

# Digital Divide between Mother and Child in Parenting

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## ABSTRACT

The birth of the Internet raised new hopes for eliminating inequality in social interactions. The fact is that there is a digital divide among internet users, especially for women. Studies show that in using technology there is a gap between women and men. In today's digital era children grow up with technology, so for a mother, digital skills are important. So far, technology has always been identified with men. This research was conducted to examine the digital divide among mothers. Through the Information Gap Theory and concepts about the digital divide, it is hoped that an in-depth analysis of the digital divide among mothers will be obtained. The research was conducted using qualitative methods and the data were collected through in-depth interviews and literature studies. The results showed that the digital divide among mothers was not due to socio-economic factors but because of low motivation to increase their ability to use digital technology. Especially for housewives because they do not see the use and importance of digital technology in their lives.

**Keywords:** Digital divide, women, digital technology, youth, and social media

## 1. INTRODUCTION

Technology has made human life easier, better, and happier, and made humans smarter. In short, it can be said that technology acts as a medium to achieve material satisfaction. Technology is shaped by the parameters of efficiency and effectiveness in such a way as to achieve a certain goal.

As stated by McLuhan in Technological Determinism Theory. The theory sees technology as the main driver of change in people's lives. Furthermore, it is said that technology is the main basis for change in society in addition to technology as the main tool in people's lives [1]. Furthermore, McLuhan wrote that technology has always been a part of every episode of human history. The instrumentalist view states that technology is a determining factor in social change and a symbol of the progress of human civilization. Abbe Mowshowitz wrote that technology has made a major contribution to improving the quality of human life and making modern life grow [2].

Today there is no doubt that the advent of digital technology has had a profound impact on how children

and youth learn, play, work and socialize. Several studies reveal how digital media has entered into social and cultural life in various ways including entering the lives of children from birth to the age of six. A study by Marsh et.al surveyed 1,852 parents and carers of their children. The research concludes that children born in this digital era are familiar with new media (internet) since birth and they grow up in the digital world and they develop various skills, knowledge, and understanding of this digital world since birth [3] Previous research has revealed that children are familiar with gadgets and the internet from an early age. Even at the age of 10, there is no longer any supervision from parents when their children access the internet [4].

Further studies have suggested that there has been a "domestication of technology" within the home [5]. This means that Information and Communication Technology (ICT) has become ingrained in the family and has had an influence on how physical space is created in the home as well as the family must reorganize "space-time" for togetherness in the family.

But on the other hand, technology cannot be easily accepted by women. In the current accumulation of

technological advances, women are still far behind men in terms of adopting and mastering (new) technology. As a result, women only become passive consumers of digital technology. This is especially true for children and adolescent girls because in general adolescents have low levels of digital literacy. As written by Lievrouw and Livingstone (2009). That not all young people are digitally competent, nor are all children interested in creating something on digital media [6]. Although many studies state that in this digital era many young people are involved in the creative process and communication in digital media, it must be admitted that this does not apply to all teenagers.

The fact is that nowadays many teenagers cannot use digital media such as smartphones optimally even though they have had the gadget for a long time. The results of research conducted by Kurniawati and Baroroh (2016: 61) on University of Muhammadiyah Bengkulu students regarding Digital Literacy concluded that students have digital literacy or competence in the basic category. This means that the ability of students to operate digital media is not too high, the ability to analyze digital media content is not too good, and the ability to communicate through media is limited [7].

Therefore, there are still many teenagers, especially teenage girls who are only passive users. It can be seen that most of the digital applications are created by men. It must be admitted that women's competence in technology is still far behind that of men. This is one form of the digital divide that is the focus of this research, especially on mothers. Mothers who have a big role in parenting in the digital era today have to face the onslaught of digital technology developments that are very fast and rapidly changing [4]. The attraction of the internet has become a magnet in children's lives. Children grow together with the development of the internet, which can affect children's thinking patterns and behavior patterns [8]. Digital technology with the presence of the internet has created new anxiety for parents today. Parents generally express concern about the adverse impact of internet exposure on their children [9][10]. Therefore, it is necessary for mothers today to have good competence in using digital technology. Women's ability to use digital technology is lower than men's [11]. That the gap incompetence in using digital technology between men and women results in low opportunities for women to access information and communication technology. The percentage of women who use the Internet is less than the number of men who use the Internet, especially in developing countries across all age groups [12] This condition causes women to have limitations in getting internet access.

