jati, 2023). Strong digital literacy enables parents to safeguard their children from online threats (Lafton et al., 2023). Parental digital literacy directly impacts digital parenting (Banić & Orehovački, 2024). In addition, low

digital literacy increases the risk of cyberbullying in children (Sembiring, 2024). These findings highlight the urgency of this study to explore how family digital literacy can build more effective cyber resilience.

2.3. Social Psychology Perspective through the Lens of Parsons' Systems Theory

Parsons' Systems Theory (Luhmann, 2013) describes social systems as entities that adapt to their external environment. Parsons' Systems Theory offers a comprehensive framework for analyzing how individuals and families function within broader social systems. There are four dimensions for understanding the main function of a system.

2.3.1. Adaptation

This dimension refers to the ability of family members to adapt to technological developments and ever-growing cyber threats. This adaptation strategy involves fostering digital literacy within the family, ensuring that all members—including parents, children, and caregivers—understand the fundamentals of responsible internet use (Kurniawan, 2020).

2.3.2. Dimensions of Goal Achievement

This dimension refers to the ability of family members to adapt to technological developments and ever-growing cyber threats. This adaptation strategy involves developing digital literacy in the family, and all family members—father, mother, children, and caregivers—can recognize the basic material for healthy internet use (Kurniawan, 2020).

2.3.3. Integration Dimensions

Integration refers to how family members engage with the broader community. This bottom-up digital literacy movement based on local communities can reduce the digital gap in society (Astuti & Binu, 2022). Collaboration with communities and educational institutions can reinforce digital literacy initiatives, enhancing collective resilience against cyber threats.

2.3.4. Dimensions of Hidden Pattern Maintenance

The behavioral patterns of using gadgets and technology are greatly influenced by the values and norms that exist in society. Digital literacy must involve an understanding of the values that must be adhered to, such as freedom of expression, respect for privacy, respect for cultural diversity, intellectual rights, and copyright (Kurniawan, 2020). Factors such as educational values, attitudes toward technology, and the influence of social media can shape the behavioral patterns that impact cyber resilience.

This system theory approach provides a framework for examining the role of digital literacy and positive parenting in fostering cyber resilience in densely populated areas. Systems theory emphasizes the interaction between elements in a system, such as the interaction of individuals, families, communities, and values in society that interact with each other to build cyber resilience in densely populated areas.

3. METHOD

This study used a qualitative method with a phenomenological approach. The respondents in this study were selected purposively. There were 16 respondents, which was

considered sufficient for phenomenological research (Creswell & Poth, 2016). The inclusion criteria were as follows: (1) parents who had children aged 3-17 years, (2) were domiciled in a densely populated neighborhood, and (3) had experience using digital technology. Data were collected through focus group discussions. The respondents in this study consisted of 16 individuals with an age range of 22-41 years, considering variations in age, education level, and parental experience.

Table 1.

Respondent Overview.

No	Initials	Age	Profession	Age of Child
1	SRU	29 Years	Housewife	11 Years
2	IWT	25 Years	Private sector employee	3 Years
3	EKW	26 Years	Craft worker	7 Years
4	EHS	22 Years	laundress	3 Years
5	RH	24 Years	Early Childhood Education Teacher	4 Years
6	SAK	37 Years	Early Childhood Education Teacher	13 Years
7	ITR	34 Years	civil servant	13 Years
8	DRN	32 Years	Teacher	13 Years
9	JSN	28 Years	Private sector employee	6 Years
10	EHD	26 Years	Shop employee	7 Years
11	RN	25 Years	Housewife	3 Years
12	RNB	22 Years	Housewife	3 Years
13	DRI	41 Years	Freelance	17 Years
14	DK	43 Years	Online motorcycle taxi	17 Years
15	ADP	46 Years	Committe Posyandu	16 Years
16	PSA	38 Years	Toddler Family Development Cadre	16 Years

Source: Processed Data, 2024.

3.1. Measurement

This study collected data using focus group discussions (FGD). This method is part of qualitative phenomenological research (Creswell & Poth, 2016). The questions used in the FGD were general, unstructured, and open-ended to obtain views and opinions from all participants. The questions were compiled by researchers based on System Theory (Luhmann, 2013), which views society as a complex system consisting of four dimensions to understand the main function of a system, including Adaptation, Goal Attainment, Integration, and Latent Pattern Maintenance. The Focus Group Discussion (FGD) method was used for data collection.

