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# THE OLDER ADULTS AND SENSE OF SMARTPHONE: ONE STEP TOWARDS TECHNOPHOBIA

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#### Abstract

The development of technology, especially smartphones, is increasing rapidly. This was responded to differently by various characteristics of the community, especially the older adults. With human limitations in the use of technology capable of producing technophobia. This study will explain what seniors include technophobia sufferers with these limitations and what characteristics and factors can surround them. This study uses qualitative research methods with a phenomenological approach. The subjects of this study were those who did not use a smartphone. Data analysis by determining what limits and who is investigated, data collection and phenomenological analysis of data. The results of this study concluded that the subject cannot be said to be a sufferer of technophobia. Characteristics that appear elderly in this study is the unwillingness to think of smartphones, incapable of thought, avoiding the use and discussion of the smartphone and the absence of intensive learning efforts. Affective dimensions that appear to be a differentiator in technophobia, namely the absence of envy and the attitude of accepting oneself (surrender). This characteristic leads the subject to the loss of the sense of smartphone. Factors that arise from the loss of sense of smartphone are sensing factors, cognitive abilities, family education and the complexity of smartphone tools.

Keywords: Older Adults, Sense of Smartphone, Technophobia

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#### A. Introduction

Technological developments are growing rapidly. Almost we have never seen in an area at all not use technology as a tool to facilitate their activities, except in very remote areas. Therefore, technology is defined as a powerful learning tool (Judson, 2006). Tools used to carry out efficiency and effectiveness in work.

In this disruption era, there are fears for some people regarding technological developments that could not be stopped. The substitution of the position of man as the holder of full authority on the means of production, will be replaced by the means of production itself and make humans become spectators of unemployment. The speed with which technology develops, people then realize that times have changed. Even the feeling of comparing times is the saddest side in nostalgia. Some people feel unprepared, while those who welcome it with joy.

The disruption era seemed to force the community to participate fully in every activity. Leaving it will give birth to a negative stigma. While welcoming it will make the activation process in the human brain very complex. It is the situation that makes society inevitably have to face a difficult psychological dilemma. The difficulty to move from conventional daily routines to activities that follow scientific developments that might not be his expertise and very far from what he often does.

The era requires great collaboration between one field and another. Ignorance of someone with one of the attributes of technology tends to force him to find out, deepen to innovate new attributes. Those who don't understand will ask other people to work together. Preparing maximum results for their own activities, of course not forgetting others.

Technology will promise ease in the process and maximum results, minimize unwanted impacts and make the appearance of an object look more attractive and prestigious. All natural exhortations and the lure given, make humans enter into a world that is very different from the past civilization. This is the product of millennial era civilization.

Inequality in economic development in several developing countries, helped facilitate deterioration in technological developments in



the area. According to Bathelt (2001) the high and low technological growth in an area can be influenced by economic factors. These countries are trying their best to try to catch up with the delay by making many breakthroughs. But it must be admitted that every time they try to go one step, other countries also go the same distance. In fact, it is shorter than that. So we look carefully that developing countries will continue to be under the super power countries. There are advantages of developing countries on some lines, certainly not forgotten.

This slowdown also affected the capabilities of its human resources. Psychology realizes that humans have the same potential naturally. The difference is certain personalities. With that perspective, we will predict that if Europeans have an established ability in terms of technology, of course Africans also have the same potential. The difference is that they don't have the same opportunity.

Karwowski's statement (2005) can be interpreted that in its development, technology is also not able to deal with human limitations. Especially to understand the technology itself. How to use it, what is the purpose of making it and what impact it has.

On the other hand, difficulties in realizing the ideal concept of the use of technology that is universally easy to learn are still unsolved. Making special algorithms, carrying out radical transformations in everyday life until the use of buttons is easy to understand is still difficult for some people. Therefore some people, surviving on a tool or technology that is considered conventional is still easier than things that are so complicated. Studying a set of iron and cables requires time and effort that are not efficient.