This study aims to examine how the digital divide that occurs in families. This is because women who play the role of mothers have to face rapid technological changes while women have weaknesses in adopting digital

technology. As in previous studies, women's competence, in this case, is mothers is lower than other family members. Other research shows that gender, age, and education are the main factors in determining the ability to use information and communication technology [13].

## **2. LITERATURE REVIEW OR RESEARCH BACKGROUND**

The term 'digital divide' originally referred to the gap in access to computers. Before the birth of the internet, the birth of information and communication technology has also created a digital divide due to social and economic differences. People who are in low economic groups and have low levels of education will find it difficult to access information. Another factor is geographical factors, people who live in mountainous areas that are difficult to reach by technology will also have difficulty accessing information [14] [15]. When the internet was born and spread rapidly into society intending to minimize the digital divide due to geographical, economic, and social factors the digital divide is still a problem, only the term shifts not only access to computers but also internet access.

In general, the digital divide is defined as the main thing related to the gap that exists between people who have access to digital media and the Internet and those who do not have the opportunity to access digital media and the internet. Lisa Servon, the digital divide has defined the digital divide as a problem of access to using computers and the internet [16]. Most of the research reveals that the digital divide focuses on inequalities of access. The term "access" about the digital divide was originally used to refer to whether a person can connect to Internet or not. Access then became a synonym for "use", which refers to the existence of opportunity and choice of time.

The main aspect in seeing the current digital divide is inequality in the aspect of ability or skills to use digital technology. In this study, the digital divide refers to the concept, namely the existence of inequality or skills between mothers and children in using the internet. Van Dijk wrote that there are three perspectives in looking at the digital divide, namely first, the innovation perspective, looking at the digital gap in the gap between groups that adopt information and communication technology and groups that do not. Both perspectives of inequality see the digital divide as the gap between groups that have the opportunity to adopt information and communication technology and groups that do not have the opportunity to adopt it. Third, the participation perspective looks at the level of community participation in using and accessing digital media [17].

From a relational perspective, the Digital Gap is used to show that digital inequality is a subset of social

inequality. From this point of view, the Digital Gap is determined by the same factors as other forms of inequality, namely education level, gender, and income [18]. Unequal use of the internet results in unequal public participation in internet access. Four factors cause the digital divide, namely low motivation to learn the latest technology, low skills in using technology, and lack of background in technology [19]. Other research reveals that the factors behind the birth of the digital divide are inequalities in skills, abilities, and interests. Another factor is the perception that the internet is less useful for individual lives or has very little relevance in supporting individual lives [20]. The age difference is also one of the causes of the digital divide. In the group of older people, there are differences in the purpose and use of the internet with the younger age group. Old age group internet access is very low when compared to the younger age group, this is because older people use only a few internet applications [21]. Another study states that in community groups, the low interest in internet access is due to their low trust in information obtained online. Another reason is that as many as 34% of respondents stated that they were not interested, wasting time and did not need it, while another 32% stated that they had difficulty and did not know how to use the internet [22].

Digital technology makes it possible for women to overcome inequalities in access to technology, namely by opening up opportunities for women to increase their ability to use technology because nowadays women have the opportunity to take education and increase their income. On the other hand, women also lack understanding of technology, experience technophobia, and technology is not designed to meet women's needs, thus creating a digital divide between men and women [23]. Another study states that the digital divide between men and women is due to the lack of skills of women in using digital technology compared to men [24] [18]

This condition results in the emergence of a digital divide between mothers and their children. Due to the low ability of mothers to use the internet while children are faster in adapting to changes and accelerating changes in digital technology (internet). This obstacle is one of the factors for the low control and supervision of mothers on their children in using the internet [4]. So that many children who become addicted to the internet, including children, are easily exposed to messages that should not be consumed by children. This condition can be minimized if the mother has good skills and competencies in using digital technology. As in previous research, it was explained that using the internet together between mother and child can increase intensive relationships that can bring the relationship between parents and children closer [26]. Several studies show that the use of the internet in the family allows parents to be closer to their children by placing digital technology as an intermediary between parents and children. This means that the internet can facilitate togetherness

between mothers and children. Another study shows that parents of children are more likely to adopt the internet because of family support for internet use [27]