3.2. Procedure

Focus Group Discussion (FGD) is technically an interview conducted in groups and focuses. In this study, the 16 respondents were divided into two groups and answered the discussion questions in two sessions. The researchers acted as moderators in each group. Moderators asked questions and controlled the FGD process by ensuring that the respondents answered all the questions. There were two FGD groups to facilitate the discussion so that each participant had enough time to share their experiences and perspectives.

3.3. Analysis Techniques

The analysis technique is based on systematic stages, namely, the coding process for the conclusion. The coding process begins with open coding, namely, researchers exploring data from the FGDs' results on the role of digital literacy and family support in cyber resilience in densely populated villages. Researchers created data categories based on themes and subthemes that emerged from the results of the FGD, including access and infrastructure, capacity and ability, habits, digital literacy, family support, and cyber resilience. The researcher then conducted axial coding. The results of the axial coding in this study are factors inhibiting cyber resilience, the role of digital literacy and its influence on cyber resilience, and the importance of family support in building cyber resilience.

4. FINDINGS AND DISCUSSION

4.1. Finding

The results of this study indicate that digital literacy and family support are important for building cyber resilience in densely populated villages. Parsons' System Theory helps understand the role of digital literacy and family support in building cyber resilience in densely populated villages.

4.1.1. Adaptation

The results of this study show that parents are trying to proactively adapt to and become aware of technological developments and cyber threats. Key themes in family and community adaptation to new technologies and cyber risks include creating safe spaces, family support, and community involvement.

Parents in Tunjung Sekar Village have shown an awareness of creating a safe environment for their children. Parents try to establish rules for gadget use and special areas for their children's online activities. This is in line with previous research stating that parents play a role in guiding children regarding the negative impacts of gadget use and misuse, which will have an impact on children's social development (Syarifudin & Syamsurrijal, 2022). Mothers are not only responsible for the family economy but also play a major role in educating and directing their children (Arifanti et al., 2024). Therefore, when digital literacy in mothers increases, it can significantly contribute to shaping safe and healthy patterns of digital media use in the family.

Table 2.

Adaptation.

Informant statement	Coding
"I make rules at home about when and how long children can use gadgets.." (ITR, Focus Group Discussion, August 24, 2024)	Parental control
"My husband and I want to make sure that the children are watching videos that are safe for them." (EKW, Focus Group Discussion, August 24, 2024)	Online content safety
"We as parents always try to stay open, so that children feel safe to tell us if they experience unpleasant things, especially online, such as bullying, etc..." (DRN, Focus Group Discussion, August 24,	Open communication

2024)	
"As a parent, I want to learn about using cellphones with my children, I also share experiences and ask children about applications they know to avoid online crime." (ADP, Focus Group Discussion, August 24, 2024)	Digital literacy
"I hope there is support from the community such as forming a community to share knowledge about technology and online security. " (DRN, Focus Group Discussion, August 24, 2024)	Community Support
"The community can organize seminars or training on online safety,.."(ITR, Focus Group Discussion, August 24, 2024)	Cyber Awareness
"I Agree that cooperation with authorities is also needed to create programs that educate the public about cyber risks and how to deal with them.."(EHD, Focus Group Discussion, August 24, 2024)	Government Collaboration

Source: Author, 2024.

Other studies emphasize the role of open communication in shaping children's character by identifying online risks, such as harmful games and gadget addictions (Junida & Mutmainnah, 2023). Emotional support and open communication between parents and children can help children deal with cyber problems. Parents share experiences with their children to overcome challenges.

Parents expect and recognize the importance of training and workshops to improve their understanding of technology as well as better access to the Internet. This highlights the need for collective efforts through education and training programs to enhance digital literacy for children, parents, and the community. Parents' expectations are in line with the definition of the digital literacy process, which involves several stages: training, socialization, and the wise use of applications or devices (Mustofa & Budiwati, 2019). The community plays an important role in providing digital literacy and resilience education to families.

