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The Influence of Parental Supervision on the Use of Information Technology and the Development of Discipline in Elementary School-Aged Children

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ABSTRACT

The development of information technology has made it easier for children to obtain information and access learning resources. However, the use of technology without parental supervision may cause children to have difficulty managing their time and potentially hinder the development of disciplined character. This study aims to analyze the influence of parental supervision on children's use of information technology, the influence of information technology use on children's disciplinary character, and the simultaneous influence of both variables on elementary school-aged children in Batu Lappa Hamlet, Tompo Village, Barru District, Barru Regency. This study employed a mixed-methods approach with a sequential explanatory design. Quantitative data were collected through questionnaires administered to 72 parents, while qualitative data were obtained through interviews, observations, and documentation. The data were analyzed using statistical and descriptive methods. The results indicate that parental supervision has a significant influence on children's use of information technology. The partial effect of information technology use on disciplinary character is not statistically significant, with a significance value of 0.051 and a contribution of 5.3% (R^2 = 0.053). However, simultaneously, parental supervision and information technology use have an influence on disciplinary character, with a contribution of 9.6% (R^2 = 0.096), while the remaining 90.4% is influenced by other factors.

Keywords: Parental Supervision,Disciplinary Character, Elementary School-Aged Children.

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INTRODUCTION

The development of information technology has become an inevitable global phenomenon in recent years, bringing significant impacts on human life, including the fields of education and family. According to Yusufhadi Miarso, information technology refers to all forms of means used to convey messages, knowledge, and values in the context of learning, both formal and non-formal (Sihotang, 2020). Technological advances, particularly the internet and digital devices, provide convenience in accessing information, broadening knowledge, and improving the efficiency of learning activities.

The ease of internet access and the availability of devices such as smartphones have made children increasingly familiar with technology from an early age. On the one hand, technology can support the learning process and improve digital literacy. On the other hand, uncontrolled use of technology can negatively affect children's

behavior and lifestyle, including their discipline (Nurhayati & Chandra, 2025). In the context of Islamic education, the use of information technology is not merely viewed as a means of modernization but must also be directed to align with religious and moral values (Arifin, 2025).

In the context of elementary school education, discipline is a fundamental character trait that must be developed from an early age. Discipline encompasses children's ability to obey rules, manage their time, and consistently fulfill their responsibilities (Uge et al., 2022). According to Nurdin, discipline is an essential foundation for developing positive behavior in children, which determines their success in learning and socializing (Maftuhah et al., 2026).

Changes in children's social behavior in the digital era have become a major concern in modern Islamic education. Children who have been familiar with digital devices such as mobile phones, tablets, and computers from an early age often spend more time in the virtual world than engaging in social and spiritual activities in the real world. According to Syam's research, the use of information technology without adequate guidance can lead to decreased interest in learning, weakened discipline in religious practices, and the emergence of individualistic behavior (Zahira et al., 2025). Therefore, the role of the family, particularly parents, is crucial in guiding children to use technology wisely and in ways that bring spiritual benefits.

From an Islamic perspective, technological advancement is essentially part of Allah's blessings, which should be utilized properly. This is in accordance with the words of Allah SWT in Surah Al-'Alaq (96), verses 1–5, which emphasize the command to read and seek knowledge:

اِقْرَأْ بِاسْمِ رَبِّكَ الَّذِيْ خَلَقَۚ خَلَقَ الْاِنْسَانَ مِنْ عَلَقٍۚ اِقْرَأْ وَرَبُّكَ الْاَكْرَمُۙ الَّذِيْ عَلَّمَ بِالْقَلَمِۙ عَلَّمَ الْاِنْسَانَ مَا لَمْ يَعْلَمْۗ

Translation:

"*Read in the name of your Lord who created. He created humankind from a clinging substance. Read, and your Lord is the Most Generous, who taught by the pen, taught humankind what they did not know.*"

According to Quraish Shihab in *Tafsir al-Mishbah*, this verse indicates that Allah SWT teaches human beings through various means of knowledge and technology, which must be utilized responsibly and ethically. Islam does not reject technology; rather, it guides its use toward the common good (Nur, 2018). Furthermore, parents have a significant responsibility in shaping children's character. The family is the first school for children, where the values of faith, morality, and obedience to Allah SWT are instilled (Karadona & Sari, 2025; Rahma et al., 2024).

Field observations indicate that the use of information technology among elementary school children is often not accompanied by adequate parental supervision. Many children spend hours using gadgets to play games or watch videos without clear limitations. Without such supervision, children are vulnerable to becoming less disciplined in their studies, neglecting their assignments, and experiencing difficulties in managing their time (Syifa et al., 2019). Research conducted by the Ministry of Women's Empowerment and Child Protection (Kementerian PPPA) indicates that 70% of elementary school children use gadgets daily without optimal parental guidance. Parental supervision involves not only moral and spiritual aspects but also controlling the negative influences of the surrounding environment, including digital media. As stated by Nata, strong family education helps establish consistent religious behavioral patterns in children's daily lives (Nata, 2016).

However, in reality, the use of technology without proper supervision can have negative effects, particularly on children. Childhood is a developmental stage that is highly vulnerable to environmental influences, including digital media. When children use information technology without parental guidance, they are at risk of being exposed to content that is inconsistent with moral values and religious teachings (Nasyomia & Pradana, 2026).

