THE ANALYSIS OF HOAX SPREAD IN SOCIAL MEDIA

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Abstract: This study discusses about the spread of hoaxes in Indonesia. The spread of hoax is done through interpersonal communication either direct communication or media communication. Thus, the technological development increases the speed of hoax spread. The spread of hoaxes in Indonesia itself has reached a very alarming level. Hoax spread rapidly, raising debates and anxieties in society related to daily behavior and The State issues. This study uses descriptive approach applying validity and reliability test which may facilitate the researcher to draw clearer conclusion. The validity test is counted using correlative Pearson while the reliability is calculated using Chronbach's Alpha estimates In addition, descriptive statistical analysis is also used in this study to describe the results of the study. Descriptive data analysis is a summarized answer given by respondents to the questionnaire. The participant in this study is all users of Facebook in Indonesia which is then selected randomly. The results or each research variable analyzed in this study show positive responses. Thus, Naive Realism, Confirmation Bias, Social Identity, Normative Influence, Social Competence and Personal Competence simultaneously influence on the dependent variable is Hoax Spread.

Keywords: hoax, social media, communication, and information.

I. Introduction

The development of informational technology stimulates the increasing of internet users massively in all over the world. Based on the data of internetworldstat.com, the number of global internet penetration in six geographical areas is more than 50%. Further, Asia owns 46.7% internet penetration (internetworldstat.com, 2017).

The comparison between internet development and world population shows that Asia has the largest population level that is 55.2% with total population of 4,148,177,672. The number of internet users in Asia is as many as 1.938.075.631 people. The percentage rate of internet user growth in Asia is from 2000 to 2017 is 1.595,5%. Infact, Indonesian's population is about 263,510.146 people. Based on the statistics, internet users per September 2016, Indonesia has penetration rate of 50.4%. The number of Facebook account users in Indonesia as of June 2017 is 126 million people (internetworldstats, 2017).

The growth of Internet users and Social Media in Indonesia is increasing fast which facilitate people to access more information. The dissemination of information has many positive effects such as rapid development of science, easy interaction and communication among individuals without any geographical boundaries. However, the growth of internet users also causes the appearance of hoaxes. In fact, the use of technology also treat asymmetric threats to the state defense system i.e. threats from individuals, groups, or countries. Asymmetric warfare threats do not use armed force instead of using technological support so that everyone is able to do the treat either by individuals, groups or non-state actors. According to AdiSulistyo (2013), Asymmetric warfare is a modern warfare that does not require any physics, energy and gun consideration.

This kind of threat will touch all aspects of Indonesia, military and nonmilitary defense easily. This threat can be formed in news, information, rumors and any other written or spoken expression. Berkowitz (1995) implied information warfare as a war in an information network. This is different from Michael Ignatieff'sopinion (2005) who tent to see the impact of technological advances. He points out in another perspective that the consequences of the information age are the emergence of Virtual War. The virtual war is a battle committed by ignoring the human morality aspects (Ignatieff, 2005: 8).

One of the threats covered by asymmetric threat is propaganda. It is a word originated from Modern Latin, *Propagare*, which means development. It is a series of information aimed to influence people's point of view and

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attitude. Propaganda is a deliberate and systematic way to shape perceptions, to manipulate the mind, and to influence attitude directly.

Hoax is derived from the Latin word, *hocus pocus*, formulated as *hoc est corpus meum* ("this is my body"), or the emulation of the 16th century term "*haxpax max deusadimax*" (Heyd, 2008: p.1) . Wikipedia divides hoaxes into 25 sub categories, including: Hoaxes by century, Hoaxes by country, Hoaxes by year, April Fools' Day, Death hoaxes, Hoaxes about drugs, Factitious disorders, Fake lore, False writing systems, Hoaxes in fiction, Fictitious entries , Forgery, Impostors, Internet hoaxes, Journalistic hoaxes, Nonexistent people used in hoaxes, Paranormal hoaxes, Performance hoaxes, Racial hoaxes, Religious hoaxes, Hoaxes in science, Self-styled orders, Urban legends (Wikipedia, 2017).