4.1.2. Achievement of Goal

The results of this study indicate that families have adopted a proactive approach toward setting clear digital literacy goals. They involve children in discussions to determine what they want to achieve so that children feel responsible for the digital literacy process.

Table 3.
Achievement of Goal.

Informant statement	Code
"If they like to draw, then I look for educational drawing apps." (RH, Focus Group Discussion, August 24, 2024)	Personalized Digital Learning
"We try to teach children to think critically when using social media. For example, when they see something suspicious, should they ask themselves, is this true, or not? The goal is for them to be responsible for themselves." (DK, Focus Group Discussion, August 24, 2024)	Critical Thinking in Digital Literacy
"I learned to create social media from my child, I felt I had to learn, and from there I set rules with my child" (PSA, Focus Group Discussion, August 24, 2024)	Parental Digital Adaptation
"Experience in our family, we make written rules that must be followed	Household

together, such as the time of use of gadgets and websites that are allowed. This helps children to obey the boundaries.” (DRI, Focus Group Discussion, August 24, 2024)	Digital Rules
"I ensure the children adhere to the agreed rules," (ITR, Focus Group Discussion, August 24, 2024)	Rule Enforcement in Digital Parenting
"Additionally, we teach them the importance of data privacy, such as not sharing personal information with strangers, and we hold frequent discussions about their online experiences." (DK, Focus Group Discussion, August 24, 2024)	Cyber Privacy Awareness
“In addition, we teach them the importance of privacy data, such as not sharing personal information with strangers and also having frequent discussions about what they experience online..” (DK, Focus Group Discussion, August 24, 2024)	Online Safety Practices
“Communities can work together routinely with schools or colleges to organize digital literacy training. For example, holding classes for parents and children.” (SRU, Focus Group Discussion, August 24, 2024)	Community-Based Digital Literacy Training
Fostering Teenagers or sub-district families can also invite speakers or technology experts to give seminars on how to use technology wisely and safely.” (DK, Focus Group Discussion, August 24, 2024)	Community Collaboration for Digital Education

Source: Author, 2024.

Children's involvement in goal-setting can increase their motivation and commitment. Through proper guidance, gadgets can be utilized for positive outcomes (Statti & Torres 2020). This shows the importance of parents' role in directing and setting digital literacy goals for their children so that they can face the challenges and opportunities offered by the digital era. Parents discuss rules openly with their children so that they can understand the context and reasons behind each rule, which helps create a sense of security and responsibility. Parents have realized the importance of having clear and consistent rules about internet and social media use (Statti & Torres 2020). Collaboration with schools, universities, libraries, and technology experts is crucial in developing digital literacy programs within communities. In line with these results, increasing parental skills in technology through the use of technology as a means of interaction increases parental involvement in matters related to children's welfare and mental health (Cobb, 2023)

4.1.3. Integration

The involvement of all parties, both family members and the community, in digital literacy practices is key to collectively addressing cyber risks. Several important themes emerged from the transcripts related to the integration dimensions in maintaining cyber stability and resilience.

Table 4.
Integration.

Informant statement	Code
“I try to communicate well with my children, listen to their needs directly. I hope they feel heard, so later they will want to tell me all the problems they face.” (ADP, Focus Group Discussion, August 24, 2024)	Parental Open Communication

“There is a family WA group that we deliberately created, yes, the hope is that we can be open with each other.”(DK, Focus Group Discussion, August 24, 2024)	Family Digital Communication
Communication as a positive social factor in providing social support can not only be done offline, but online communication will show more effective results (Udwan et al., 2020).	Online Social Support
“In our environment, we have been using social media to communicate about village activities, so that other residents are encouraged to use social media, such as Instagram and WhatsApp..”(ADP, Focus Group Discussion, August 24, 2024)	Community Digital Engagement
“In our community, sharing information about technology is very common. When there are parents who know a lot about technology, they tend to help other parents.”(EHS, Focus Group Discussion, August 24, 2024)	Digital Knowledge Sharing

Source: Author, 2024.

Regular discussions provide a space for children to share their experiences and concerns, thereby strengthening their sense of security in the face of online risks. Community activities, such as digital literacy training, not only increase technological knowledge but also build a sense of togetherness and support among parents. Previous research suggests that the best way to address the lack of digital skills or gaps in poor countries is to mobilize policymakers by leveraging the involvement of resources, institutions, fellow communities, and local culture (Gondwe, 2024).