One of the most developed technologies in the world today is a smartphone. The emergence of new and complex technologies does not have mediocre effects in the midst of society. The rapid development of technology and the amazing thing they built human civilization, did not escape the negative effects. General discussion of the negative effects of technology, such as the effects of addiction, asocial behavior, or crime. The impact that is no less severe and worthy of another focus of attention is technophobia.

Technophobia is feeling uncomfortable in using technology and trying to avoid its use (Dhawan & Sharma, 2015). Rosen and Maguire (1990) explain that the technophobia is characterized by the emergence of negative attitudes to technology, thinking of its negative impacts from the future to carry out critical dialogue related to the use of technology. Both summaries of these views provide characteristics in terms of affective, behavioral, and cognitive.

Technophobia as a psychological variable certainly has distinctive characteristics, affective, cognitive, and behavioral. There are other characteristics of affective. Jay (Oluwalola, 2015) states that technophobia affectively arouses feelings of hostility towards the tool. Rosen and Weil (Gülseçen & Kubat, 2006) state that if a person has been proven to be at least in accordance with the characteristics of technophobia, then it can be ascertained that he has the disorder. Rosen and Weil mention that affectively, people with technophobia have mild to severe discomfort reactions and anxiety about current or future interactions with computers or computer-related technology. As for Shaw (Ha, Page, & Thorsteinsson, 2011) mentioning one of the characteristics of his affection is fear or anxiety about computers.

Acocella and Calhoun (1995) state that anxiety is a fear accompanied by an increase in psychiatric reactions. This fear can be realistic or unrealistic. In technophobia, technology anxiety may be motivated by thoughts that are negative about the dangers of technology.

Badar, Murtiani and Haskas (2013) fear is an anxiety feeling that arises due to the presence of a clear object. A person's fear of using technology does not only give birth to psychic anxiety. However, sensed objects can directly make other people feel uncomfortable. Fear when seeing a smartphone for example. This feeling usually results from past trauma or emotional disturbances triggered by an acute bitter event (Hatta, 2015).

The inconvenience that arises in this discussion is the feeling that is raging between the wishes of the people around or the demands of the development of the era of the use of technology in every activity. This feeling of discomfort makes some people feel sued, even though in



themselves they cannot or do not want such a thing. Discomfort can also arise due to feelings of guilt or guilty feeling (Argo, Karyono, & Kristiana, 2014).

Feelings of hostility or can also be said to hate technology tools, such as cellphones and similar devices are one characteristic of technophobia. A hostile feeling like irritation that is present when unable to use the tool. No useful tool when you want to use due to the difficulty in using. Minderop (2010) mentions that hate is an intense feeling of anger with a reflection of a sense of antipathy, disgust, limitation or the desire to destroy. This feeling rejects all forms of interaction between humans and things.

Other negative attitudes in the component of affection are degrading attitudes or things that make someone not find something useful in using technology. This negative attitude can arise from various thoughts and provided that it comes from unpleasant events. Suharyat (2009) negative expressions will arise, if stimuli that come provide an unpleasant experience.

The cognitive component of technophobia described by Rosen and Maguire (1990) provides an explanation that sufferers of technophobia will emerge negative thoughts on the use of technology and present critical dialogue within themselves. Shaw (Ha et al., 2011) mentions that technophobia cognitively raises resistance to talking about computers or even thinking about computers. Jay (Oluwalola, 2015) also added that there was an unwillingness to think about things related to the use of technology.

The thought resistance to technology is someone's attempt to fight against the hegemony of the media on him. The thought of disagreeing with use makes someone look like they have another personality. In particular, affective resistance is most likely associated with affective outcomes, cognitive resistance with cognitive-based outcomes, and behavioral resistance with behavioral outcomes (Oreg, 2006).

Negative thinking that arises to someone about technology that is most common among the people is its impact on the economy, health and social. The assumption that the use of technology is a product that is quite expensive to be used by the lower classes. Health factors are another implication of the continuous use that creates addiction. As for negative thinking on technology in the social sphere, solutions are often sought. For example, the development of tools that can not only do everyday tasks. However, also its role in giving feedback during a conversation.

Critical dialogue is a natural way to help a person act in a polymorphic manner (Amorim, 2005). It's just that in technophobia, critical dialogue is a form of thinking that raises anxiety between using or not using. This thinking becomes the beginning of the birth of excessive anxiety if those present are negative attitudes or impacts from the use of technology.