### 3. METHODOLOGY

This research was conducted using qualitative methods. In this study, in-depth interviews were conducted to obtain data to get an overview of the problems related to the digital divide among women. The informants in this study were mothers who lived in the city of Surabaya. The city of Surabaya is the second-largest city in Indonesia, of course, internet access is easier to obtain without any technical barriers related to geography. The informants in this study were 12 people aged 33-58 years. In determining the informants, the researcher chose informants based on their place of residence, namely 4 informants who lived in the upper-middle-class housing area, 4 people who lived in lower-middle-class housing, and four people who lived in the village area.

### 4. RESULT AND DISCUSSION

The notion of the Digital Gap refers to differences in internet access. This means that there are differences in individual opportunities to access Information and Communication Technology (ICT) in general and the Internet in particular [28]. In this study, the digital divide is seen as an inequality in the ability and skills to use the internet.

As described above, the informants in this study were mothers who had a role in shaping the upbringing of their children. The informants are familiar with the internet, especially since the birth of social media, although the informants do not have many social media accounts. Most of the informants only have one social media account, namely Facebook, and are currently not very active in using Facebook. Informants also use a messenger application, namely Whatsapp.

In the digital era, the role of mothers is greater in nurturing and educating their children because of the rapid and rapid development of digital technology that can affect children's thinking patterns and behavior patterns. The data of this study indicate that the role of mothers in assisting children is low, even mothers often lose or do not control their children when they access the internet.

As expressed by several mothers when interviewed. The data shows that the informants who in this case are mothers said they never control their daughters when using technology, especially in accessing the internet through their devices. As stated by informant 7 below:

*"No... I don't know I don't understand".*

Likewise, fifth informant said as follows:

*"... what are the names of those children if they are followed too much... if nowadays it's being pointed out, they don't want to be too."*

Fourth Informant also stated almost the same thing as follows:

*"...don't monitor...no, it's just that if you monitor it, you don't know what it's like to not open it"*.

The data shows that mothers do not monitor their daughters when they access the internet. This condition is due to the low digital competence of mothers, meaning that these mothers cannot access the growing internet and its various applications. This is what then creates a digital divide between mothers and their daughters, even though these children are on average still in high school but already have skills on their smartphones.

The increasing use of the Internet has led to an interesting debate about the risks and negative impacts of using this technology. One risk that is often mentioned is the Digital Gap. Initially, the digital divide focused on the factors causing the digital divide, namely differences in internet access. The difference in internet access is mainly in rich and poor areas. In the next period, this study on the digital divide will focus on analyzing internet use, especially in groups of people who have low levels of internet use.

The digital gap in several previous studies was caused by the unequal distribution of infrastructure and services for internet access in an area. However, this has been criticized because it is evenly distributed and the availability of internet service infrastructure in an area does not eliminate the digital [12]. The fact is that the digital divide still exists in certain community groups.

As in the results of this study. The research data shows that the informants are residents of the city of Surabaya where internet access can be obtained easily in fact most of the informants do not have good access to the internet. Several informants admitted that they could not use and access their children's gadgets and did not understand how to use social media, which currently have a lot of interest, such as Facebook, Instagram, Twitter, and Tik Tok, especially informants (mothers) who come from the lower classes. As stated by informant 5 below

*"No... I can't, I don't know how to use it"*.

Likewise, seventh informant stated:

*"No... I don't know I don't understand"*.

The same thing was stated sixth informant as follows:

*"Yeah... because I can't,.....hahaha"*

This condition illustrates that mothers who are socio-economically in the lower strata can be said to lack the ability to use digital technology. This is different from their daughters, who on average are still in school and

even one of the informants' children is still in elementary school. These girls have skills in using digital technology, especially in accessing social networking sites, messengers, and information search sites. The low skills possessed by these mothers indicate that women's ability to use digital technology is minimal.