Based on Mastel's survey (2017), the categories and percentage of hoaxes commonly accepted by people reveal to several types of hoaxes, such as: social political (91.8%), SARA (ethnicity, religion, race, and inter-group relations) (88.6%), Health (41.2 %), food and beverages (32.6%), financial fraud (24.5%), IPTEK (Technological science) (23.7%), hoax news grief (18.8%), joke (17.6 %), natural disaster (10.3%) and traffic 4%. The spread of hoax is done through interpersonal communication either direct communication or media communication. Thus, the technological development increases the speed of hoax spread. The spread of hoaxes in Indonesia itself has reached a very alarming level. Hoax spread rapidly, raising debates and anxieties in society related to daily behaviour and The State issues.

Indonesian Telematics Society (Mastel) conducted an online survey of 1,116 respondents to find out community behavior hoaxes, its shape and channel to respond hoax and its impact on the life of the nation. The results of a survey conducted by mastel mentioned that the respondent defines hoax as deliberate misrepresentation (90.30%), inciting news (61.60%), and inaccurate news (59%) (29.10%), and a reliable source (29.10%) (Mastel, 2017) .

Hoax has a negative impact on society and even Indonesia's life. Its outbreak has become a national problem that causes disunity, political instability and security disturbances that potentially hamper national development. A number of prominent figures expressed their concern about the hoax as follows:
1. JokoWidodo (Indonesia President) recommends "Stop Spreads of False News and Slander" detik.com, February 9, 2017.
2. "The Government Continues to Fight Hoax" beritasatu.com, January 22, 2017
3. Wiranto (Coordinating Minister for Political, Legal, and Security Affairs) stated "Hoax News Disadvantages the Community and Disrupts National Development" antaranews.com, January 3, 2017
4. The Indonesian Force Commander stated "Hoax News Can Bring Division" beritasatu.com, January 22, 2017 (Mastel, 2017).

Based on the Indonesia Law, the perpetrators of hoaxes spread violate Article 28 Paragraph 1 about the Information and Electronic Transactions Act (ITE Law). News hoax is threatened with six years imprisonment and a fine of 1 billion under Article 28 paragraph 1 (hukumonline, 2016).

Article 28 paragraph 1 of Law No. 11 2008 about Information and Electronic Transactions (the "ITE Act") states, "Every person intentionally, and without right to disseminate false and misleading lies resulting consumer losses in Electronic Transactions."

The law of "spreading false news" is also set forth in Article 390 of the Criminal Code with "broadcasting false news". based on the Criminal Code and its Complete Comments Article By Article R. Soesilo (page 269), the defendant can only be punished with Article 390 of the Criminal Code when it turns out that the news is false. The false news do not only tell a hollow news but also misrepresent an event. Based on hukumonline.com, this explanation applies also to Article 28 paragraph (1) of ITE (hukumonline, 2012).

One of the recent cases is the disclosure of the Saracens who have actively disseminated hoax in social media. Based on bbc.com (2017), this group works on order, rule, and has a big impact on society. On August 23, 2017, Indonesia national Police revealed the arrest of the Saracen group who became the actor of a ethnicity, religion, race, and inter-group relations hoaxes. The results of an investigation by the Indonesia National Police related to digital forensics revealed that the group is raising more than 800,000 user accounts through Facebook groups, such as: Saracen News, Saracen Cyber team, and Saracennews.com. Since November 2015, Saracen groups are working in an organized manner, this group proposes to a number of parties to offer dissemination services of ethnicity, religion, race, and inter-group relations issue in social media accounts. Saracen uses social engineering advance technique, multiply effect (BBC, 2017).

Based on a survey of bbc.com (2017) conducted by GlobeScan around January and April 2017 involving 16,000 respondents revealed that most Indonesians are worried about hoaxes on the internet. 90% of respondents admitted to worry which becomes the highest rank of 18 countries surveyed by the BBC World Service. The second

rank is placed by Brazil 92% record. Additionally, The BBC World Service further survey stated that about 79% of respondents in 18 countries are worried about the sheer difference between the original news and hoax on the internet (bbc.com, 2017).