The family is the first and most influential educational institution in shaping children's values, attitudes, and behavior. Therefore, parental supervision is not merely about monitoring children's external behavior but also constitutes part of the process of internalizing Islamic values (Hidayat et al., 2018). According to Hadi (2023), parental supervision (parental control) includes activities such as guiding, reprimanding, setting examples, and establishing clear boundaries for children in using technological devices and interacting socially. Parents who actively supervise their children's use of information technology can instill strong values of responsibility and religiosity. From the perspective of Islamic education, the development of disciplined character is an integral part of educational objectives. According to Zuhairini, Islamic education aims to develop individuals who possess faith, piety, and noble character. Disciplined character is reflected in behaviors such as being diligent in worship, honest, trustworthy, polite, and responsible toward oneself and the surrounding environment (Sa'adillah SAP et al., 2020).

Social realities in various regions of Indonesia indicate that advances in information technology are not always accompanied by improvements in adequate parental supervision. Based on data from the Ministry of Communication and Information Technology, approximately 87% of children in Indonesia have used digital devices from an early age; however, only 42% of them receive direct guidance from their parents regarding digital media use.

Tompo Village is one of the villages in Barru District that has considerable social and religious potential. According to the 2024 Tompo Village Profile, the village consists of several hamlets, including Batu Lappa Hamlet, Lompo Tengah Hamlet, and Tanete Hamlet. The majority of its population is Muslim and actively participates in religious activities such as Islamic study sessions, religious gatherings, and Qur'anic education programs (Taman Pendidikan Al-Qur'an/TPA). The village government's vision is "To Realize a Religious, Prosperous, and Independent Tompo Village Based on Local Potential," demonstrating its commitment to spiritual values and the moral education of the community.

Nevertheless, technological development in this village also presents new challenges. Based on field observations, many children have become familiar with digital media such as YouTube, TikTok, and mobile games. Some parents have expressed difficulties in controlling their children's digital activities, particularly due to work commitments or limited understanding of technology. This phenomenon indicates a gap between technological advancement and the capacity of families to provide supervision. If this situation is not properly addressed, it may affect the development of disciplined character among children in the area.

Initial interviews conducted in Batu Lappa Hamlet revealed that several community leaders stated that religious activities for children, such as afternoon Qur'anic lessons, congregational prayers, and youth Islamic study sessions, are still being conducted. However, participation has declined compared to previous years. Children who are more interested in playing online games are often absent from TPA activities or Islamic study sessions. This situation indicates that technological

advancement can shift children's interest away from religious activities, particularly when intensive parental supervision and guidance are lacking.

Parental supervision can be defined as a series of actions aimed at monitoring, controlling, and guiding children's behavior so that it conforms to applicable social norms (Widyanti & Jatiningsih, 2022). The role of parents is particularly important in supervising children's use of technology. Parental supervision involves not only regulating screen time but also providing guidance regarding content, purposes of use, and rules that children must follow (Hasanah, 2018). According to Syaiful Bahri Djamarah, consistent parental supervision can develop discipline through habituation and behavioral control (Wulandari et al., 2023). In the context of Islamic education, this supervision encompasses three aspects: spiritual, social, and moral supervision. Spiritual supervision is carried out by instilling the values of faith and worship; social supervision involves developing positive habits in interacting with others; while moral supervision is implemented by establishing boundaries and consequences for behavior that contradicts religious teachings (Hidayat et al., 2018b).

The religious and social conditions of the Tompo Village community serve as a strong foundation for developing children's character. However, without effective supervision of technology use, these religious values may be undermined by the negative influences of digital media. This phenomenon is consistent with the findings of Aslan (2019), who stated that children with low levels of parental supervision tend to use technology solely for entertainment rather than as a means of learning or self-development. Therefore, appropriate supervision based on Islamic values is essential to ensure that technology is utilized positively and supports the development of children's disciplined character. Accordingly, the relationship between parental supervision, information technology use, and the development of children's disciplined character is important to investigate comprehensively. A quantitative approach can explain the extent to which parental supervision influences children's technology use behavior and religiosity, while a qualitative approach can explore in greater depth how supervision is practiced in the field, as well as the challenges and supporting factors involved. This mixed-methods approach is appropriate for examining the complex and contextual nature of this phenomenon within the community (Creswell, 2014).

Furthermore, this research is also relevant to the objectives of national education as stipulated in Law Number 20 of 2003 concerning the National Education System, which states that education aims to develop students' potential so that they become individuals who possess faith, piety, noble character, competence, creativity, and a sense of responsibility. This demonstrates that the development of children's disciplined character through family supervision is an integral part of national education objectives, which must be adapted to the challenges of the digital era.

Based on the phenomena described above, it can be concluded that parental supervision plays an important role in guiding children to use information technology wisely and in accordance with religious values. When parental supervision becomes weaker, children are at risk of developing behavioral deviations, experiencing a decline in their enthusiasm for religious practices, and losing their moral direction.