Furthermore, this research also found that the informants did not feel the need to learn or get to know new applications even though the informants had quite good gadgets. Informants feel that they do not need other applications besides Whatsapp and Facebook. Including search engines and other applications that are currently very diverse in number. Even the social media applications that are currently widely used by internet users in Indonesia are also not understood by the informants. When their children used Instagram and Tiktok six informants did not know how the two social media were accessed and used. For the six informants, there is no advantage for them to learn and have good skills in using the internet. In addition, the informants felt that they did not have much time in their daily lives to sit and specifically study gadgets or their supporting applications. This is especially true for informants who are at a lower economic level and have low education. Although this research also found that informants who have a good economy and level of education also do not have the desire to learn new technologies. The research data revealed that the informants did not have a strong desire to follow the development of the internet because mothers felt that someone was always ready to help in using the internet, namely their children and their families. There are only two informants who know how to access Instagram and Tiktok because both informants have a good education and they are mothers who have quite good careers outside the home.

#### **4.1. Discussion**

The informants (mothers) are active internet users, especially on messenger applications (Whatsapp) and social networking media, namely Facebook. As described in the research data above, informants have limitations in terms of ability and skills to use and access the internet. It is very different with their children who have much better abilities and skills than their mothers. This means that there is a digital divide in the family between mother and child.

The emergence of the digital divide among informants (mothers) is caused by several factors. Research data reveals that two factors cause the digital divide among mothers, namely the first is the mother's low motivation in improving her digital skills and the second is the factor of the use of digital technology. One of the reasons for the digital divide that occurred among mothers in this study was the mother's low motivation to learn to improve her ability to use digital technology. The same thing was also stated by informants who came from

lower socio-economic groups. The informants stated that they had no desire to learn digital technology.

That the informants who are mothers, both those at the upper- middle and lower socioeconomic levels, have low motivation to improve their ability to use digital technology. Although these informants are encouraged by their children to improve their ability to use digital technology such as recognizing and using social media, the informants feel that they no longer have the desire to follow the rapid development of digital technology. This condition is very different from previous research which states that the support of children and families will make parents more open to the existence of the internet. The informants (mothers) lack the motivation to learn about the internet even though their children are ready to help. As a result, the digital divide is widening because children in the city of Surabaya adapt very quickly to the acceleration of internet development, on the other hand, mothers cannot adapt because of their low motivation to learn and adapt to internet developments. This fact is in line with previous research which found that there is a digital divide between women and men because women have low motivation to learn digital technology [29]

As in previous research, the low motivation to learn technology is one of the factors causing the digital divide. Furthermore, research states that the low motivation to learn new technologies is due to lack of time, anxiety about technology, and low socioeconomic levels [30]. In this study, it was also found that the informants felt they did not have more time to learn on the internet. In daily life, the mother's duties at home are quite time-consuming, so it is very difficult for informants to study the internet in particular.

One of the factors that cause the low motivation of mothers in learning digital technology is the age factor. If you pay attention to the informants who are low in motivation, they are those who are 45 years old and over. This is in line with previous research which found that older individuals lack the motivation to adapt and adopt digital technology [31]. Several studies show that internet users are mostly young and have a good economic and educational level. Because these people have a more positive attitude towards internet usability and find internet usage easy. Studies have found that individuals who have negative attitudes towards the internet are usually those with low education and old age [32].

In contrast to their children, although these children are at a low social and economic level, they can access digital technology much better than their mothers. This is in line with previous research on several factors causing the digital divide due to age. Older people have less access to technology than those who are younger [6]. As a result, parents, especially mothers who play a role in assisting their children daily, are less experienced and knowledgeable about digital media than their children. Women, especially older people, have low digital

competence. Parents are less experienced and knowledgeable about digital media than their children. The results of other studies also suggest that age has a significant influence on an individual's ability to access the internet [21]. This is because young people feel that the internet is very helpful for them in their lives and they feel that something is missing when they do not access the internet.

This phenomenon eventually gave birth to a significant digital divide in family life. The digital divide in the family in the previous study revealed more about the digital divide that occurs between husband and wife. This research shows that the digital divide occurs between mothers and their children, both girls and boys. The gap is mainly related to skills in using the internet, not because of not adopting digital technology. As in the research data above, mothers continue to adopt the internet but only to communicate with their family and closest social groups. For the mothers in this study, the Internet was not used for other things due to their limited skills of the mothers in using the internet. Especially for informants who have lower education and economic levels. This is because women with old age and education levels and low incomes have low and limited adoption and use of the internet [33]

In addition to the mother's low motivation to improve her ability to access the internet or use the internet, another factor that appears to be a digital divide between mothers and their daughters is the usability factor. The informants feel that the internet, which is currently growing rapidly, does not function in the lives of mothers, especially mothers who do not work.

