Hoaxes: Attacking all Netizen and Putting Women as the Most Vulnerable Group
(Survey on Netizen’s Responses to Hoaxes in Gianyar Bali)

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ABSTRACT

Hoaxes circulate in social media. The power of social media which penetrate times and spaces without borders make hoaxes penetrate all the internet users. Hoaxes build hatred and exaggerated fear. For that reason, it is crucial to identify the toughness of netizen in dealing with hoaxes. This paper describes how netizen in Gianyar Bali responds to hoax information they receive. Gianyar is one of the regencies in Bali, which located in the sub-urban area near Denpasar but still dominated by rural area. The research was conducted through survey with 440 respondents on March 2020. The study came out at (1) level of age and level of income impacting the level of internet access; (2) but there is no significant difference in education level, age, income, and occupation type in responding to hoax in social media; (3) women are recorded to be more vulnerable to get fooled by hoaxes than men. Women recorded ignoring hoaxes in their social media, they are rarely verified the information that they gained in their smartphones. This research shows that even a professor can be fooled by hoaxes and didn’t have digital literacy higher than high school students. The study stressed out that women are the internet users most vulnerable in facing hoaxes. Therefore, women should be increasing their knowledge in identifying hoaxes in social media.

Keywords: Bali, Hoaxes, Responses, Social Media, Women

1. INTRODUCTION

Since the age of information developed through social media, they bring their own benefit and threat. Hoaxes are one of them. In social media, every user can generate content and become a source, and they can also be the receiver or sharing the content. In social media, hoaxes and false information spread faster than truths in all categories of information. False information triggers fear, disgust, and surprise in replies. Need of accuracy is the main aspects of human endeavor. False news online disrupted how people react when facing political and economic issues, natural disaster and terrorism [21].

In Indonesia, hoax or false information had been the centre issues that give big impact in 2019 elections. Social media has been used in political smear campaign that growing since 2012 in Indonesia’s election. Social media users are increasing. Indonesia its self has a nickname “Social Media Nation” [9]. By numbers, in 2020 Indonesian active internet users reach 64% of the population, growth 17 percents since 2019, 59% are active social media users. Netizen in Indonesia spent 7 hour 59 minutes average for every day and 3 hour 26 minutes using social media. Youtube is the most active platforms used by internet user in Indonesia, it reach 88% from total internet user in Indonesia, follow by chatting platforms whatsapp (83%), facebook (81%) and Instagram (80%) [22].

Why the number is always increasing? There are several researches on this. In psychological needs, social media are used to fulfilled the need of affiliation and self disclosure [7], [8], [3], [4] need of information, for popularity [17], and for recreation [19].
Social media comes with massive information. Some of them true information some of them doesn’t. This massive information are attacking all internet users. The power of social media which penetrate times and spaces without borders make false information penetrate all the internet users all over the world, including netizen who stay in rural area. Gianyar is one of the regions in Indonesia where people are relatives as a new comer in social media. Gianyar is one of the regencies in Bali Province. It is well known as a regency of art with more than 470 thousand population. In tourism, Gianyar get famous through Ubud as one of the most visited tourist destinations and the centre of art and museum in Bali. Ubud is one of seven subdistricts in Gianyar regency. In the north of Gianyar, there are still a rural areas dominated by farmer, far from tourism. In the west south of Gianyar, the regency borders on Denpasar, the capital city of Bali Province that makes it a sub urban area with a dense population. These plural characteristics make Gianyar crowded with all the Balinese characters to know how they response in facing false information or hoax.

Hoaxes also attack netizen in Gianyar. During pandemic covid-19, there are several hoaxes in Gianyar. One of them is spreading through social media whatsapp that there was a Corona’s patient walking around in the middle of Gianyar City. The information came with suggestion not to go shopping in the area. It turns out that this information was a hoax or false information [12]. In Gianyar this false information spread fast through chat in chatting application whatsapp and social media facebook. It is a proof that hoax is attacking all netizen in global or local. Because of these massive threats, society and state have to know how vulnerable the people are when facing false information or hoax in Gianyar, Bali and how people in Gianyar, Bali react and respond to when they first get an information.