METHOD

Types and Research Design

This study employed a mixed-methods approach with a sequential explanatory design, which combines quantitative and qualitative approaches sequentially (Khabibullah et al., 2024). The first stage involved a quantitative approach to examine the influence of parental supervision on the use of information technology and the development of children's disciplined character. Subsequently, the qualitative stage was conducted to clarify and further explore the quantitative findings through interviews, observations, and documentation. The integration of both approaches was carried out to obtain a more comprehensive understanding of the relationship between parental supervision, information technology use, and the disciplined character of elementary school-aged children.

Research Location, Population, and Sample

The research was conducted in Batu Lappa Hamlet, Tompo Village, Barru District, Barru Regency. The research population consisted of parents who have school-aged children in Batu Lappa Hamlet. Based on data from the 2024 Tompo Village Profile, there were approximately 120 parents with children of active school age (elementary to junior high school). The quantitative sample consisted of 72 parents. The quantitative sampling technique employed was proportional random sampling, which involves randomly selecting respondents while considering the proportions of the population. Meanwhile, qualitative informants were selected using purposive sampling based on their involvement and knowledge regarding child supervision. There were 10 informants, consisting of six parents, one religious leader or TPA teacher, and three community leaders. Qualitative data collection was based on the principle of the saturation point, whereby data collection was terminated when the information obtained was considered sufficient and no significant new information emerged.

Research Variables and Instruments

This study involved three variables: parental supervision (X), information technology use (Y_1), and children's disciplined character (Y_2). Quantitative data were collected using a closed-ended questionnaire with a five-point Likert scale (1–5). The instrument was developed based on the indicators of each variable. Meanwhile, the qualitative instruments consisted of semi-structured interview guidelines, observation sheets, and documentation.

Instrument Validity and Reliability Testing

Validity testing was conducted to determine the extent to which each statement item was capable of measuring the research variables. The validity test employed Pearson's Product Moment correlation using the following formula:

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Data Collection Techniques

Data collection was carried out through questionnaires, interviews, observations, and documentation. Questionnaires were distributed to 72 parents using a five-point Likert scale, consisting of a score of 1 (strongly disagree), 2 (disagree), 3 (undecided), 4 (agree), and 5 (strongly agree). The questionnaires were used to obtain data regarding parental supervision, information technology use, and children's disciplined character. Semi-structured interviews were conducted with 10 informants

to obtain information regarding forms of parental supervision, children's technology usage habits, and the implementation of discipline in everyday life. Direct observations were carried out to examine parental guidance, information technology usage activities, and children's disciplinary behavior within both family and community environments. Documentation was also used to obtain supporting data, including regional profiles, population records, and documentation of children's and families' activities relevant to the research.

Qualitative Data Analysis and Data Integration

Qualitative data were analyzed through three stages: data condensation, data display, and conclusion drawing. Data validity was examined using source triangulation and technique triangulation by comparing information obtained from interviews, observations, and documentation. Furthermore, the quantitative and qualitative findings were integrated using the sequential explanatory approach. Statistical findings served as the basis for determining aspects that required further investigation through interviews and observations. This integration was conducted to explain how parental supervision is related to information technology use and the development of disciplined character among elementary school-aged children.

RESULTS AND DISCUSSION

Internal Factors Hindering Adolescents in Pursuing Higher Education in Komba Village

The discussion in this study is based on the research findings obtained through a mixed-methods approach. It does not merely interpret the quantitative analysis results but also integrates qualitative findings obtained through interviews, observations, and documentation. Furthermore, these findings are examined in relation to previous studies and the perspectives of sociology, anthropology, psychology, and the Qur'an. Through this approach, the discussion is expected to provide a more comprehensive understanding of parental supervision, information technology use, and the development of disciplined character among elementary school-aged children in Batu Lappa Hamlet, Tompo Village, Barru District, Barru Regency.

1. The Influence of Parental Supervision on Children's Use of Information Technology

Based on the integration of the mixed-methods research findings, parental supervision was found to have a significant influence on children's use of information technology. The quantitative analysis indicates that parental supervision significantly influences children's use of information technology, while the qualitative findings explain that this influence is manifested through direct supervision, guidance, moral and disciplinary education, and exemplary behavior practiced in everyday life. The integration of these two approaches demonstrates convergence, whereby the statistical results are reinforced by field evidence showing that the better the parental supervision, the more directed children's use of information technology becomes. Therefore, technology use is influenced not only by the availability of digital devices but also by the quality of parenting provided within the family environment.

These findings are consistent with Jalaluddin's theory, which explains that the family is a child's first educational environment. According to him, the development of children's personalities, attitudes, and behavior is strongly influenced by educational experiences within the family. Parents have a significant responsibility to provide guidance because the family is the first environment in which children become familiar

with values, rules, and daily habits. In the context of this study, parental supervision of technology use represents a form of family education intended to help children use technology appropriately and responsibly (Jalaluddin, 2008).

This perspective is consistent with Abdullah Nashih Ulwan's concept, which explains that children's education is carried out through exemplary behavior (*al-qudwah*), habituation (*al-'adah*), advice (*al-mau'izhah*), attention (*al-mulahazah*), and supervision (*al-muraqabah*). According to Ulwan, parents should not merely establish rules but must also be actively involved in their children's lives through continuous guidance and assistance. This is reflected in the findings of this study, in which parental supervision is not limited to restricting technology use but is also implemented through assistance, guidance, moral education, and exemplary behavior, enabling children to use technology wisely (Ulwan, 1992).