The unwillingness to think about technology is also one of the cognitive characteristics in technophobia. For example, someone who does not want a discussion about handphone is in the middle of a conversation or just giving feedback to the other person regarding the discussion of technology. Ignorance is also included in this matter. That is, efforts that are educational in themselves are also difficult to realize.

From the presence of attitudes or affections and certain thoughts about technology, someone in this discussion will bring up behavior that is also synchronous with the two components. As a result of the presence of anxiety and negative thoughts, sufferers will avoid using tools (Dharman & Sharma, 2015); raises aggressive behavior towards the tool (Oluwalola, 2015).

Ignorance or not wanting to think about technological tools cognitively elicits evasive behaviors related to similar discussions. Avoidance behavior is used as a defense mechanism like denial (Zimmermann, 2004). This behavior is to save himself from things he doesn't like. For example, innuendo from the other person because they do not understand it with the technology discussed.

The highest peak in our worries about technophobia is when the sufferer aggressively affects the environment. Berkowitz (2003) describes several forms of aggressiveness, such as efforts to defend oneself with hostility, rebellion or destruction; self-resistance to rules; egocentric in order to prioritize personal interests such as showing power over him;



and efforts to show superiority to others. In practice, people with technophobia aggressively damage the tools they don't like.

From the description of the characteristics of technophobia above, we can look a little at the impact that has been caused on other people and sufferers themselves. Of course, besides complicating daily activities, this will also affect health and other aspects of life.

The case of technophobia is important to discuss because technophobia has become an eternal problem in the industrial economy over the past 20 years with some estimates that place the number of technophobes close to one third of the world's industrial population (Korukonda & Finn, 2003). Technology failure and its inability to create a comfortable environment for all human characteristics causes technophobia (Scull, 1999). Although the number is estimated to be large, the discussion on technophobia is not very familiar to the Indonesian people. Even though it is undeniable that there are still many people who do not use technology that is commonly used.

If we look at the public at a glance, maybe we will conclude that it tends to be difficult for older people to use technology, such as cell phones. Their unwillingness to use the technology can raise questions about whether they have technophobia? This assumption is opposed by Sievert, Albritton, Roper and Clayton (1998) who did not find an association between age, sex or education related to technophobia during the study. Therefore, there are no generalizations that can be formed to combat technophobia in certain age groups, education or gender.

The above case is different from the Malta translation (2009) that internet-based studies often hinder their inclusion because of the technophobia attitude that parents do. From here we can see that the dialectic that occurs between technophobia and one's age is still an important material to be explored further.

The importance of discussing technophobia and the elderly and various things that can enrich this discussion become a unique phenomenon in Indonesia. studies that focus on this discussion are still rare. Authentic evidence still needs to be used so that it can describe the phenomenon carefully. In this case, researchers try to examine elderly

phenomena with early indications of technophobia. The background of this research is based on the phenomenon of subjects who are not interested in using smartphones.

#### B. Method

Research method uses qualitative research methods. The approach used in this study is phenomenological. Phenomenology is an approach that understands the existence of symptoms, variables, or circumstances that are examined as they are according to their original context (Arikunto, 2006). With this approach, the chosen subject is not arbitrary or randomly selected the subject .

Based on the explanation of Muhadjir (2000), there are criteria in phenomenological use in a qualitative study. Among the criteria are as follows: 1). Ontologically requires a holistic approach that sees the object of study in a natural context and not partially. 2). Epistemologically, phenomenologists reject the use of a theoretical framework as a step in research preparation. Whereas 3). axiologically, the phenomenological method relies on four criteria of truth, namely sensual truths (based on sensory abilities), logical truths (based on the ability to analyze reason), ethical truths (based on researchers' reasoning), and transcendental truths (derived from revelation) God or certain beliefs).