2. LITERATURE REVIEW

Online socialization in the view of the Election Supervisory Agency (Bawaslu) will bring its own problems. Bawaslu identifies that the poor internet infrastructure will be the central point of problems in the Pilkada (Local Leader Election) process. Bawaslu itself has identified 67 urban districts that are prone to poor aspects of internet infrastructure (bbc.com, 2020). This confirms that socialization during the Pandemic period was very important, especially how to socialize and through what socialization was carried out to potential owners. The socialization is expected to provide understanding and knowledge about a series of activity programs to be implemented. Election socialization by the KPU is considered to be a variable in influencing the level of participation in the pilkada (Hendrik, 2010 in Meyliana, 2020: 171). Dissemination of the electoral stages and technical health protocols in polling stations at this time is very important. Political socialization is one of the factors that can determine the success of the Pilkada. Wibowo et al (2019: 22-42) emphasized that to increase voter participation, an offensive strategy or new programs is needed that is different from the previous. There were many research in how and why people used social media. Li and Lin (2012) in their research stressed that people use social media for engagement, making new friends, finding old friends, foster a feeling with others and strangers and help to maintain relationship across distance. Social media also being used to share varieties of information, including the users’ experiences and linking to news stories [10]. Twitter noted to fulfill information needs or motives [11].

Brashier and Schacter (2020) stressed there were differences in facing fake news in older adults. These adult had been experiencing cognitive decline and difficulty in detecting lies because they are relatives newcomers to social media and have to struggle spotting sponsored content or manipulated images. Therefore Brashier and Schacter suggest it is important to give older adults interventions in shifting social goals and gaps in their digital literacy. Their research problems are why do older adults engage with fake news more frequently? Their paper tries to explain the problem through three aspects such as cognitive declines, social changes and digital literacy. Even though there is cognitive declining for older adults, it cannot explain why they be the most misinformation. Digital literacy could explain why older adults seem can be easier to trust false information in social media. Nightingale et.al (2019) explained the ability to recognize fake photos is declining with age. Although savvy young adults also struggle to distinguish real photos or news from online news service [15].

Chen (2013) focusing her research on women’s social media experiences. Her research came out that women bloggers’ motives in using social media for recreation. Chen used online survey in 2010 to 1500 women bloggers to measure three motivations in using social media such as information, engagement, and recreation. Her research questions are what are women’s main motivations for social media use? How are these motivations related to frequency of social media use?

Kurnia, et. Al (2020) had a project to elaborate on how Indonesian women navigate information, including misinformation from multiple WhatsApp groups and direct messages simultaneously. Framework the project is using Tzu-Bin digital literacy competence. The research came out with there were numerous ways to response misinformation and hate speech depending on the context. Women in Indonesia had moderate score for digital literacy skill, even though their functional skills are higher than their critical skills. Women are found have stronger consuming skills than presuming skills. For that Indonesian women needed to upgrade their skill through digital literacy program.

But there are limited works or researches on how people react when they are facing false information in Indonesia. Indonesia as the fourth most populated country in the world is one of countries with the largest number of social media users. There are several researches on social media habit, but they have not evaluated hoaxes or false information especially in Bali.
2.1 Theories of decision making
People react differently in every different situation depend on their personal characteristics. People’s behavior is a unique interaction between them as individual and the environment (Rakhmat, 2019). There are several factors influencing people’s behavior. Sampson (1976) divided the factors into three aspects: (a) environment (b) psychosocial and (c) stimulus. Environment include ecology, design and architecture, times, atmosphere, technology, and social. When they gain information in their social media, they react differently by individual. Some will ignore, some will react impulsively.

In every situation, as an individual, they should make a decision. Three sets of factors affecting decision made by individuals are decisions features, situational factors, and individual differences [2]. Rakhmat (2019:91-92) explain various aspects that influence how people react. There are motivation, false belief and attitude, habit and emotion. Decision making can be categorized as a skill. As a decision making skill can be improved. The more experienced an individual in making some decision, the better is the skill to make an effective decision [1]).

3. METHODS
This current study used quantitative method by conducting survey on seven sub districts in Gianyar Regency at March 2020. Population of the survey is all the citizens who live in Gianyar, consisting of around 400,000 people. Estimated margin error of under 5 percent at the level of confidence at 90 percent with proportional sampling method, sample came up with 420 respondents. The study is a descriptive research. Descriptive research give portray an accurate profile of people and situations.