4.1.4. *Maintained Latent Patterns*

An analysis of participants' responses showed that in densely populated areas, basic values such as honesty, respect, responsibility, and cooperation are considered important in building cyber resilience. Local values remain strong and can be applied to positive parenting related to technology use. Previous research has shown that communities play an important role in building healthy social norms (Rosdiana, 2024). This principle can be applied to build awareness and cybersecurity.

Table 5.
Maintained Latent Patterns.

Informant statement	Code
“They need to understand that not everything on the internet is true, and they also need to be honest when sharing information online.”(SAK, Focus Group Discussion, August 24, 2024)	Digital Honesty
“ when they want to download or upload something, they must know what it is for, and what the risks are. They must understand that everything on the internet can be accessed by many people and is difficult to delete.”(DRN, Focus Group Discussion, August 24, 2024)	Parental Role Modeling
“My wife and I set a direct example. Moreover, we did not carelessly share personal information. Children learn from what we do.”(ITR, Focus Group Discussion, August 24, 2024)	Digital Awareness
“I often talk to the kids about the news or videos they see. This is so they know that they are responsible for what they see and share..”(JSN, Focus Group Discussion, August 24, 2024)	Responsible Digital Consumption
“we invite people who know about technology, so we can all learn about the dangers and how to use the internet safely..”(ADP, Focus Group Discussion, August 24, 2024)	Community Digital Education

“In this village, we usually share information. For example, if someone receives a fraudulent message or false news, we immediately tell the others. This makes us more vigilant together..”(SAK, Focus Group Discussion, August 24, 2024)	Collective Digital Vigilance
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Source: Author, 2024.

Positive parenting of digital literacy is also known as the digital parenting method, which teaches parents and children about the limitations of accessing the digital world so that its use is appropriate and more positive. Building self-awareness among family members regarding the use of digital technology requires the direct involvement of parents in showing the right way to use technology. When provided with knowledge about the limits of technology use, children can learn to assess their experiences and manage digital risks when using the Internet (Kurniawan, 2020). This emphasizes the importance of discussion and role models in fostering responsibility. Previous research explains that children, by communicating openly, children can share their experiences and learn from mistakes without feeling judged (Muniroh et al., 2019). Social norms in the environment play an important role in creating a positive digital literacy culture (Haider & Sundin, 2022).

In addition, community activities involving training and sharing of information show that the community is aware of the importance of digital literacy. This creates a collaborative and supportive learning atmosphere to strengthen communities facing digital challenges. Strategies for increasing digital literacy in rural areas, namely, infrastructure maintenance and providing digital facilities and devices (Ibrahim, 2022). The use of sustainable digital technology plays an important role in the collective efforts of communities to overcome obstacles by navigating the existing potential to achieve development towards resilience and sustainability (Attah et al., 2024). Support among residents in densely populated villages strengthens both the learning process and the exchange of information. The existence of the Internet and digital media can encourage the emergence of digital social action and solidarity in helping others, while also providing socio-economic and cultural benefits (Syarifudin & Syamsurrijal, 2022).

4.2. Discussion

The results of this study are in line with previous studies showing that the digital literacy of parents in low-income or densely populated areas is often inadequate for providing effective guidance on digital parenting. The use of gadgets that are not yet properly regulated according to needs, where children are very familiar with technology but their use has not been properly supervised by parents, can have negative impacts (Wardana et al., 2023). Densely populated areas are characterized by population density and varying levels of education, which also affect the high problems related to cyber risks. The results of this study indicate that parental awareness of digital literacy in densely populated areas has increased. However, families and communities in densely populated areas face many challenges and obstacles in using and accompanying their children to safely and responsibly use digital technology. This is supported by previous research showing that parents tend to be worried about accompanying their children because they realize that they do not have the right knowledge (Tsoraya et al., 2022).