Hoaxes are increasing in many countries around the world. It is often used to attack political opponents or scoop up votes ahead of elections. Generally, it contains bombastic and sensational news and shared through social media like Facebook. In addition, it also aims to gain financial benefits such Saracens, or gain financial benefits from advertising revenue.

The term of hoax is popularized by Donald Trump who calls media such as CNN and the New York Times as a media hoax. It links to online partisan media that respond to hoax to set their own agenda. Ahead of elections, partisan media tend to receive hoax agenda because of political interests to win the candidate. The coverage of hoax then evolves into a variety and becomes automatic by topic. It competes with fact-checkers who seek investigate the false news spread (Vargo, Guo&Amazeen, 2017: p.1).

Besides the hoax spreader group, there are also anti-groups or groups opposing the hoax and trying to provide clarification of facts related to the growth of hoax in. In Indonesia, there are at least two largest anti-hoax communities in Facebook, named as: Indonesian Hoaxes, @TurnBackHoax and Anti-Defamation Society of Indonesia.

From a psychiatric point of view, according to Dr. AndriSpKJ, FAPM from Psychosomatic Clinic of Omni AlamSutera Hospital, hoax news dissemination are caused by several things, as follow:

1. Post update. Someone wants to be someone who updates or the present. This reason is usually from young people or teenagers.
2. Provocation. People mean to hoax with the aim of provoking a commotion or provocation.
3. Anxiety causes a person to spread the hoax without verifying the truth of the news.
4. Gadget all day long. It causes someone to have a lot of free time (Suleiman, 2017).

Based on the description above, the problems encountered in this research are naive realism, confirmation bias, social identity, normative influenza, social competence and personal competence. Thus, the purpose of this study is to know the influence of naive realism, confirmation bias, Social identity, Normative Influence, Social Competence and personal Competence partially and simultaneity to the spread of hoax.

II. **Literature Review**

Hoaxes

Hoax is the promotion and dissemination of news through social media designed as well as possible so that it will look like real. It is designed to influence or to manipulate the opinions of social media users on specific topics for specific purposes (Lion Gu, Kropotov&Yarochkin, 2017: p.5). Hoax campaigns are depending on the triangle of components shown in Figure 1 (Lion Gu, Kropotov&Yarochkin, 2017: p.6).

Figure 1: Triangle of Hoaxes

Fake news is is spread for following reasons: Cost, Anonymity (confidentiality of identity), Credibility (Lion Gu, Kropotov&Yarochkin, 2017: p.6-7). Parties who order fake news have a specific purpose. Its campaigns are usually based on fabricated lies and not really happening. Interesting headlines are important because the scope of the reader's attention is very short in the digital age. A sensational topic will attract the reader's attention. The purpose of this headline is primarily political although there are also other motives. The tools and techniques used become more diverse while the profit-making motivation becomes the point of view (Lion Gu, Kropotov&Yarochkin, 2017: p.8).

Rubin & Conroy (2015) mentioned fake news as deceptive news, including fake news, counterfeit press releases and hoaxes. They cited Pew Internet Research's report on the future of the big data of 2012 which states that despite the big data in 2020 has a trans formative impact on knowledge and understanding of the world. They also reveal the term of Journalistic deception that is the act of communicating false or verbal messages verbally or non-verbally with the aim of initiating or maintaining a false understanding. Rubin & Conroy (2015) divides the news category into some categories, such as: genuine news, finger pointing and deceptive news.

In addition, Shao, C. (et al) (2017) found that social bots play a major role in spreading fake news. Twitter accounts that actively disseminate misinformation tend to be bots. Automated accounts are active in the early days of spreading viral claims, and tend to target influential users. Social media users are vulnerable to this manipulation and re tweet the fake news spread. Shao et.al (2017) suggest that curbing on a social bot can be an effective strategy for mitigating false information dissemination in social media.

Furthermore, Balmas (2014) analyzed the relationship among fake news consideration, disability, alienation and cynicism toward political candidates. He showed that seeing fake news fosters attitude of perceiving incapacity, alienation and cynicism through perception of realism from fake news. While hard news moderates the relationship between seeing fake news through realism perceptions.