Like various existing studies, the sample becomes an important reference in qualitative research. According to Patton (2015) the advantages of using samples include: facilitating the course of research, research more efficiently, being more thorough and careful in data collection, and more effective. Sampling in this study uses sampling techniques based on intensity. Intensity based sampling technique is sampling which focuses on intensity almost almost equal to extreme sampling techniques. The logic used in sampling is intended to obtain rich data about a particular phenomenon. The difference is that the sample used is not extreme cases. But cases that are expected to represent the phenomenon intensely.

In its implementation, research finally found a similar subject using the snowball sampling method. Efforts to obtain data that is in



accordance with the phenomenon under study, lead to other similar subjects. The hope is to complement the data from the first subject. Snowball sampling is a method based on respondents' suggestions conveyed by research respondents who were also excavated serially. Respondents who gave suggestions included key informants in this study. The search for additional respondents stopped after the data needed to assess the existing phenomenon was sufficient.

In order to get accurate information from several parties. So the researcher added a sampling method, namely sampling based on confirming and disconfirming. According to Cohen, Manion, Morrison, (2007); Patton (2002) Confirming technique is way that researchers use to confirm and describe findings, add research results, deepen and strengthen research credibility. The disconfirming included in part as a source of interpretation of sampling other in determining the boundaries of research results that are not easily generalized (Patton, 2002).

At the confirming stage, the researcher interviewed the main respondent's siblings by confirming the characteristics of the respondents. Is it in accordance with the phenomenon under study or not. Likewise in the period disconfirming, the researcher interviewed his close relatives. At this stage, researchers try to bring up contradictions in the main parts of the phenomenon under study.

The criteria in this study begin with an indication of respondents experiencing the phenomenon of technophobia. According to Dhawan and Sharma (2015) there are some characteristics of a person experiencing technophobia, namely feeling uncomfortable when using any technology, there is fear when using it, avoiding the use of technology and feel doubtful if you want to use it. In addition, according to Jay (1981) people who experience technophobia do not want to think about the use of technology, feel hostile to the tool, and create an aggressive attitude towards the media.

Relationships with research respondents have been built for 10 months. The subject is a researcher who almost every day interacts with each other. There are a number of routine activities that contribute to the closeness of the researcher to the respondent, namely worship activities at

the prayer room, joint community service and badminton sports every week.

In a few moments that are not busy, we occasionally chat on the sides of the house. At least there are sessions where greetings are reciprocated. The discussion is quite varied, starting from the issue of dating to politics. There are many messages that are conveyed. Similarly, humor and funny topics. All are in proportion and there is no interest in them. Moreover, the local residents also considered the main respondents as friendly people.

Similarly, other additional respondents. They are neighbors around the boarding house who are also relatives of the main subject. The second respondent was the main respondent's sister. He is a person who often gives food to researchers. Every time the researcher leisurely reads in his yard, at that time he always provided snacks and warm tea.

The third respondent was the wife of the first respondent. Interactions that occur are like children and parents. The time I see him most often is in the afternoon. When selling the front of his house is still neatly arranged. Every now and then I buy snacks or fruit juices. The most prominent habit from him is his habit of watching soap operas at night. At that time, he could not be bothered by anyone. Even her husband herself. Before conducting an interview, the researcher has conveyed his intention first that he will interview the main subject. After the respondents agreed, the researcher then conducted an interview.

These qualitative data are collected by means of interviews. Interviews are conversations and question and answer that are directed towards achieving research goals (Poerwandari, 2011). The interview technique used is the interview technique with open standardized guidelines. The interview guide is written in full, both the set of questions and the translation of the sentence. Flexibility in exploring answers is limited, depending on the nature of the interview and the skills of the researcher (Poerwandari, 2011). The contents of the interview in this study are about how the views of subjects related to smartphones, the dimensions of affection that arise with interaction in the discussion of smartphones and related behavior of subjects with this media.



The results of the interviews were then analyzed using phenomenological data analysis. According to Sanders (1982) the phases of phenomenological analysis are done by determining what limits and who is investigated, data collection and phenomenological analysis of data.

## C. Research Finding

During this research, researchers can draw results based on interviews and direct observation. We can describe the results of research related to the subject based on three important aspects in psychology. The dynamics that occur in the subject consist of cognitive dynamics, affective dynamics and behavioral dynamics. From this dynamic, the characteristics of the subject appear with a smartphone.

