



RESEARCH ARTICLE

The Digital Immigrant Challenges: Balancing Between Digital Literacy and Family Communication

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ARTICLE INFO	ABSTRACT
Received: Nov 17, 2024 Accepted: Jan 19, 2025	<p>Prevention behavior from hoax information is difficult by parents, especially those from Gen X and baby boomers as digital immigrant generation. Many parents are only able to use digital devices but unable to respond the information on the digital platforms ethically and wisely, which causes the majority of parents to be trapped in hoax information. This study aims to identify the theoretical model of the Revised Family Communication Patterns by Fitzpatrick (1992) to explain the influence of digital literacy and the mediating role of family conversations on preventive behavior towards hoax information in parents as a digital immigrant generation in Sidoarjo, East Java. The approach used was a quantitative approach, using a survey research method to 75 parents. The results of the Structural Equation Model or SEM explained the influence of digital literacy and family conversations on preventive behavior towards hoax information. This study indicate that digital literacy has a significant effect on parental behavior in preventing hoaxes and family conversations significantly mediates the influence of digital literacy on preventive behavior towards hoax information. This study contributes to enriches the study of family communication, especially for digital immigrant generation, which leads to openness and two-way communication across generations. Parents get a practical solutions in improving digital literacy skills that can be applied directly in family life based on ethics and responsibility.</p>
Keywords Family Conversations Family Communication Patterns Digital Literacy Digital Immigrant	
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INTRODUCTION

Behavior prevention of information hoax / lie become fundamental needs for life humans in the era of society information. Hoaxes result in commotion, disbelief, confusion so that endanger security society (Salsabila, Dewi, Hidayat, 2024). The Ministry of Communication and Information (Kemenkominfo) reported that cases hoaxes in Indonesia are quite high and rising from in 2022, namely as many as 1615 contents issue hoaxes circulating in digital platforms during 2023. Meanwhile, Indonesia is one of the countries with social media users the largest in the world (Muannas & Mansyur, 2020). This is hinting that Indonesian society needs knowledge and attitude critical to information circulating in digital space for become defense from threat hoaxes are getting worse rampant. Attitude critical and knowledge This leading to ability individual in use all elements inherent in the digital world or called as digital literacy.

Digital literacy is not only just ability reading and writing, but expert in use and evaluate with critical to information contained digitally (Iswanto, et al. 2022). Digital literacy refers to ability individual in understand, use, and communicate available information in digital platforms. The American Library Association (2012) defines digital literacy as an individual's ability to use information and communication technology as a way to find, evaluate, create and communicate information with

cognitive and technical skills. Someone who is able to search for, utilize, manage and integrate digital information is considered a digitally literate person (Greene et al., 2014). Empirical research report that digital literacy plays a role for individual in protect himself from information hoax. Digital literacy and media are trusted as control self in case circulation information false in a way Keep going continuous, helpful individual analyze issue social, economic and political factors that influence the media, as well as make more internet users critical of information and its sources (Sabrina, 2019; Hobbs, 2005; Lee, 2018).

The urgency of digital literacy is very important because it not only requires the ability to use technology but also ethical and responsibility factors to direct individuals to become responsible digital users (Amin, Malik & Akkaya, 2021). Responding to argumentation said, individual now No only play a role as recipient message, but also can become communicators at the same time to information. Phenomenon thus close the relation with the era of society information because they capable create diverse possibility in use information and technology communication New Information and Communication Technologies (ICT's)) (George, 2004). The era of modern society information often associated with the label as digitally literate society. Reported from Sindonews.com, as many as 215 million resident Indonesia has internet literacy by 2024, supported with more from half its population has social media literacy expressed from report entitled "Digital 2021: The Latest Insights into The State of Digital", 170 million among them has using social media with number its penetration around 61.8 percent.