Rubin, V.L., Chen, Y. & Conroy, N.J. (2015) designed a fake news detection system to detect and to filter the types of potential fake news. The prediction of a news item being deliberately deceptive is based on an analysis of previous news that is considered true and false. The scarcity of available fake news as a predictive model corpora is a major obstacle in Natural Language Processing (NLP) and deception detection.

The spread of gossip and rumors can be seen as epidemiological information that spreads like a plague in society and from one place to another. The spread of this gossip can be attributed to social influences, beliefs and political extremism. Human behavior against gossip and rumors affect the structure of social networks (Situngkir&Hokky, 2011).

Kai Shu et al (2017) explored the issue of false news by reviewing the existing literature in two phases: characterization and detection. In the characterization phase, he introduces the basic concepts and principles of fake news in traditional media and social media. Meanwhile, the detection stage review some fake news detection approaches from a data mining perspective, including feature extraction and model construction.

Juliswara, Vibriza (2017) tries to conduct media literacy studies to build media literacy models so that people can differentiate useful media content and that cause harm or loss. Media literacy is expected to realize high media literacy capabilities characterized by: 1) critical power in receiving and interpreting messages; 2) ability to search and to verify messages; 3) ability to analyze messages in a discourse; 4) ability to understand the logic of reality creation by media, 5) ability to construct positive messages and to distribute them to others. The media literacy model becomes a relevant requirement to empower netizen to respond the widespread of provocative messages in the online realm especially through social media. High media literacy capabilities empower netizen to not only be aware of the ethics of communicating but also have the constructive skills of receiving, producing and distributing information. Media literacy and education models allow netizen to search and to filter wide information spread.

The Influential Factors of Hoax Spread

Social Identity

The social identity theory according to Tajfel (1982) is a part of one's self-concept which comes from their knowledge on their membership in a social group along with value and emotional significance of the membership. Social identity is related to involvement, care and pride of membership in certain group.

According to Jackson and Smith (in Baron and Donn, 1991), there are four dimensions in conceptualizing social identity, i.e.:

a. Perception in inter group context

By identifying self with a group, the status and prestige of the group will affect the perception of every individual in it. The perception demands individual to give assessment, both to the group and other groups. The higher the level of common perception among individuals, the more vulnerable one is to spreading hoax.

b. In-group attraction

Generally, in-group can be defined as a group in which one has a sense of belonging and "common identity". Meanwhile, out group is a group perceived to be clearly different from "in-group". A sense of "in group" often leads to "in-group bias", which is tendency to see their own group as good.

Based on Social identity Theory, Henry Tajfel and John Tunner (1982) state the prejidice usually occur due to "in-group favoritism", which is tendency to discriminate better or more beneficial treatments for in-group over out-group.

Based on the theory, all of us will try to improve our self-esteem, i.e.: personal identity and social identity from the group we belong with. So, we can reinforce our self-esteem using our personal achievement and we are compared with other individuals. Therefore, the higher the in-group attraction, the more vulnerable it is to spreading hoax.

c. Interrelated belief

Social identity is the whole aspects of one's self-concept which comes from their social group or emotional common membership category and significant result of evaluation. It means that one has emotional attachment to their social group. The attachment occurs after realizing their existence as a member of certain group. People use their social identity as a source of pride and self-esteem. The more positive the assessed group, the stronger the group identity and self-esteem. Conversely, if a group is considered to have low prestige, the group will have low identification. If something threatens self-esteem, attachment to group will increase and aversion to other groups will also increase. The higher the level of inter-individual interrelated belief, the more vulnerable one is to spreading hoax.

d. Depersonalization

When an individual in a group feels like they're a part of the group, the individual tends to reduce values within themselves to match the values in the group. However, this may also be caused by fear of not being 'acknowledged' in the group for ignoring the values and uniqueness in the group. Therefore, the higher the level of depersonalization, the more vulnerable one is to spreading hoax. The four dimensions tend to occur when an individual is amid the group and when they interact with other group members.