Cognitive dynamics that arise in both subjects are the unwillingness to think about the use of smartphones protracted and the presence of incapable thinking. The dynamics of affection that emerge is a feeling that can be said to be quite positive, namely the presence of an attitude not to be jealous, to accept the situation and surrender to ability. The dynamics of behavior that tends to be raised is the lack of effort to study smartphones.

#### D. Discussion

## **Environmental and Family Descriptions**

Geographically, the subject lives on the border of the Regency. Sleman and Yogyakarta City. Its location adjacent to Gadjah Mada University makes it easy to find it quickly. It is located only about 1 km with a distance of 15 minutes. There are several important institutions outside the subject settlements but not so far away, such as hospitals, several offices, schools and rows of shops. The geographical location and development of the surrounding community should facilitate the interaction and development of the spread of information and technology.

Although the subject location is so close to one of the strategic areas in Yogyakarta, the location of the subject becomes somewhat different because the nuances offered are rural. The characteristics of the hamlet and village community can be seen from the activities of the The 1st Multi-Discipinary International conference University Of Asahan2019
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residents and housing miniatures which are often found in the suburbs of Yogyakarta or outside the city of Yogyakarta itself. There is no Middle School in this hamlet. They have to go out a little further to continue their studies if they want to.

The environment around the subject is filled with relatives who are almost genetically related to each other. They descended on the same place in the same residence. Some of them are immigrants. However, it can be said to have inhabited the settlement for quite a long time. Differences in lineage in this environment do not really affect interactions. Because every month there are always activities that are mutually beneficial.

Observations of researchers about the hamlet situation for a year make a positive assessment of the activities contained in the environment and family of the subject. It is very possible to hold potential community development programs, especially in the field of technology. The existence of mutual cooperation activities and the proximity of these settlements to UGM is a plus.

## **Description of the Individual**

Subjects in this study were two people. The first subject was a man aged 64 years. Daily work is building coolies and sand fishers in the river near the house. Almost all of the activities of earning a living are carried out around the house.

This first subject was a father with one wife and two sons who were both married. His wife everyday becomes a housewife with a small sale that she puts in front of the house. However, several times received odd jobs which are still around the residence as well. Subject child married to one daughter also lives with her. Researchers in this case also have inhabited his boarding house a year with the subject. The interaction between everyone in the house can be said to be very intense.

Judging from his education, the subject was an Elementary School alumni whose time of technology development was still very minimal. The subject also considers himself to have limitations in



cognitive abilities, such as memorizing activities. According to him, as a child, he lacked nutrition.

Based on the words of his wife, with the age of the subject who had entered the elderly, he had difficulty when pressing the buttons on the cellphone. This difficulty is caused by the ability of his sense of sight which has decreased. Regarding his physical abilities, he is among those who do not have motoric disorders. It was evident from his routine activities every week playing badminton and his position as Chair of the Badminton Association at Sendowo. Although often he feels pain in the back and arm muscles. This does not really affect their daily activities.

The subject looks so simple with jobs that are not luxurious and income that is not so large with the work of seasonal construction workers and river sand farmers. This situation does not necessarily make it difficult for him to buy a smartphone. The child and his wife who live in the house, both have worked and are able to buy a car. The reason for economic limitations is rather difficult to juxtapose with him. Living with simplicity may be more appropriate to judge it as a life choice.

The second subject in this study was a 60 year old mother. He lives in front of the first subject's house. He is a wife of a husband who is around 65 years old with a 22-year-old boy. In addition to the nuclear family, his mother who had not been able to see the old man also lived with him at home.

His daily life is the backbone of the family. His job is to make food for employees in a private office. Her husband no longer worked after feeling unable to carry a regional public transport bus anymore. Everyday, he is only at home cleaning the yard or washing dishes. Seen there was no severe physical disturbance in him, except he had indeed entered old age. As for the large child, it also doesn't work. Everyday, he cleanses the birds he keeps and looks around the hamlet.

In working, the subject does not use a motorbike to buy food ingredients and deliver the food to the Office. The subject also does not use any communication tool to confirm the business activities that he does every day.