As mentioned previously that various findings prove that digital literacy is able protect self from information Lie For sustainability and well-being life human. Although majority expert confirm truth this, no none of them from research the previous one emphasized aspect social, moral and ethical digital literacy (Amin, Malik & Akkaya, 2021). This is shown by the inconsistency of the findings and empirical phenomena as they occur in Indonesia. The size number internet penetration vs. backwards with reality from response user in case certain, especially in respond to digital information that occurs in the scope small man like family. Reported from Tempo, distribution hoax often found in Network personal message one of which through group WhatsApp family. Aggravated with results survey The Ministry of Communication and Information Technology which proves that parent group with age above four twenty five years is agent distribution and also a victim of hoax the COVID-19 pandemic is the most in Indonesia (Suara.com). Phenomenon the need become attention special because number activity digital media users in scope family Keep going increase temporary its use followed by threats news frequent lies occurs in the parent group as digital immigrants.

Generation digital immigrant leads to groups that are already familiar with gadget technology in the age mature However Enough fight in adapt with technology although they also use technology (Cimen & Hangul, 2021). On the other hand, the use of digital in effective very attached to the group generation new as in children as millennial generation and generation Z. Knowledge technology owned child can influence knowledge and use digital technology for parents so that complete quality connection family (Terras & Ramsay, 2016). On the basis of that, parents need build pattern conversation with child or family in a way intensive as effort in formation attitude protection in a way critical of information hoax. More continue, orientation conversation in communication family become receptacle For get used to climate openness two way communication between parents and children (Arindra et al. 2023) which then assumed can increase digital literacy with behavior prevention from information hoax.

Conversation family is a subsection in theory pattern communication family which refers to the extent to which the family push every member for involved in two way communication For build agreement together (Koerner & Fitzpatrick, 2002b). Communication studies family is clump mutual study related with various discipline science. As it is said in book Handbook of Family Communication that communication family covers studies about marriage, intimacy, couple, pattern foster care and relationships between family processes accompanied by with development individuals in it (Vangelisti, 2004). Communication theory family involving How method member family family each other related and factors that impact the relationship them (Noller & Fitzpatrick, 1993; Vangelisti,

2004). In other words, the study communication family capable explain and measure how far is the quality connection family develop and have an impact on aspects life human. Empirical research prove that conversation family capable influence psychosocial Individuals and behavior communicative like skills social and ways face conflict (Cummings, Goeke-Morey, & Papp, 2001; Ledbetter & Beck, 2014). On the basis of that, communication family play a role important on increasingly problematic appear along development ecosystem life man like as it is in anticipate hoaxes in the digital age.

In general theoretical, research This functioning as proof from conformity The Revised Family Communication Patterns concept was formulated by Fitzpatrick in 1992 in influence parental behavior face information hoax. In case this, parents need notice aspect communication family that becomes possibility existence knowledge in a way more comprehensive and capable obtained from every member family. Research This donate input that all over member family is asset intangible for parents in doing activities in the middle development increasingly advanced technology rapid. Communication model family based on orientation conversation cross generation as discussed in study This become solution for parents in prevent possibility they trapped in circle uncertainty information.

METHODS

Study This use paradigm positivism with quantitative method. Quantitative research is able to explain problems Which results of the research can generalized (Kriyantono, 2006). Population This study is all parents who are digitally active on social media. This study applies non-probability techniques sampling in the form of samples non-random which applies various methods to be able to reach specific populations that tend to be difficult to reach. (Neuman, 2013). The sample in this study used the criteria of men and/or women who were included in the digital immigrant generation , namely aged 45 years and over and married. The number of population in this study is unknown, therefore the number of representative samples was taken using Ferdinand's formula (2014), namely the number of indicators multiplied by 5 to 10, so that a minimum sample of 75 respondents was obtained.

Structural statistical techniques Equation Models -Partial Least Square (SEM PLS). SEM analysis technique is used because it has advantages that can overcome the relationship between various explanatory variables even though they experience multicollinearity. SEM PLS has the advantage of being immune or robust which does not require various classical assumptions so that it is suitable for use on all types of data scales and does not require a large number of samples (Hair, Black, Babin and Anderson, 2010).