Normative Influence

Normative Influence theory states that social acceptance and affirmation are important for one's identity and self-esteem. According to Susan T. Fiske Etal (2010), normative influence is influence to adjust oneself with other people's positive expectations. People have needs for social approval and acceptance which makes them agree with group on common goals for instrumental reasons, i.e cultivating approval and acceptance, avoiding criticism or rejection, or achieving certain purpose. Therefore, normative influence plays a role when the group is considered to have strength and ability to mediate reward and punishment which depend on our behavior. An important requirement is one believes that they're being observed by group and, therefore, one's behaviors can be observed openly. Because of this, people tend to make "socially safe" choices in consuming and spreading information by following the norms in effect in the society despite the news being spread being fake.The higher the level of normative influence means the easier and the stronger one's tendency to make decision safely and to avoid hoax. However, the lower the level of normative influence so that the higher the tendency to spread hoax.

Naive Realism

Naive realism states that consumer tend to believe that only their perception of reality was accurate while other people who disagree are considered ignorant, irrational or biased. According to ProtasiusHardonoHadi (1994), naïve realism is acceptance that just happens on overall objectivity without philosophical affirmation on the acceptance. It's often said that naïve realism maintains qualities which are experience formally regardless of sensation and the way the subject receives it. Therefore, the higher the level of naïve realism, the more vulnerable one is to spreading hoax, and the lower the level of naïve realism, the safer one is from spreading hoax.

Confirmation bias

Consumer tends to choose information which supports their point of view. Because cognitive bias is natural, fake news are often thought to be real by consumers. Once the wrong perception is formed, it's very difficult to change. A study shows that correction of incorrect information (fake news) by presenting correct and factual informationfails

to reduce misunderstanding, but occasionally increases the misperception, especially in ideological groups, Kai Shu, et al 2017: p. 25).

One of the explanations on why people are vulnerable to Confirmation bias is efficient way to process information. People are bombarded with information in the social world and it's impossible to spare time to process information carefully to form unbiased conclusion. Human decision making and information processing are often biased because people are limited to interpreting information from their own point of view. People need to process information quickly to protect themselves from danger. It's adaptive to rely on natural and automatic reflexes which get people out of danger. Another reason for Confirmation bias is protecting people's self-esteem. People like to feel comfortable with them, and finding that their belief on their values is wrong makes people uncomfortable with themselves. Therefore, people will look for information to support their current belief. Another motive is accuracy. People want to feel smart, and information which shows that one has inaccurate belief or makes poor decision shows that one has poor intelligence. Carole Wade's (2008) principle of falsifiability states that a scientific theory must make quite specific prediction so it has the chance of being rejected, so the theory doesn't only predict thing which will happen, but also things which will happen. Principle of falsifiability plays an important role in science because all of us, including scientists, are vulnerable to Confirmation bias, which is tendency to search and accept facts which only support theories and assumptions we like, but ignore or reject facts which contradict our belief.

Therefore, the higher the level of confirmation bias, the more vulnerable one is and the more one tends to spread hoax. Conversely, the lower the level of confirmation bias, the easier it is and the more one tends to make decision safely and avoid hoax.

Media Literacy

Literacy on social media is based on literature review on three theories by experts and practitioners, i.e. computer literacy, internet literacy, and media literacy.

21st Century Literacy Summit in 2002 publishes 21st Century Literacy in a Convergent Media. The summit identifies literacy standard for the 21st century based on science and technology development, Sumiaty&Sumiaty, (2014:79). 21st century literacy surpasses traditional literacy which is based on reading, writing, mathematics, and science. 21st century literacy include 1) Technology literacy which is ability to utilize new media, such as the internet, to access and communicate information effectively; 2) Information literacy which is ability to collect, organize, filter and evaluate information and form solid opinion based on the ability; 3) Media creativity which is individual capacity which continues to grow anywhere to make and spread content to the public; 4) Social responsibility and competence which are competency to calculate social cause and effect of online publication and responsibility to children (Bertelsmann and AOL Time-Warner in NonengSumiaty&NuniSumiaty, 2014:78).

In the information technology era, literacy covers computer literacy and internet literacy. The literacy is referred to as ICT (Information and Computer Technologies) literacy which is related to one's ability to effectively and efficiently communicate and gain information, Sumiaty&Sumiaty, (2014:81).

Sumiaty&Sumiaty (2014:82) state that internet literacy is ability to use theoretical and practical knowledge in relation with internet as a communication and information processing media. Internet literacy is ability to perform communication, search information, etc. via internet to fulfill the needs which are only possible if one has computer literacy.