4. RESULTS AND DISCUSSIONS
Gianyar community is dominated by people between 36-55 years old with high school, elementary school, and undergraduate latest education. The occupations of Gianyar people are quite diverse, dominated by traders / entrepreneurs at 22.9 percent, followed by private employees (14.5 percent), farmers (13.8 percent), and craftsmen (10.2 percent). Gianyar people have various incomes; however, almost half of them earn less than IDR 2,500,000.00 per month with 24.8 percent of them earning between IDR 1,500,000 to 2,500,000 and 22.1 percent earning less than IDR 1,500,000. On the other hand, there are 21.7 percent of people who have income between IDR 3,000,000.00 to IDR 4,500,000.00. 13.8 percent of the people even earn more than IDR 4,500,000.00 per month.

4.1 Media Habit as Information Source
Television is still being the main choice for Gianyar community in seeking information. 49.8 percent of Gianyar people claimed to use television as the source of information. The next option is through social media with 16.7 percent. Gianyar community still upholds kinship and social relations, which is shown by their trust in community leaders as their sources of information. 9.3 percent of people still hold trust in their community leaders. Ironically, other mainstream media based on newspapers are only used as the source of information by 1.9 percent of Gianyar people. In fact, it was noted that 56.2 percent of them no longer read newspapers at all.

Internet access. Most of Gianyar people (58 percent) stated that they have had access to the internet, while 40 percent have not. This shows that not all people in Gianyar have internet access. It can be seen in Figure 1 below:

![Internet Access Precentage](image)

From the research results, there are two out of seven districts dominated more by people who do not have internet access, namely Tampak Siring and Payangan. These two districts are located in the northern area of Gianyar regency. Based on gender, the data stated that the number of male respondents who have access to the internet in Gianyar Regency is higher than that of female respondents (65.7 percent to 51 percent). This shows that internet is more accessible to men than to women.

There are some differences in accessing social media in regards to their income per month; the higher the income, the higher the internet access. The highest internet access occurs in the community group with the highest income, while the lowest internet access occurs in the community group with the lowest income, which is less than IDR 1,500,000. Only 19.4 percent of people in this group have access to the internet. 52.9 percent of people from the next group with total income between IDR 1,500,000 to IDR 2,500,000 per month have access to the internet. This figure continued to increase to 63.5% in the next group with income between IDR 2,500,000 to IDR 3,000,000 per month. 80.2 percent of the group with the income of IDR 3,000,000 to IDR 4,500,000.00 per month has internet access, while for the highest income group, which is above IDR 4,500,000.00 per month, have internet access of 89.7 percent.
Differences in internet access also occur based on the respondents’ educational background. The higher the level of their education, the greater is the number of respondents exposed to internet access. The group of respondents with their latest education in elementary school has the lowest number of internet accessibility. 77.8 percent of the group does not have any access to the internet. 57.6 percent of the group with the latest education in middle school does not have internet access. On the other hand, in the group with high school education background, only 25.7 percent of the member does not have internet access. Only 19.4% of the group with D3 education background does not have internet access. For those with undergraduate education background, the percentage is getting smaller, only 4.8 percent of the member does not have access to the internet. All members of group with the highest educational background, such as masters and PhDs, have access to the internet. The details are explained in the figure below:

**Figure 2. Income and Internet Access**

The other groups that have internet access are tourism services (92.9 percent), private employees (86.9 percent), state employees (81.8 percent), and civil servants (61.5 percent). The groups with the lowest internet access are farmers (20.7 percent), housewives (29.7 percent) and construction workers (22.2 percent).

### 4.2 Social Media Ownership

There are various social media platforms. Whatsapp is the most widely used social media in Gianyar, reaching 57.4 percent with a level of activity reaching 97.1 percent. Next is Facebook the ownership of which reaches 52.6 percent of Gianyar people with 94.1 percent activity. Interestingly, the ownership of YouTube account is higher than Instagram. Youtube account ownership reaches 43.1 percent, 6.2 percent higher than Instagram, even though the level of activity for Instagram is higher than YouTube.

**Table 1. Social Media Ownership and Activities**

| Account   | Ownership  | Activity |
|-----------|------------|----------|
|           | Have | Not have | Active | Non active |
| Facebook  | 52.6 | 47.4 | 94.1 | 5.9 |
| Instagram | 36.9 | 63.1 | 87.6 | 12.4 |
| Whatsapp  | 57.4 | 42.6 | 97.1 | 2.9 |
| Youtube   | 43.1 | 56.9 | 83.6 | 16.4 |

The figure above is in line with the number of the most frequently accessed social media. Half of the respondents stated that Whatsapp is the social media they access most. The next most frequently accessed social media is Facebook, reaching 38.6 percent, followed with Instagram, which is 11 percent. The percentages can be seen in figure 4.