Subject education is also not high, graduating from elementary school. Even so, he actually has good general knowledge. This can be seen from how he explained the impact of using technology that affects the nerves if it is excessive in its use. However, it is appropriate to distinguish between understanding and practical ability in this matter. His difficulties are the same as the first subject who has difficulty understanding and using tools on a smartphone.

If you want to contact his son who migrated to Jakarta, he is usually assisted by his son who uses a smartphone. Once the researchers noticed he was contacting his son using a smartphone. It's just that as I explained earlier, he is rather difficult to understand the function tools.

The researcher confirmed to two more subjects related to the main subject. Both have family relationships. Their residence is also only limited by one small hallway, close to each other.

The third subject (verbatim II) is the wife of the first subject. He is around 59 years old with a small posture of around 150 cm. Subjects are housewives who work everyday selling in front of the house. The sale consisted of snacks and fruit juices he had taken from the son-in-law who sold the same as he seemed.

The subject is auser mobile phone with an old model, not a smartphone. Researchers when communicating with him can only be contacted via SMS. His daily life is a loyal audience for soap operas. Usually he watches TV during the afternoon or after sunset. Nevertheless, it appears that researchers see the subject using a cellphone public.

The fourth subject (verbatim III) is the younger brother of the first subject. He is around 40 years old. His place of residence with his sister who is also married. His work is a washing worker. He is an unmarried person.

The subject uses a smartphone made in China. Initially he used mobile phones with capacities that are still with the previous features. Subjects include people who are rather difficult to express their opinions. Although he is auser smartphone, he is not very capable of detailing this discussion.



The question that should be answered in this study is whether these two subjects include technophobia sufferers? At the beginning, researchers have explained what indicators can be used to prove it. Based on the results of interviews, researchers found that cognitive and behavioral indicators have met the requirements of (Rosen & Maguire, 1990). Cognitive evidence expressed by both subjects in the indicator did not want to think. The behavior dimension is represented by behavior to avoid using the smartphone itself.

With evidence that the affective aspects were not fulfilled in this study, it was difficult to say that the subject was a patient with technophobia. Moreover, the most important condition in diagnosing a phobia is an indicator of anxiety. Indicators of fear, discomfort, feelings of hostility and negative attitudes do not appear during the interview. Similarly, when researchers try to confirm on other subjects. The results were both subjects not suffering from technophobia.

The characteristics that appear on the subject other than the two indicators above are incapable thinking which is often repeated in a cognitive manner. The behavioral aspect that is raised is the lack of effort to learn intensely in using smartphone. Both of these are found in both subjects.

First, inadequate thinking is quite dominant in interviews. Even if there is a wish statement, this becomes not dominant compared to incompetence thoughts. Repeated words like "can't" are the most patented that they have difficulty learning about smartphones.

Understanding of the existence of technology that cannot be used as a backing material that everyone is able to use other technologies appropriately. Subjects are not people who don't know that technological developments, especially smartphones, are experiencing rapid development. They understand this. Even able to explain the positive and negative effects.

This inadequate thinking is limited by one thing that is directly related to smartphones according to researchers, namely the use of tools on smartphones. Changing cell phones from the button model to the screen tool has shocked some people. There is hardly any change in the function of this communication tool.

Tools that are quite complicated if not understood carefully make the elderly in this case become unable to follow the rhythm of using the tool. Tools that do not arise make it feel like we are touching a smooth wall and will not have an effect on human skin sensory. Not to mention the location of the tools on the smartphone that don't immediately appear Although the color of the symbol is quite in contrast to the smartphone back ground, this is not enough to be interpreted by seniors without the initial knowledge related tosymbols tool.

Second, there is no intense effort in studying smartphones. What we think of course will affect how we act next. Thought is not able to contribute to the effort that is not optimal on the subject. This shows that there is no persistence. Persistence in question is a continuation of the efforts of individuals who, despite obstacles in understandinguse smartphone, continue to work on it.