There are three stages of internet literacy to fulfill three different attitudes and roles of people online, i.e.:

Basic skill – the passive usage of internet user to search information online.

Moderate skill – combination of active and passive usages by those who use internet in searching information online;

Intermediate skill – the combination of active and passive technical usages by those who search information online.

Information technology development presents many alternative information channels to fulfill one's information needs at all times, which are only limited by internet access and ownership of gadgets, e.g. laptop, computer and smartphone.

Media literacy is a necessary skill for citizens to interact properly with media and use it confidently (Hayuningrat, 2010 in Santoso, 2015:84)).

Media literacy is often translated as 'media discerning'. But it's not limited to not being blind to media. Rapid media development, particularly mass media, should be offset with comprehensive media literacy movement, Juliswara (2017:145). Media literacy can be defined as ability to interpret, analyze and produce message via media, Juliswara (2017:p151).

Media literacy can be measured using Individual Competence Framework. Individual Competence is one's ability to use and utilize media. The ability is the ability to use, produce, analyze and communicate message via media.

Further, Santoso states that Individual competence is categorized into:

Personal Competence is one's ability in using media and analyzing media contents. Personal competence consists of:

Technical skills are technical ability in using media. It means one is able to operate media and understand all kinds of instruction in it.

Santoso also measures technical skill based on one's ability in using the internet actively and developing effective information search strategies to solve problem independently (Santoso, 2015:91)

Critical Understanding is cognitive ability in using media, such as ability to understand, analyze and evaluate media content.

Social Competence is one's ability in communicating and developing social relation via media and ability to produce media content. Social competence consists of Communicative abilities are ability to communicate and participate via media. Communicative abilities cover ability to develop social relation and participate in community via media and ability to make and produce media content.

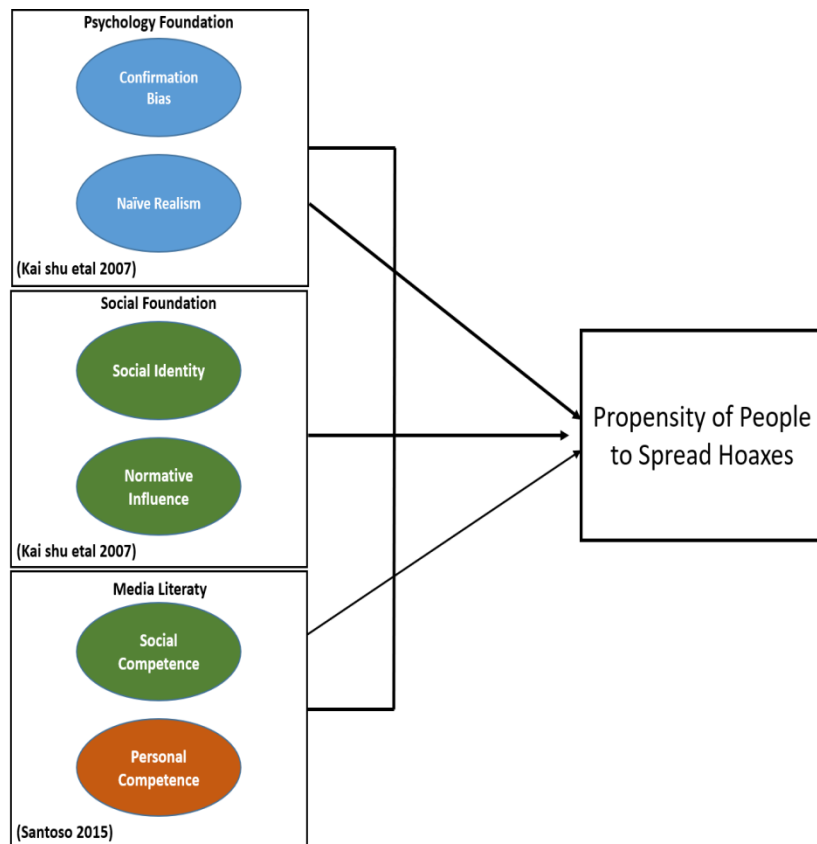Based on the literature review above, the framework of this study can be displayed below.