Furthermore, from a psychological perspective, child development theory proposed by Santrock explains that children's development is influenced by reciprocal interactions between individuals and their social environments. Parents serve as the closest environmental influence by providing support, rules, and control, enabling children to develop self-regulation skills. In the context of technology use, children's ability to exercise self-control does not develop automatically but emerges through guidance and habituation provided by parents (Santrock, 2012).

From a sociological perspective, parental supervision of children's information technology use can be understood as part of the primary socialization process within the family. Berger and Luckmann explain that primary socialization is the initial process experienced by individuals during childhood through their closest social environment. Through this process, individuals learn to understand social reality, values, rules, and behavioral patterns that govern their lives (Hayat et al., 2026). In this study, parents serve as the primary agents of socialization who introduce children to rules, limitations, and habits regarding information technology use. Supervision through time restrictions, assistance, guidance, and examples of appropriate technology use demonstrates that families do not merely control children's behavior but also help them internalize appropriate patterns of technology use. Thus, the influence of parental supervision on children's information technology use can be understood as a social process that occurs through learning and the internalization of values within the family environment.

From an anthropological perspective, children's use of information technology can be understood as part of changes in habits and lifestyle patterns within family culture. Clifford Geertz views culture as a historically transmitted system of meanings embodied in symbols through which human beings understand and conduct their lives (Joko Suryono, 2025). In this study, parents' habits of regulating device usage time, guiding children to use technology for educational and religious activities, and demonstrating appropriate technology use represent processes of habit formation that carry meaning within family life. Children learn that technology is not merely a means of entertainment but can also serve as a medium for learning and obtaining useful information. Therefore, children's use of information technology cannot be separated from the values and habits developed within the family's cultural environment.

These findings are also consistent with the research of Livingstone and Helsper, who explain that parents employ various strategies to regulate children's internet use, including active mediation, restrictive mediation, shared media use, and monitoring children's activities (Ikmal & Fahruddin, 2026). These findings are relevant to the present study because parental supervision observed in the field was also implemented

through guidance, time restrictions, assistance, and monitoring of children's technology use. Thus, parental supervision in this study does not merely involve restricting children but also includes guidance and assistance to ensure that technology is used more safely and beneficially.

The verse demonstrates parents' obligation to protect and educate their families. According to Ibn Kathir, this verse explains that the head of a family has an obligation to educate and guide family members so that they obey Allah and avoid wrongdoing. Meanwhile, Al-Qurtubi explains that protecting one's family in this verse means providing instruction, advice, and guidance so that family members attain salvation. According to Quraish Shihab in *Tafsir Al-Mishbah*, Qur'an Surah At-Tahrim, verse 6, emphasizes that family education and development must begin within the home. The command to "protect yourselves and your families" is addressed not only to fathers but also to mothers, meaning that both parents share responsibility for guiding, educating, and instilling religious values in their children. Protecting the family from the Hellfire cannot be achieved merely through advice but must be implemented through exemplary behavior, habituation in fulfilling Allah's commands, and supervision of family members' conduct. Therefore, parents play an essential role in developing children's faith, morality, and behavior from within the family environment. This explanation is consistent with studies referring to *Tafsir Al-Mishbah*, which emphasize that education must begin at home and include children's religious development.

The hadith concerning leadership responsibility was narrated by Abdullah ibn Umar (may Allah be pleased with them both) from Prophet Muhammad (peace be upon him), and was transmitted through several chains of narration until it reached Imam al-Bukhari and Imam Muslim. One of Imam al-Bukhari's chains of transmission includes Abdullah ibn Maslamah, Malik ibn Anas, Abdullah ibn Dinar, and subsequently Abdullah ibn Umar. Meanwhile, Imam Muslim narrated it through Qutaibah ibn Sa'id, Laith ibn Sa'ad, Abdullah ibn Dinar, and subsequently Abdullah ibn Umar. This hadith is classified as authentic (*sahih*) and is included among the hadiths agreed upon by both al-Bukhari and Muslim (*muttafaq 'alaih*).

According to Imam al-Bukhari, this hadith demonstrates that every individual holds a leadership trust according to their respective responsibilities, including parents toward their families. Imam an-Nawawi explains that this hadith establishes the obligation of individuals to safeguard the trust entrusted to them, including educating and guiding their families. Meanwhile, Al-Khattabi explains that a leader's responsibility includes protecting, improving, and guiding those under their care.

Based on the integration of the research findings, it can be concluded that parental supervision is a primary factor determining the direction of children's information technology use. Supervision implemented through assistance, guidance, moral and disciplinary education, and exemplary behavior enables technology to serve as a learning medium that benefits children's development. Therefore, the main finding of this study indicates that the quality of parental supervision provides the foundation determining whether technology will have positive or negative effects on children's lives.

2. The Influence of Information Technology Use on Children's Disciplinary Character

Based on the integration of the mixed-methods research findings, information technology use was found not to have a statistically significant direct influence on children's disciplinary character. The quantitative results indicate that information technology use is not the primary factor determining the development of children's disciplinary character, while the qualitative findings explain that the benefits and effects of technology largely depend on how it is utilized in everyday life. Therefore, the development of children's disciplinary character is not determined by the presence of technology itself but by educational processes, habituation, and supervision that guide responsible technology use.