This business is quite important in the process of technology development. Because it becomes a measure of the usefulness and efficiency of the tool to the community. Consumer loyalty in the use of technology indicates that the tool is not universal enough to be used for various characteristics of heterogeneous societies. Evaluation needs to be done on tools that are not very friendly to human limitations. Moreover, the world, including in the village itself has entered a period of massive distribution. There needs to be synchronization of understanding among elements of society. So that there will be no more people who feel that technology is making it difficult.

From the absence of an intense effort to study smartphones, it shows that it seems that the benefits of using smartphones independently do not really affect them. Subjects prefer to be passive in this discussion when they are in the surrounding environment and feel unhappy about the circumstances.

Interestingly in the affective dimension raised by the subject. The indicator that arises is the absence of envy in others, the attitude of accepting oneself or resignation. The limitations in understanding the use



of smartphones they have made them not be jealous of others. It is necessary to realize that use smartphone among the people has mushroomed. Of course this is a separate material to be the object of judgment or bully for the incompetence of the subject. However, the feedback given by the two subjects became affectively different.

Envy is not an affective that tends to both. This attitude also leads them to other positive attitudes, such as resignation. A positive attitude accepts yourself. Trying to make peace with the circumstances that do not want to study smartphones further.

The characteristics shown in this study are the first steps a person experiences with technophobia. Unwilling to think of certain technologies, presenting incapable thinking, avoiding the use and discussion of media and the lack of sustained effort in studying the technology intensively. Such indicators are the beginning of entering technophobia. We call this a loss of sense of technology.

The loss of sense of technology is due to the absence of individuals in forming a close relationship with technology. Feelings of ownership and the desire to be present as one part of modern society that uses communication tools as a medium for helping creativity. This sense of technology ties the community into one whole part that is interrelated with one another. He will create a technological society which in this discussion is related to smartphones.

As for the factors that would become mediators in supporting the loss of sense of technology this are factors of vision in the elderly who began to decline at age, family education, the complexity of the tools, and the potential of individuals neuro Physical factors certainly cannot be denied enough to affect mainly the sense organs of the eye. The potential for neuro in the brain will be related to memory or cognitive processes in processing information.

Another important thing seen here is family education related to technology. The development of the times will always change to become easier but looks so complex. For example, the development of smartphones. Almost everyone understands that smartphones will facilitate their activities. However, this looks complex if we do not

understand how to use it. Therefore, the family becomes the closest part of media learning institutions. From here, we will slightly reduce the misunderstanding of family members in understanding smartphone tools. We cannot excuse environmental conditions as an obstacle if everyone can help each other.

#### E. Conclusion

From the results of the study it can be concluded that the subject cannot be said to be a sufferer of technophobia. Characteristics that appear elderly in this study is the unwillingness to think of smartphones, incapable of thought, avoiding the use and discussion of the smartphone and the absence of intensive learning efforts. Affective dimensions that appear to be a differentiator in technophobia, namely the absence of envy and the attitude of accepting oneself (surrender). This characteristic leads the subject to the loss of the sense of smartphone. Factors that arise from the loss of sense of smartphone are sensing factors, cognitive abilities, family education and the complexity of smartphone tools.

## **Bibliography**

- Dumanig, F.R. (2014). Social Capital and Politeness Strategies in Fostering Ethnic Relations in Malaysia and Philippines. Jurnal Ilmiah Peuradeun. 2 (3): 23-38.
- Horowitz, D.L. (2000). Ethnic Groups in Conflict, Berkeley: University of California Press.
- Kaylene, P., & Rosone, T. (2016). Multicultural Perspective On The Motivation of Students in Teaching Physical Education. Jurnal Ilmiah Peuradeun, 4(1), 115-126.
- Nata, Abuddin (2001). Pemikiran Para Tokoh Pendidikan Islam: Seri Kajian Filsafat Pendidikan Islam. Jakarta: Raja Grafindo Persada.
- Acocella, JR. and Calhoun, J.F 1995. Psikologi tentang Penyesuaian dan Hubungan Kemanusiaan (Alih Bahasa, Satmoko, RS). Semarang: IKIP Press.
- Amorim, C. (2005). Beyond Algorithmic Thinking: An Old New Challenge for Science Education, 13.