Figure 2 : The Framework of A person's propensity to spread hoaxes

III. Methodology

This study uses descriptive approach applying validity and reliability test which may facilitate the researcher to draw clearer conclusion. The validity test is counted using correlative Pearson with below formula.

$$rxy = \frac{n\Sigma xiyi - (\Sigma xi)(\Sigma yi)}{\sqrt{\{n\Sigma xi^2 - (\Sigma xi)^2\}\, n\, \{n\Sigma yi^2 - (\Sigma yi)^2\}}}$$

Note:

rxy: the coefficient of correlative product moment Pearson
y: total item score
x: question score
n: questions number

To know whether or not the instrument is valid, the significant level of an instrument reached 5%. If the value of *r* arithmetic >*r* table, it can be concluded that the instrument item is valid. Validity test in this research is done with *SPSS* program version 17.

The reliability test is done to know the strength of correlation of the grains in the questionnaire. The correlation between the items of question can be measured using Chronbach's Alpha estimates with below formula:

$$r_{11} = \left(\frac{k1}{k-1} \right) - \left(\frac{\sum \sigma b^2}{\sigma t^2} \right)$$

Note:

r_{11}	=	Instrument reliability
k	=	Numbers of question
$\sum \sigma b^2$	=	Numbers of variant
σt^2	=	Total of variant

Variant formula:

$$\alpha^2 = \frac{\sum x^2 - \left(\sum x\right)^2}{\frac{n}{n-1}}$$

Note:

α^2	=	Variants
n	=	Numbers of respondent
x	=	the score chosen

The reliability test in this study was calculated using SPSS 17. A variable is considered to be reliably if the Cronbach Alpha is (a)> 0, 6.

In addition, descriptive statistical analysis is also used in this study to describe the results of the study. Descriptive data analysis is a summarized answer given by respondents to the questionnaire. Descriptive statistics aim to provide an overview or description of the data in terms of mean and standard deviation. Descriptive statistics are used to explain the factors that influence a person to spread the hoax news based on the mean value. The mean value is interpreted by the following formula:

Interval distance = Interval (maximum score - minimum score) / Level
Interval distance = (5-1)/ 4 = 0,8

Table 1: Responses category

Very Agree	Agree	Neutral	Disagree	Very Disagree	
5	4.2	3.4	2.6	1.8	1

The above table is explained as below:

✓ If the mean value is between 1 <1.8, the response is categorized as Strongly Disagree / Very Negative.

✓ If the mean value is between 1.8 <2.6, the response is categorized as Disagree / Negative

✓ If the mean value is between 2.6<3.4, the response is categorized as Neutral.

✓ If the mean value is between 3.4 <4.2, the response is categorized as Agree / Positive.

✓ If the mean value is between 4.2 <5, the response is categorized as Strongly Agree / Very Positive.

The population in this study was all social media users in Indonesia calculated using Slovin formula to determine the number of samples. The formula is as follows:

$$S = \frac{N}{N.d^2 + 1}$$

S : Sample
N : population
d : significant standard used in this study (10%)

The primary data is collected through questionnaire and observation which is supported by the secondary data, hoaxes in Facebook.

IV. Result

1. The result of validity test on Naive Realism

Based on the test, each indicator of naive realism can be seen in below table 2.

Table 2: validity test of naive realism

Question code	r_{count}	r_{table}	Note	*Alpha Cronbach*	Note
NR1	0.664	0.163	Valid		
NR2	0.765	0.163	Valid	0.636	Reliable
NR3	0.733	0.163	Valid		
NR4	0.613	0.163	Valid		

Based on Table 2, the four item statements for the Naive Realism variable have met the requirements. There are two requirements that have been met the validity and reliability. The first requirement is validity test using Pearson / Product Moment correlation coefficients (r_{count}>r_{table}). In this test, validity and reliability use 145 respondents or $n = 145$, so r_{table} for Pearson / Product Moment correlation coefficient is 0.163. Due to the value of r_{count}>r_{table}, the entire item of Naive Realism variable instrument is valid. The second requirement is reliability test using Cronbach's alpha. A variable is said to be reliable if the value of Cronbach's alpha is (a)> 0.6. In fact, the

Cronbach's alpha variable of Naive Realism is 0.636, so all items of the Naive Realism variable statement in this study are reliable and can be used to collect research data for all respondents.