In addition to convergence, this study also reveals partial divergence between the quantitative and qualitative findings. Statistically, information technology use does not have a significant influence on children's disciplinary character. However, the qualitative findings indicate that technology remains related to the development of disciplined behavior when utilized for learning activities, religious education, and other beneficial activities. This difference does not indicate a contradiction between the research findings. Rather, it explains that technology is not the primary factor in developing disciplinary character but serves as a supporting medium whose effectiveness is strongly influenced by habituation, education, and parental supervision.

These findings are consistent with Hasan Langgulung's perspective, which explains that the development of human personality and behavior is an educational process that takes place gradually through interactions between individuals and their environments. According to Langgulung, education aims not only to develop intellectual abilities but also to shape the values, attitudes, and habits that form the foundation of individual behavior. This condition is reflected in the findings of this study, in which information technology use has not been able to directly develop disciplinary character because discipline develops through continuous habituation, exemplary behavior, and educational experiences within the family.

This perspective is further supported by Elizabeth B. Hurlock's theory, which explains that discipline develops through the learning process of understanding rules, accepting limitations, and building self-control. According to Hurlock, discipline is not merely obedience to rules but also an individual's ability to regulate behavior based on an awareness of responsibility. The findings of this study indicate that information technology use does not automatically develop this ability. Instead, disciplinary character develops through consistent habituation practiced by parents, enabling children to use technology responsibly. In the context of this study, technology use does not automatically make children more disciplined because discipline requires a learning and habituation process involving parents and the educational environment.

Furthermore, these findings are also consistent with Zuhairini's perspective, which emphasizes that the objective of Islamic education is to develop individuals with noble character through the instillation of values, habituation, and responsibility. The findings indicate that information technology use cannot develop disciplinary character without an educational process that instills responsibility, self-control, and time-management skills. Thus, this study reinforces Zuhairini's view that character development is a continuous educational process.

From a sociological perspective, the influence of information technology use on children's disciplinary character can be understood as part of the social construction of reality that occurs through everyday interactions. Berger and Luckmann explain that individual behavior is formed through the processes of externalization, objectivation,

and internalization within social life. Children do not merely passively accept rules but internalize values and habits that are continuously practiced within family and community environments (Berger & Luckmann, 2023). In this study, information technology does not automatically develop disciplinary character because technology is merely part of the social reality in which children live. Disciplinary character develops when technology use is internalized alongside the values of responsibility, time management, and obedience to rules taught by the family.

From an anthropological perspective, disciplinary character is part of culture that is learned through everyday habits within family and community environments. Mamis et al. (2025) explain that culture consists of historically transmitted patterns of meaning conveyed through symbols, which serve as guidelines for human behavior and interaction. In the digital era, information technology has become a new cultural symbol influencing children's lifestyles. However, the meaning of technology use continues to be shaped by family culture, which teaches children how to use technology appropriately. Therefore, technology use is not the primary determinant of disciplinary character but rather part of family culture that can strengthen or weaken the development of discipline depending on the values transmitted through everyday life.

Moreover, from a psychological perspective, the influence of information technology use on disciplinary character can be explained through Albert Bandura's Social Cognitive Theory. Bandura explains that individual behavior is influenced by reciprocal interactions among personal factors, behavior, and the environment (*reciprocal determinism*). Furthermore, disciplinary abilities develop through self-regulation mechanisms, namely the ability of individuals to observe their behavior, compare it with certain standards, and subsequently regulate their actions according to their intended goals (Rusman & Hendayana, 2025). In this study, information technology use has not been able to directly develop disciplinary character because children still require self-regulation skills to manage their time, select content, and control their use of digital devices. When self-regulation has not yet developed adequately, technology is more likely to be used for entertainment rather than activities that support character development. Therefore, the research finding indicating the absence of a significant direct influence reinforces Bandura's perspective that disciplined behavior depends on the development of self-regulation skills shaped through learning experiences and the family environment.

These three perspectives demonstrate that the development of disciplinary character is not solely influenced by the presence of technology but also by the process of value internalization, the development of family culture, and children's self-regulation abilities.

According to Quraish Shihab, the word *al-'ashr* in the first verse is understood as time in its general sense. Allah SWT swears by time to demonstrate that time is one of the most valuable resources available to human beings. If time is not filled with positive and beneficial activities, it will pass without providing any benefit. Such loss is not limited to material loss but also encompasses losses in human life as a whole. Therefore, people must make the best use of their time through faith, righteous deeds, mutual encouragement toward truth, and mutual encouragement toward patience. Accordingly, Qur'an Surah Al-'Asr, verses 1–3, provides a foundation demonstrating that the ability to manage and utilize time effectively is an essential part of achieving a beneficial life and avoiding loss. According to Quraish Shihab, such loss may not be

immediately realized but will become apparent when individuals reach the final stage of their lives.