- Argo, Karyono, & Kristiana. (2014). Kebermaknaan HIdup Mantan Punkers: Studi Kualitatif Fenomenologis, 9.
- Arikunto, S. 2006. Prosedur Penelitian: Suatu Pendekatan Praktek (Edisi Revisi). Jakarta: Rineka Cipta.
- Badar, M. A. (2013). Hubungan Dukungan Keluarga dengan Tingkat Kecemasan pada Pasien Fraktur di Ruang Rawat Inap Lontara II RSUP DR. Wahidin Sudirohusodo Makassar, 2, 12.
- Bathelt, H. (2001). Regional competence and economic recovery: divergent growth paths in Boston's high technology economy. Entrepreneurship & Regional Development, 13(4), 287–314.
- Berkowitz, L. (2003). Emotional behavior: Mengenali perilaku dan tindakan kekerasan di lingkungan sekitar kita dan cara penanggulangannya. Buku Kesatu. Ahli Bahasa: Hartini Woro Susianti. Jakarta: PPM
- Dhawan, S., & Sharma, V. K. (2015). Technophobic Attitude among the Students of Senior Secondary Level. Jan, Vol. 2, No. 16: 2790-2796.
- Gülseçen, S., & Kubat, A. (t.t.). Teaching ICT to Teacher Candidates Using PBL: A Qualitative and Quantitative Evaluation, 12.
- Ha, J.-G., Page, T., & Thorsteinsson, G. (2011). A Study on Technophobia and Mobile Device Design. International Journal of Contents, 7(2), 17–25.
- Hatta, K. (2015). Peran Orang Tua dalam Proses Pemulihan Trauma Anak, 18.
- Judson, E. (2006). How Teachers Integrate Technology and Their Beliefs About Learning: Is There a Connection?, 18.
- Karwowski, W. (2005). Ergonomics and human factors: the paradigms for science, engineering, design, technology and management of human-compatible systems. Ergonomics, Vol. 48, No. 5: 436 463.
- Korukonda, A. R., & Finn, S. (2003). An investigation of framing and scaling as confounding variables in information outcomes: The case of technophobia. Information Sciences, 155(1–2), 79–88.
- Malta, S. (2009). Qualitative Interviewing of Older Adults: Offline Versus Online Methods. Era Conference.



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Thema: The Role of Science in Development in the Era of Industrial Revolusion
4.0 based on Local Wisdom." in Sabty Garden Hotel-Kisaran North Sumatra,
March 23rd 2019

- Minderop, Albertine. 2010. Psikologi Sastra. Jakarta: Yayasan Pustaka Obor Indonesia.
- Muhadjir, Noeng. (2000). Metodologi Penelitian Kualitatif. Yogyakarta: Reka Serasin.
- Oluwalola, F. K. (2015). Effect of Emotion on Distance e-Learning The Fear of Technology. International Journal of Social Science and Humanity, 5(11), 966–970.
- Oreg, S. (2006). Personality, context, and resistance to organizational change. European Journal of Work and Organizational Psychology, 15(1), 73–101.
- Poerwandari, E. K. (2011). Pendekatan Kualitatif untuk Penelitian Perilaku Manusia. Depok: LPSP3.
- Rosen, L. D., & Maguire, P. (1990). Myths and realities of computerphobia: A meta-analysis. Anxiety Research, 3(3), 175–191.
- Sanders, Patricia. 1982. Phenomenology: A new way of viewing organizational research. Academy Management Review 1982, Vol 7 no.3.
- Sievert, M., Albritton, R.L., Roper, P., & Clayton, N. (1998). Investigating Computer anxiety in an academic Library. Information Technology and Libraries, Vol. 7, Iss. 3: 243.
- Scull, C. . (1999). Computer anxiety at a graduate computer center: computer factors, support, and situational pressures. Computers in Human Behavior, 15(2), 213–226.
- Suharyat, Y. (2009). Hubungan antara Sikap, Minat, dan Perilaku Manusia, 19.
- Zimmermann, C. (2004). Denial of impending death: a discourse analysis of the palliative care literature. Social Science & Medicine, 59(8), 1769–1780.