Table 1. Variables and variable indicators

No.	Variable Types	Name	Indicator
1	Dependent (Y)	Hoax prevention behavior: Behavioral intentions based on information obtained from the media followed by awareness of their social environment (Masur et al., 2021).	Critical information literacy: the ability to select, use and protect oneself from any information contained in the media. Anticipatory reflection: the ability to consider the impact and consequences of actions to be taken in digital platforms. Intentional use: the ability of oneself to use digital platforms intentionally
2	Independent (X)	Digital literacy: The ability of individuals to use information and communication technology as a way to find, evaluate, create and communicate information	Communication: Ability to utilize online reading, writing, listening and communicating platforms

		with cognitive and technical skills. Someone who is able to search, utilize, manage and integrate digital information is considered a digitally literate person (Greene et al., 2014; Chen, 2015)	<p>Collaboration: Participate with global community online for help environment social</p> <p>Critical thinking: The ability to solve problems, analyze in depth, and question the content contained in the platform. digital</p> <p>Creativity: Engagement For active produce digital content, not only as digital user</p> <p>Citizenship: Availability use digital technology legally and responsibly</p> <p>Character: Engagement For active support ethics digital media users</p> <p>Curation: Ability understand method investigate and analyze web content credibility</p> <p>Copyright: Ability to understand and comply with copyright regulations that exist online</p> <p>Connectedness: Ability For cooperate with others in digital realm</p>
3	Intervening (Z)	Family Conversation How far is the family push every its members involved in two way communication For build agreement (<i>agreement</i>) Together (Fitzpatrick, 1992).	<p>Emphasis communication that is not limited</p> <p>Communication done No under control</p> <p>Intensity frequent communication</p>

Relatedness between variable that is digital literacy , conversation family , and prevention of hoaxes is explained in Figure 1:

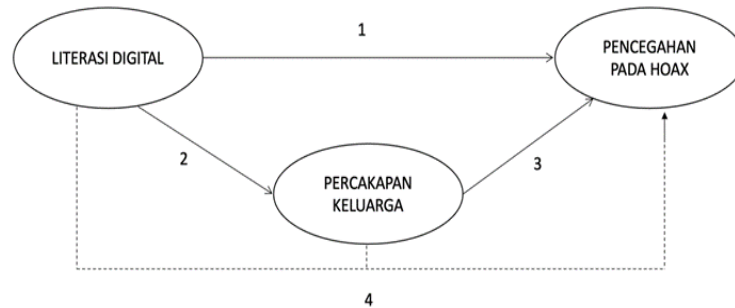


Figure 1. Conceptual Framework

It is explained in Figure 1 that digital literacy has a direct effect on hoax prevention behavior and indirectly through family conversations. Figure 1 explains the hypotheses that can be developed in this study, including: (a) Digital literacy has a direct influence on hoax prevention behavior, (b) Digital literacy has a direct impact on family conversations, (c) Family conversations have a direct influence on hoax prevention behavior, (d) Digital literacy has an indirect effect on hoax prevention behavior through family conversations.

FINDINGS AND DISCUSSION

Description of Filling Results Questionnaire

Recapitulation results filling questionnaire by seven twenty five respondents in perceive grains statement variable served in tables 2 to 5:

Table 2. Description of digital literacy variable items.

No	Statement Items	Item Score Amount	Average Item Score
1	Ability I in utilizing reading , writing , listening and communicating platforms by online*	306	4.08
2	Ability individual in understand and comply regulation right existing creation by online	302	4.03
3	Ability in solve problem , analyze deep , and questioning repeat about content contained in digital platform	303	4.04
4	Involvement I For active support ethics digital media users	305	4.07
5	Availability I in use digital technology legally and responsibly	296	3.95
6	Ability I in understand method investigate and analyze web content credibility	308	4.1
7	Activity I in participate with global community online for help environment social	293	3.9
8	Involvement I For active produce digital content , not only as digital user	298	3.97
9	Ability I For cooperate with other people in a wide in digital realm	305	4.07
			4.02

In general Overall, table 2 explains that digital literacy is parent tools For realize behavior prevention of hoax information by average score of 4.02. This means that respondents are able to assess the questionnaire well but not all respondents agree on digital literacy as a whole. Not all respondents agree on all items of digital literacy based on ethical awareness and responsibility in digital media. It is explained that the statement item about communication is the largest contributor to the digital literacy variable with an average score of 4.08. This score means that parents agree on their ability to use digital platforms to read, write, listen and communicate messages online so that they can act so far without any filtering of information.