Based on these data, it can be seen that the internet is considered less useful for the lives of informants (mothers). who has a middle socioeconomic level. For mothers, the internet can only be used to communicate with their close friends, family, or community. The informants felt that they no longer needed the

applications offered by the internet today. Previous studies have also revealed that those with low adoption rates for the internet are due to age and feel that they do not need the internet in their lives [34]. In addition, there is a lack of knowledge about the internet and a lack of skills in using the internet which is followed by distrust of the internet. In the Technology Readiness and Acceptance Model, it is said that individuals who judge themselves as incompetent in technology tend to refuse or delay adopting technology by lowering the value the benefits and uses of the technology ("Determinants of a Digital Divide Among Able-Bodied Older Adults: Does 'Feeling Too Old' Play a Role?," 2020).

This phenomenon illustrates that the digital divide is not only talking about inequality in using the internet or digital technology but the low level of individual adoption of digital technology is also a form of the digital

divide. As explained in the Innovation perspective in the context of understanding the digital divide. The innovation perspective on the digital divide explains that the digital divide occurs when there are groups of people who adopt information and communication technology to support their development and there are groups of people who do not adopt information and communication technology to support self- development [17]. The fact that the mothers in this study did not feel that the internet was not very useful in their lives, means that mothers are a group of people who do not adopt digital technology that is used for self-development. The internet is only used to build interaction with family and closest social groups. The low level of technology adoption among mothers when referring to the TAM (Technological Acceptance Model) model, then a system or technology will be accepted if the technology is felt to be useful in improving individual performance. Therefore, the a low desire of informants (mothers) to use digital technology because mothers feel that nothing is needed to support their performance in daily life. In addition, there are also cultural factors, namely the high family ties in people's lives. In Indonesian families, the nuclear family has a very close emotional bond, therefore, mothers will always feel that some children and husbands will help at any time regarding the use of this technology. This can be seen from all the informants' statements that children can help their mother at any time when it comes to internet use.

The mother's low motivation to learn to use the internet and the mother's perception of the lack of usefulness of the internet in the lives of the informants (mothers) will lead to low mother's digital competence. Digital competence can be defined as the ability to use information and communication technology to evaluate, create and communicate information that requires cognitive and technical expertise [35].

For parents, especially mothers, it is important to have digital skills. Because the level of knowledge and skills of parents will determine the level of digital security in the family. The results showed that mothers as informants had low digital competence. In the sense that the informants (mothers) do not know much about the functions and applications of their children's smartphones. Van Dick has written that the existence of a digital divide or digital inequality is part of social inequality, which is related to education, gender, income, and other variables.

In other words, unequal use of the Internet leads to unequal participation in society. This situation also leads to the strengthening of classical inequalities to an unequal distribution of available public and private resources. From the data above, it can be explained that the occurrence of this digital divide is not due to purely economic factors as in previous studies on the digital divide. In this study, informants with lower- middle and

upper-middle socioeconomic levels turned out to have the same factors that caused the digital gap between mothers and their daughters, namely the low motivation to follow and learn digital technology which is rapidly developing, and the low level of use of digital technology for mothers

## 5. CONCLUSION

The digital divide does not only focus on the male and the female digital divide. The rapid development of digital technology has resulted in a digital divide between mothers and children in a family. The results of this study indicate that there is a digital divide, namely the existence of inequalities in terms of abilities and skills to use the internet, namely in mothers and their children. Based on the data and research analysis above, this study shows that there are two factors that cause the digital divide among mothers, both with their children and with men. These two factors are very low motivational factors for adopting the internet in mothers. The low adoption of digital technology among mothers is because mothers feel that the internet is less useful except for communicating with friends and family. Therefore, mothers feel that it is enough to use the internet only to interact with their closest people and closest social groups. For mothers, the rest of the internet is not useful for their lives. The existence of a digital divide between mothers and children results in weak patterns of mother assistance and mothers' control over children, especially for children under 15 years of age when using the internet.

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