**Figure 4. Percentage of Most Accessed Social Media**

There are similarities and differences in the types of social media platforms used by men and women. Both men and women choose Whatsapp as the most accessed social media. However, the number of women accessing Instagram is more than the men. Men are noted to use Facebook more. This shows that a variety of social media is more widely used by women than men. The details are described in table 2.
Table 2. The Most Accessed Social Media

| Gender | Account | Total |
|--------|---------|-------|
|        | FACEBOOK | INSTAG | WA  | TT/IM |       |
| MEN    | 13       | 67     | 1   |       | 137   |
|        | 40.9%    | 48.6%  | 0.7%|       | 100.0%|
| WOMEN  | 19       | 56     | 0   |       | 109   |
|        | 35.8%    | 51.4%  | 0.0%|       | 100.0%|
|        | 85       | 27     | 123 | 1     | 246   |
|        | 38.0%    | 11.0%  | 56.8%| 0.4%  | 100.0%|

4.3 Hoax Exposures

As internet users, the internet users or netizens in Gianyar are also exposed to false information or hoax. Of all respondents, 45 percent stated that they had received false information, 50 percent were not sure if they had received false information or not, and the rest did not answer. This is shown in the figure below.

Figure 5. Hoax Exposures

Most of the hoaxes or false information that the respondents received came from Facebook (49.2 percent), and WhatsApp (29.6 percent). Other social media which are the source of false information are Instagram and Line apps with 7.4 percent and 1.6 percent respectively (Figure 4.). It can be seen that Facebook is the main source of hoaxes circulating on social media and the same is happening in Gianyar Regency.

Figure 6. Source of Hoax

There are various types of hoaxes or false information. The types of hoaxes that are most widely received by Gianyar people are false information or hoaxes about political issues (36.5 percent), ethnicity, religion, race, and inter-group relation issues (27.5 percent), and health issues (24.9 percent). Other false information received is related to environment, education, and technology issues (below 5 percent). The details are shown in the figure below.

Figure 7. Various Types of Issues in Hoaxes

The figure above illustrates that political issues contains the most false information or hoaxes. This is in line with [2] stating that hoaxes attack many political issues in Indonesia and eventually become the main issue that attracts a lot of attention from netizens.

4.4 Responses on Hoaxes

Hoaxes are harmless when the recipient does not respond adversely. For this reason, it is important to identify how Gianyar people respond false information or hoax. The data shows that 54.2 percent of people who receive hoaxes said they ignore the information. Only 23.7 percent stated that they verified the information and tried to find out the truth or accuracy of the information. Interestingly, 10% of the respondents inform their immediate environment, such as family and close friends, if the information is false or hoax. There are 8.4 percent who tried to tell the spreader of the information that it was false information or a hoax. Details can be seen in the following figure.

Figure 8. Responses after Receiving False Information

From the figures above, it is known that most of them are not concerned with whether or not the information they receive is classified as false information. From this ignorance, the respondent is at risk of getting
negative impact from false information. This indicates that the public is still lacking in awareness, so that they are quite vulnerable to being deceived by false information. People, in the absence of introspective ability and critical power, are not only at risk of being deceived but also spreading the false information themselves.

In comparing the differences in responses when receiving information between male respondents and female respondents, it is found that male respondents are more concerned and tend not to ignore information that had the potential for hoaxes than the female respondents. The figure shows that female respondents who ignore the information are 57.6 percent of the total respondents, higher than male respondents at 51.4 percent. Male respondents are also more likely to tell the source that the information is hoax (9.5 percent), while female respondents tends to ignore them (7.1 percent). Male respondents also proved to have a higher percentage of verifying or finding out the truth of this information than female respondents. Male respondents who stated that they verified the false news / information they received are 26.7 percent, much higher than the percentage of female respondents, which was only 20 percent.

4.4.1 Based on age

There is no significant relationship to the response when receiving false information based on the age. The age group between 56 and 66 years is the age group with the highest number of tendency in ignoring information they received. The age group of 17-25 years old has the percentage of 58.1 percent, while the lowest percentage is in the 36 to 45 year age group, 47.7 percent. This shows that the age group that cares the most is in the age group 36 to 45 years.