Table 3. Description of family conversation variable items

No	Statement Items	Item Score Amount	Average Item Score
1	Ability I For each other tell a story with child about activities we have done throughout day	300	4
2	Availability I For listen opinion child I even though we sometimes different opinion *	316	4.21
3	Our availability for talk about diverse triggering topics difference opinion One each other	305	4.07
4	Involvement I For ask about opinion child I	302	4.03
5	Availability I in provide long time for can talk with child	309	4.12
6	There is a response positive child moment speak together even though happen difference marked opinion with enthusiasm and feeling like from child moment speak with I	309	4.12
7	Availability child For able to tell all matter to I	311	4.15
8	Ability I in talk about plans and hopes family in a way together	301	4.01
9	Ability I For open about feeling I to family	310	4.13
			4.09

In general Overall, table 3 explains that conversation family is parent tools For realize ability literacy with average score of 4.09. This is meaningful If Respondent capable understand questionnaire with good and they agree existence climate equal conversation within family. This average give meaning that Respondent agree formation freedom open communication with involving child for participate active in interaction about diverse topic. Explained that statement item about availability for listen opinion child get score highest which is 4.21 in determine conversation family. This is described that conversation will more effective when parents and children own equal portion in determine the way Topic discussion.

Table 4. Description of variable items prevention of hoaxes

No	Statement Items	Item Score Amount	Average Item Score
1	Ability I in determining the credibility of information shared on social media	314	4.19
2	Ability I in protect self from associated risks with use of social media	300	4
3	Ability I to form opinion Alone with easy about A uploads	300	4
4	Ability I in interpret social media content from perspective political, economic and social.	305	4.07
5	Ability I in consider possibilities and consequences before upload something on social media	314	4.19
6	Ability I in consider uploads and comments can influence other people's thoughts and feelings.	306	4.08
7	My ability to think about uploads that are and are not allowed on the media	298	3.97
8	Ability I in share opinion personal in digital media	303	4.04
9	Involvement I in do something with spontaneous on digital platforms	307	4.09
			4.07

In general Overall, table 4 explains that behavior prevention of hoax information is parent tools For fortify self from the rise information lies circulating wide with score average of 4.07 points. This value hinting that behavior prevention hoax information no only refers to the ability individual in using digital platforms, but activity This is accumulation from skills and abilities somebody in reflect every the action to be taken they do in digital realm.

Testing Hypothesis

For answer hypothesis that has been developed, research This using the Smart-PLS Model Statistical Test, with results analysis as served in Figure 2 and Table 5 as following:

Table 5. Significance Value of Structural Model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Information
LD->PH	0.670	0.727	0.355	2,837	0.030	Significant
LD -> PK	0.714	0.805	0.098	5,262	0.011	Significant
PK -> PH	0.224	0.080	0.338	0.880	0.041	Significant
LD -> PK -> PH	0.760	0.862	0.084	5,767	0,000	Significant