This study uses Systems Theory (Parsons) to understand the role of digital literacy and positive parenting in building cyber resilience in densely populated villages by understanding the interrelated elements of the system. There are four dimensions to understanding the main function of the family as a system in this digital era: Adaptation, Goal Achievement, Integration, and Latent Pattern Maintenance. This study shows that parental adaptation in the digital era is achieved by carrying out positive parenting through digital literacy, which can be effective if parents provide guidance and direct examples of healthy, safe, and wise use of gadgets to their children. This is supported by previous research showing that parental guidance includes managing gadget usage time and monitoring children's activities so that children can learn to be responsible for their actions in the digital world (Rubyanti, 2022). The goal of positive parenting through digital literacy is for all family members, communities, and society to protect themselves from cyber threats. The important role of parents in supervising and regulating the use of digital technology in children can minimize the negative impacts and maximize the positive impacts of technology on the development of children's character and morals (Yunita et al., 2021).

This study shows that parents realize that collaboration with communities, society, and relevant stakeholders has great potential for supporting digital literacy programs. Collaboration between various stakeholders, such as schools, non-governmental organizations, and the government, is important for building an effective digital literacy program. Initiating empowerment programs such as competitions or workshops can attract public attention and increase participation, thereby strengthening the awareness of the importance of digital literacy. Empowerment programs such as this need support from many stakeholders to prepare for the productive generation of young people who can compete in the digital era (Novanana, 2022).

This study also showed that communities in densely populated villages have strong cultural capital in terms of moral values, self-awareness, and social norms that support cyber resilience. Densely populated communities can use joint activities to improve digital literacy and cyber resilience. Technology empowerment not only offers a new method to facilitate collaboration among various parties but also provides a new means for rural authorities to improve village governance capabilities (Zhao et al., 2024). Increasing community participation in activities related to digital technology is also a strategy for improving the community's digital experience and literacy (Rennó & Novaes, 2024).

This study contributes to efforts to build cyber resilience through positive parenting and digital literacy in densely populated areas and helps families and communities build the capacity to deal with digital risks more effectively by maintaining strong local cultural values. This study can also serve as a guide for parents on how to monitor children's online activities wisely so that they can protect them from potential dangers while still respecting their privacy. The results of this study can also be used to initiate the formation of digital communities in densely populated areas, through which people can share information with each other, such as cases of online fraud, so that they can help the community increase collective awareness. It is also hoped that it can encourage residents to remind each other and protect their children in this digital world by emphasizing the values of honesty, responsibility, and understanding the importance of ethics in the digital world.

Although the results of this study are useful for people in densely populated areas, they have some limitations. First, this study was conducted in only one densely populated village, which makes it impossible to generalize the results to a wider population, such as in densely populated villages in other areas that have different social and cultural characteristics. Second, access to technology and information in densely populated areas is limited; therefore, some respondents do not have the same experience in terms of digital literacy. In addition, respondents were not fully aware of or understand cyber risks, so the answers given were less in-depth and did not reflect a comprehensive understanding.

5. CONCLUSION

This study concludes that families in densely populated areas face significant challenges in supervising their children's use of digital technologies. Parents' awareness of digital literacy has been established, but limited knowledge and resources in managing technology use remain obstacles. Parsons' System Theory suggests that families act as adaptive systems in the digital era with four main functions: adaptation, goal achievement, integration, and maintenance of latent patterns.

This study found that parental guidance and positive parenting based on digital literacy are important steps in preventing the negative impacts of technology and maximizing the positive impacts of children's character and moral development to build effective cyber resilience. In addition, densely populated communities have cultural capital in the form of moral values, social norms, and collective awareness, which can support family resilience. Interventions involving families, communities, and stakeholders are essential for the development of relevant digital literacy programs. Initiating empowerment programs can protect children from the risks of the digital world and build a safe, adaptive, and healthy environment for children.

Future research could employ longitudinal studies to examine how digital parenting patterns affect children's behavioral habits in the long term. In addition, further research can explore cultural factors, social norms, and local policies, such as by analyzing the influence of social norms and religiosity on digital parenting patterns. The results of this study support the importance of initiating empowerment programs for parents and communities to improve family digital literacy. Such programs can contribute to protecting children from risks in the digital world and building safe, adaptive, and healthy environments. Interventions involving families, communities, and stakeholders are essential strategies for developing relevant and sustainable digital literacy programs.

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