Based on the integration of the research findings, theories, previous studies, and perspectives of the Qur'an and hadith, it can be understood that information technology use is not a factor that directly determines the development of children's disciplinary character. Technology merely functions as a medium that can produce either positive or negative effects depending on how it is used. The development of disciplinary character is more strongly determined by the educational process within the family through habituation, supervision, exemplary behavior, and the instillation of responsibility. Therefore, the main finding of this study indicates that the effectiveness of technology use in supporting children's disciplinary character depends on the quality of education and supervision provided by parents.

3. The Relationship Between Parental Supervision, Information Technology Use, and the Development of Children's Disciplinary Character

Hypothesis testing is an analytical stage conducted to obtain empirical evidence regarding the preliminary assumptions formulated in a study. The research hypotheses were developed based on the research questions and theoretical framework explaining the relationship between parental supervision, children's information technology use, and the development of disciplined character among elementary school-aged children. Before hypothesis testing was conducted, the study underwent quantitative data analysis, including variable description, validity testing, reliability testing, normality testing, linearity testing, and heteroscedasticity testing. These stages were carried out to ensure that the data met the requirements for statistical analysis. After these assumptions were satisfied, hypothesis testing was performed using simple linear regression and multiple linear regression to determine the direction, magnitude, and relationships among the research variables.

According to Ghozali, linear regression analysis is used to measure the relationship between independent and dependent variables and to determine the direction of the relationship and the magnitude of the influence of independent variables on dependent variables. The t-test is used to determine the partial influence of each independent variable on the dependent variable.

Hypothesis testing was conducted to examine the influence of parental supervision on children's information technology use (H_1), the influence of children's information technology use on their disciplinary character (H_2), and the simultaneous influence of parental supervision and children's information technology use on their disciplinary character (H_3).

After the data met the requirements through instrument testing and classical assumption testing, the next stage involved hypothesis testing using simple linear regression and multiple linear regression analyses to determine the direction, magnitude, and relationships among the research variables. The decision-making criteria for hypothesis testing were as follows: if the significance value (Sig.) was less than 0.05, the alternative hypothesis (Ha) was accepted. Conversely, if the significance value (Sig.) was greater than 0.05, the alternative hypothesis (Ha) was rejected.

Thus, hypothesis testing aimed to determine whether parental supervision influences children's information technology use, whether information technology use influences the development of children's disciplinary character, and whether there is a relationship among parental supervision, information technology use, and the development of children's disciplinary character.

The following section presents the results of the hypothesis testing.
First Hypothesis Testing (H_1): The Influence of Parental Supervision on Children's Information Technology Use

The first hypothesis in this study examines the influence of parental supervision on children's information technology use. This test was conducted because, in the context of digital technological development, parents play an important role in establishing limitations, providing guidance, and assisting children in their use of technology. Parental supervision in this study is not merely understood as restricting the use of digital devices but also includes providing guidance, monitoring digital activities, and developing responsible technology-use habits. Therefore, this test was conducted to determine whether parental supervision practices within the family environment have a statistically significant relationship with the information technology use patterns of elementary school-aged children in the research location. The results of the first hypothesis test are presented below.

Table 1. The Influence of Parental Supervision (X) on Children's Information Technology Use (Y_1)

Variabel	**t Hitung**	**Sig.**	**Keputusan**
Pengawasan Orang Tua (X) → Penggunaan Teknologi Informasi Anak (Y_1)	11,984	0,000	H_1 diterima

The test results showed a significance value of 0.000 < 0.05. This indicates that parental supervision has a significant effect on children's use of information technology. Therefore, the first hypothesis (H_1), which states that parental supervision has a significant effect on the use of information technology among elementary school-aged children in Batu Lappa Hamlet, Tompo Village, Barru District, Barru Regency, is accepted.
These results indicate that the better the supervision provided by parents, the more directed and controlled children's use of information technology will be.

1. Testing the Second Hypothesis (H_2): The Effect of Information Technology Use on Children's Discipline Character

The second hypothesis was tested to determine the effect of information technology use on children's discipline character. This test was based on the assumption that information technology can have both positive and negative effects on children's behavior, depending on how it is used. Properly guided technology use can serve as a means of learning and self-development, whereas uncontrolled use may affect children's habits, sense of responsibility, and discipline.

To determine this effect, a simple linear regression analysis was conducted, with Children's Use of Information Technology (Y_1) as the independent variable and Children's Discipline Character (Y_2) as the dependent variable.

Table 2. Simple Linear Regression Results: The Effect of Children's Use of Information Technology

Variabel	**B**	**Std. Error**	**t Hitung**	**Sig.**	**Keputusan**
Konstanta	24,852	3,734	6,655	0,000	-
Penggunaan Teknologi Informasi Anak (Y_1)	0,233	0,117	1,986	0,051	Tidak signifikan

Based on the simple linear regression test results, a significance value of 0.051 > 0.05 was obtained. This indicates that children's use of information technology does not have a significant effect on their discipline character at the 5% significance level. The regression coefficient of 0.233 indicates a positive relationship, meaning that an increase in children's use of information technology tends to be accompanied by an improvement in their discipline character. However, this effect is not statistically strong enough to be considered significant.

Table 3. Coefficient of Determination (H_2).