4.4.2 Based on educational background

There is no significant relationship pattern between education level and response to hoaxes. The group never receiving any formal education is the most ignorant of hoax and false information (75 percent), followed by the diploma (65 percent), undergraduate (63.6 percent), middle school (52.4 percent), High school (50 percent), and the last, postgraduate (0 percent).

4.4.3 Based on occupation

Employees have the highest tendency to ignore false information. The percentage rate reached 86.7 percent, followed by housewives (83.3 percent), professionals and freelancers (71.4 percent), farmers and tourism services (66.7 percent), students and teachers / lecturers (57.1 percent), Traders/Entrepreneurs (51.1 percent), Private sector employees (48.7 percent), and Civil Servants (33.3 percent).

4.5 Critical and Verification

One step to reduce hoaxes is to inform the sender of the message that the message or information conveyed is false information/hoax. However, this response is the least popular among respondents. Even in the youngest age group, age of 17 to 25 years, only 2.3 percent of this group informed the sender of the message that the information conveyed is false information. The age groups that are most active in informing the false information senders are the age group of above 66 years and the age group of 26 to 35 years. This is the youngest and the oldest age group.

Based on the educational background, the group who did not finish the elementary school is the largest group informing the senders that the message or information conveyed is false information, reaching 50 percent. The next group is the group of people who never received any formal education (25 percent), diploma (15 percent), middle school (14.3 percent), high school (7.6 percent), and undergraduate (6.8 percent).

Identifying a piece of information as false information is not easy. Even those who deal with social media on a daily basis often find it difficult to tell the difference (McGrew, et al 2018). Therefore, the process of verification or checking the accuracy of the information received is very important. For Gianyar people, the data shows that only 29 percent of respondents always verify after receiving any information. Most of the respondent said they are rarely or occasionally verify the information they get (52 percent). There are also 18 percent of the respondents never making verification after getting any information. Details can be seen in the next figure:

Figure 9. Verify Information in Social Media

Based on the age group, the largest age group making verification when receiving information containing hoaxes is the youngest age group of 17 to 25 years, which is 27.9 percent. The lowest group in conducting verification is in the oldest age group of 55 to 65 years, which is only 11.1 percent.

There was no significant relationship between the level of education and the tendency of verifying the information received. The group with educational background of vocational high school and Postgraduate (Master / PhD) is recorded as the groups that verify information received the most, at the percentage of 50 percent. The next groups are elementary school (42.1 percent), high school (24.2 percent), middle school (23.8 percent), diploma (15 percent), and undergraduate (13.8 percent).
percent). The group of people which never receive formal education and elementary school are both 0%.

5. CONCLUSION
From the data shown above, several interesting issues are found: (1) Educational background and monthly income influence the internet access of Gianyar people. The higher their education, the higher is their access to the internet. The same thing goes to the higher monthly income. It shows that the respondents with higher educational background and monthly income have more access to the internet. (2) However, there is no significant difference in responding hoaxes or false information in all variables; educational level, age, monthly income, and occupation. Another interesting thing is that women are more vulnerable to hoaxes or false information than men. Regarding to this matter, women should have higher digital literacy than men. Besides, women tend to ignore whether the information they got from social media is true or not, that makes them more susceptible to false information.

This matter requires attention because the previous research from Brenner (2012) stated that women as user are known (to be) more active in social media than men. Women also have different motives than men in using social media (Chen, 2013). Ironically, women are noted as users that have no critical skill, tend not to question the information they receive and believe it straightaway. According to decision making theory, a person will respond differently to each situation depending on personal characteristics. Rakhmat explained that habit and emotions are things that influence how a person makes decisions or responds. It is known that women are ignorant of false information due to their habit of not criticizing the information they receive.

5.1 Recommendations
Literacy education is a must for every single level of society today, including the Gianyar community. Looking at various worrying facts about the condition of the level of literacy, some things become the focus of attention, namely the low level of digital literacy by most women. Women are considered as those who are deemed unfit to be given digital literacy understanding. This is due to the stereotype of Balinese society in general about the role of women who are less central in the social culture of society. However, this cannot be used as an excuse to discredit the position of women. Women need to understand literacy because digital literacy will affect the way a person thinks and acts. Women who may be considered not to have an important role should also be given an understanding of digital literacy. Everyone has the right to be a literate person.

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