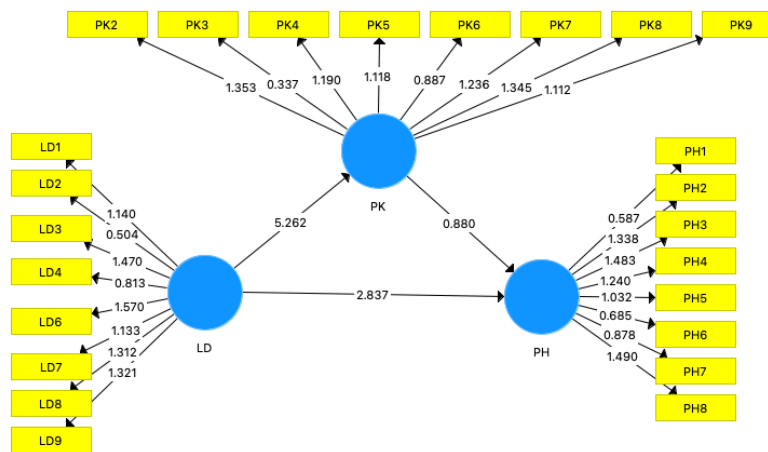


Figure 2. Structural Model

Explained in image 2 that data analysis was performed refers to the framework conceptual (Figure 1), namely digital literacy as variable predicted independent influence behavior prevention of hoaxes. Measurement the done in a way direct and also No direct through conversation family. Significance value influence digital literacy, conversation family with behavior Hoax prevention is:

Information:

LD (Digital Literacy); PH (Hoax Prevention); PK (Conversation) Family) Table 5 is explained mark significance connection between variable as base For conclude accepted or rejected hypothesis research , namely :

The direct influence of LD on PH has a variable coefficient of 0.670 which is significant at a value of 0.030 (less than 0.05). This value means.

That the first hypothesis stating that digital literacy has a direct influence on being accepted as true

The direct influence of LD on PK has a variable coefficient of 0.714 significant at a value of 0.011 (less than 0.05). This value means that the second hypothesis stating that Digital Literacy has a direct influence on Family Conversation is accepted as true.

The direct influence of PK on PH has a variable coefficient of 0.224 significant at a value of 0.041 (less than 0.05). This value gives meaning that the third hypothesis stating that family conversations have a direct influence on hoax prevention is accepted as true.

The indirect effect of LD on PH through PK has a variable coefficient of 0.760 significant at a value of 0.000 (less than 0.05). This value means that the fourth hypothesis stating that digital literacy has an indirect effect on hoax prevention through family conversations is accepted as true.

CONCLUSION

In general, the findings of this study prove that digital literacy has a significant effect on self-protection behavior against hoax information, measured by parents' ability to balance digital literacy and self-ability in opening up information space through family conversations. The analytical perspective on Family Communication Patterns (FCP) developed by Fitzpatrick & Koerner in 1992 shows that conversation orientation plays an important role in all aspects of family life and individuals personally. This opinion is supported by many experts in the field of family communication about the importance of building democratic, non-linear, and respectful conversations within the family. The openness and freedom of interaction carried out by the family will provide parents with a variety of knowledge, experiences, and information from the perspective of children or other family members who may be digital natives.

As one of the human assets in surviving in the era of knowledge-based information advancement, digital literacy has proven to be able to protect parents when consuming and disseminating information obtained through digital platforms wisely. Various efforts to filter information, starting from critical thinking in analyzing every digital content in depth and multi-aspects, and having the ability to see the credibility of information providers as a whole are weapons for parents as a group of digital immigrants to fortify themselves from the rampant hoax information. Critical skills accompanied by ethics in examining every piece of information can encourage parents to take a preventive attitude towards hoaxes which are reflected through actions such as not being easily provoked or spreading content whose truth is unclear. The ethics of using digital media are based on morals that refer to the truth in the use of digital technology, which automatically locks its users to remain within the corridor of values agreed upon by society. Therefore, parents need to improve digital literacy based on ethics that aim to realize competence in using digital platforms responsibly. Digital media requires its users to not only be able to use devices but also to search for, analyze, and act on information available on digital devices.

Family conversations are very important for humans as an effort to protect themselves from every challenge in life, including from the circulation of hoax information. At the level of family communication, family conversations can support parents' digital skills in consuming information built through two-way communication, but they can also lose their meaning if parents are unable to use them as a forum for family discussion. Family conversations are a bridge for parents to get broader and more up-to-date perspectives from their children and family members about digital insights. This study recommends that parents instill voluntariness and awareness of the potential for differences of opinion in the climate of communication with the family, because freedom in communication will not only enrich the mind but also very likely cause tension. This tension needs to be addressed wisely by parents so that technical and ethical skills in digital media are realized so that they can protect themselves from all complexities of information.

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