R	R Square	Persentase Pengaruh
0,231	0,053	5,3%

The coefficient of determination (R^2) value of 0.053 indicates that children's use of information technology contributes only 5.3% to the variation in children's discipline character, while the remaining 94.7% is influenced by other factors outside the scope of this study.

Based on the explanation above, the t-test results from the simple linear regression analysis show a significance value of 0.051. This value is greater than the significance level of 0.05 (0.051 > 0.05); therefore, the alternative hypothesis (Ha) is rejected and the null hypothesis (H_0) is accepted. Thus, these results indicate that children's use of information technology does not have a significant effect on their discipline character at the 5% significance level. Nevertheless, the regression coefficient indicates a positive relationship, suggesting that properly guided use of information technology still has the potential to support the development of children's discipline character.

The results above indicate that the use of information technology is not the only factor determining children's discipline character. The development of children's discipline character is likely to be influenced more by other factors, such as parenting styles, family role models, the school environment, daily habits, and the cultivation of values and responsibility in children.

1. Testing the Third Hypothesis (H_3): The Effect of Parental Supervision and Children's Use of Information Technology on Children's Discipline Character

The third hypothesis was tested to determine the simultaneous effect of Parental Supervision (X) and Children's Use of Information Technology (Y_1) on Children's Discipline Character (Y_2). This test was conducted using multiple linear regression analysis because the study aimed to determine the simultaneous contribution of two predictor variables to the development of children's discipline character.

Table 4. Multiple Linear Regression Results: The Effect of Parental Supervision and Children's Use of Information Technology on Children's Discipline Character

Model	**F Hitung**	**Sig.**	**Keputusan**
X dan $Y_1 \rightarrow Y_2$	3,649	0,031	Signifikan

Based on the multiple linear regression test results, the calculated F-value was 3.649, with a significance value of 0.031 < 0.05. This indicates that Parental Supervision and Children's Use of Information Technology simultaneously have a significant effect on Children's Discipline Character.

Table 5. Regression Coefficients for H_3

Variabel	B	Std. Error	t Hitung	Sig.	Keterangan
Konstanta	30,191	4,727	6,386	0,000	-
Pengawasan Orang Tua (X)	-0,156	0,087	-1,796	0,077	Tidak signifikan
Penggunaan Teknologi Informasi Anak (Y_1)	0,236	0,115	2,051	0,044	Signifikan

The equation indicates that the constant value of 30.191 means that when the variables Parental Supervision (X) and Children's Use of Information Technology (Y_1) remain constant or unchanged, the baseline value of Children's Discipline Character (Y_2) is 30.191. The regression coefficient for Parental Supervision (X) is -0.156, indicating that every one-unit increase in Parental Supervision is associated with a change of -0.156 units in Children's Discipline Character, assuming all other variables remain constant. However, based on the significance value of 0.077 > 0.05, this effect is not statistically significant on a partial basis.

Furthermore, the regression coefficient for Children's Use of Information Technology (Y_1) is 0.236, indicating a positive relationship. This means that every one-unit increase in children's use of information technology is associated with an increase of 0.236 units in Children's Discipline Character, assuming all other variables remain constant. The significance value of 0.044 < 0.05 indicates that children's use of information technology has a statistically significant partial effect on their discipline character. Therefore, it can be concluded that, in this multiple regression model, Children's Use of Information Technology makes a stronger partial contribution than Parental Supervision in explaining changes in Children's Discipline Character.

After determining the magnitude of each variable's effect through the regression coefficients, the next step is to examine the model's ability to explain variations in the dependent variable using the coefficient of determination (R^2) test. The coefficient of determination is used to determine the extent to which Parental Supervision (X) and Children's Use of Information Technology (Y_1) jointly contribute to explaining changes in Children's Discipline Character (Y_2). The R^2 value indicates the percentage contribution of the independent variables to the dependent variable, while the remaining percentage is influenced by other factors outside the research model.

Tabel 6. Koefisien Determinasi H_3

R	R Square	Persentase Pengaruh
0,309	0,096	9,6%

Based on the coefficient of determination test, an R Square value of 0.096 was obtained. This indicates that Parental Supervision (X) and Children's Use of Information Technology (Y_1) jointly explain 9.6% of the variation in Children's Discipline Character (Y_2). Meanwhile, the remaining 90.4% is influenced by other factors outside this research model, such as family parenting styles, the school environment, behavioral habituation, parental role modeling, and other social factors. Thus, although the regression model indicates a simultaneous effect, the contribution of both independent variables in explaining children's discipline character remains relatively limited. This suggests that other factors also play a role in the development of children's discipline character.

In addition to simultaneous testing through the F-test, multiple linear regression analysis was also conducted through partial testing using the t-test. Partial testing aims

to determine the individual contribution of each independent variable to the dependent variable. In this study, the partial t-test was used to determine whether Parental Supervision (X) and Children's Use of Information Technology (Y_1) individually affect Children's Discipline Character (Y_2). The decision-making criteria are based on the significance value of each variable. If the significance value is less than 0.05, the variable has a statistically significant effect. Conversely, if the significance value is greater than 0.05, the variable does not have a statistically significant effect. Based on the partial test results, the following findings were obtained.

Table 7. Partial Test Results

Variabel	B	t Hitung	Sig.	Keterangan
Pengawasan Orang Tua (X)	-0,156	-1,796	0,077	Tidak signifikan
Penggunaan Teknologi Informasi Anak (Y_1)	0,236	2,051	0,044	Signifikan

Based on the partial test results, Parental Supervision (X) obtained a significance value of 0.077 > 0.05. This indicates that Parental Supervision does not have a statistically significant partial effect on Children's Discipline Character. Furthermore, Children's Use of Information Technology (Y_1) obtained a significance value of 0.044 < 0.05. This indicates that Children's Use of Information Technology has a statistically significant partial effect on Children's Discipline Character.

Therefore, these results indicate that Parental Supervision and Children's Use of Information Technology jointly contribute to children's discipline character. However, when tested individually, only Children's Use of Information Technology demonstrates a statistically significant effect. This suggests that the development of children's discipline character is not influenced by a single factor but rather results from the interaction of various factors within the child's environment.

After testing the three research hypotheses using simple linear regression and multiple linear regression analyses, the results were obtained as presented in the following table.

Table 8. Summary of Research Hypothesis Testing Results

No	Hipotesis	Analisis	Nilai Sig.	Keputusan
1	Pengawasan Orang Tua (X) berpengaruh terhadap Penggunaan Teknologi Informasi Anak (Y_1)	Regresi Linear Sederhana	0,000	H_1 Diterima
2	Penggunaan Teknologi Informasi Anak (Y_1) berpengaruh terhadap Karakter Disiplin Anak (Y_2)	Regresi Linear Sederhana	0,051	H_2 Ditolak
3	Pengawasan Orang Tua (X) dan Penggunaan Teknologi Informasi Anak (Y_1) secara bersama-sama berpengaruh terhadap Karakter Disiplin Anak (Y_2)	Regresi Linear Berganda	0,031	H_3 Diterima

Based on the hypothesis testing results, the first hypothesis (H_1) is accepted. These results indicate that Parental Supervision has a significant effect on Children's Use of Information Technology. This finding suggests that the better the supervision provided by parents, the more directed and controlled children's use of information technology tends to be.

Furthermore, the second hypothesis (H_2) is rejected because the obtained significance value of 0.051 is greater than the significance level of 0.05. These results indicate that

Children's Use of Information Technology has not been proven to have a statistically significant partial effect on Children's Discipline Character. Nevertheless, the regression coefficient indicates a positive relationship, suggesting that appropriate use of information technology still has the potential to support the development of children's discipline character.

Meanwhile, the third hypothesis (H_3) is accepted. These results indicate that Parental Supervision and Children's Use of Information Technology jointly have a significant effect on Children's Discipline Character. This finding suggests that the development of children's discipline character is not influenced by a single factor but rather results from the interaction of various interrelated factors, including parental supervision and patterns of information technology use.

Overall, the hypothesis testing results indicate that Parental Supervision plays an important role in directing children's use of information technology, while the development of children's discipline character is influenced by a combination of various factors operating simultaneously. Therefore, to gain a deeper understanding of this phenomenon, the quantitative research findings are further explained through qualitative data obtained from interviews, observations, and field documentation.

To strengthen and further explain these quantitative findings, the study continued with qualitative data analysis. The qualitative approach was used to explore in greater depth the experiences, perspectives, and practices of parental supervision regarding children's use of information technology and its relationship with the development of children's discipline character. Thus, qualitative data served an explanatory function in clarifying the quantitative findings obtained previously, resulting in a more comprehensive understanding of the phenomenon under investigation.

Based on the integration of the mixed-methods research findings, it was found that Parental Supervision and the Use of Information Technology jointly affect the development of children's discipline character. The quantitative analysis showed that the regression model was statistically significant, with a contribution of 9.6% (R^2 = 0.096), while the qualitative findings explained that this relationship was established through supervision, guidance, habituation, and technology use directed by parents. These findings indicate that children's discipline character results from the interaction between family education and the use of information technology rather than being shaped by a single factor independently.

Based on the integration of these findings, convergence between the quantitative and qualitative results was identified. The statistical analysis showed that Parental Supervision and the Use of Information Technology simultaneously affect children's discipline character, with a contribution of 9.6%. Meanwhile, the qualitative findings explained that this influence is manifested through guidance, habituation, role modeling, and the appropriate use of technology in everyday life.

This study did not identify any substantive divergence between the quantitative and qualitative findings. The differences were only evident in the partial analysis, in which Parental Supervision did not demonstrate a statistically significant effect on Children's Discipline Character. However, the qualitative findings revealed that parental supervision remains a major factor in shaping disciplined habits through guidance, habituation, and role modeling. This difference indicates that the influence of parental supervision occurs largely indirectly through the family education process and is therefore not always reflected in partial statistical analysis. Consequently, these differences are methodological in nature and do not indicate any contradiction between the two research approaches.

CONCLUSION

Based on the research findings, it can be concluded that parental supervision has a significant effect on children's use of information technology through monitoring, guidance, the habituation of discipline, and parental role modeling. The use of information technology does not have a significant direct effect on children's discipline character because the development of discipline depends on the patterns and purposes of its use. Meanwhile, parental supervision and the use of information technology jointly influence children's discipline character, particularly in developing time management, task completion, religious practices, and obedience to rules..

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