2. Validity and Reliability Test Results of Confirmation Bias

Variable Confirmation Bias has three indicators. The validity and reliability testing of each indicator in the Confirmation Bias variables can be seen in Table 3 below:

Table 3: Validity and Reliability Test Results of Confirmation Bias

Question Code	r_{count}	r_{table}	Note	Alpha Cronbach	Note
CB1	0.758	0.163	Valid		
CB2	0.769	0.163	Valid	0.635	Reliable
CB3	0.762	0.163	Valid		

Based on Table 3, the three questions for the Confirmation Bias variables have met the requirements. There are two requirements that have been met its validity and reliability. The first requirement is validity test by using Pearson / Product Moment correlation coefficients (r_{count}>r_{table}). In this test of validity and reliability use 145 respondents or n = 145, so r_{table} for Pearson / Product Moment correlation coefficient is 0.163. Due to the value r_{count}>r_{table}, so that all items of Confirmation Bias instrument is valid. The second requirement is reliability test by using Cronbach's alpha. A variable is said to be reliable if the value of Cronbach's alpha is (a) > 0.6. Due to the value of Cronbach's alpha of Confirmation Bias is 0.635, then all items of Confirmation Bias question on the instrument of this study is reliable and can be used to retrieve research data for all respondents.

3. Test Result of Validity and Reliability on Social Identity

Social Identity has 5 (five) indicators. The result of the validity and reliability test of each indicator in Social Identity variable is explained in Table 4 below:

Table 4: Test Result Validity and Reliability Social Identity

Question code	r_{count}	r_{table}	Note	Alpha Cronbach	Note
SI1	0.653	0.163	Valid		
SI2	0.693	0.163	Valid		
SI3	0.701	0.163	Valid	0.680	Reliable
SI4	0.610	0.163	Valid		
SI5	0.659	0.163	Valid		

Based on Table 4, the five item statements for the Social Identity variable have met the requirements. There are two requirements that have been met, the validity and reliability. The first requirement is validity by using Pearson / Product Moment correlation coefficients (r_{count}>r_{table}). In this test, validity and reliability use 145 respondents or n = 145, so r_{table} for Pearson / Product Moment correlation coefficient is 0.163. Because the value of r_{count}>r_{table}, so all the items of Social Identity variable is valid. The second requirement is reliability by using Cronbach's alpha. A variable is said to be reliable if the value of Cronbach's alpha is (a) > 0.6. Because the Cronbach's alpha Variable Social Identity reached 0.680 values, thus all the items of the Social Identity variable statement in this research instrument are reliable and can be used to collect research data for all respondents.

4. Validity and Reliability Test Results of Variable Normative Influence

Variable Normative Influence has 5 (five) indicators. Based on test result, the validity and reliability testing of each indicator in Normative Influence variable is seen in Table 5 below:

Table 5: Test Results Validity and Reliability Normative Influence

Question code	r_{count}	r_{table}	Note	*Alpha Cronbach*	Note
NI1	0.653	0.163	Valid		
NI2	0.710	0.163	Valid		
NI3	0.760	0.163	Valid	0.662	Reliable
NI4	0.630	0.163	Valid		
NI5	0.502	0.163	Valid		

Based on the table 5, the five items statement for the Normative Influence variable has met the requirements. There are two requirements that have been met namely the validity and reliability. The first requirement is validity by using Pearson / Product Moment correlation coefficients ($r_{count}>r_{table}$). Test of validity and reliability use 145 respondents or n = 145, so r Table for Pearson / Product Moment correlation coefficient is 0.163. Because the value $r_{count}>r_{table}$, so the whole instrument items of the Normative Influence variable is valid. The second requirement is reliability test by using Cronbach's alpha. A variable is said to be reliable if the value of Cronbach's alpha is (a)> 0.6. Because of the Cronbach's alpha of Normative Influence is 0.662, all items of the Normative Influence variable statement in this research instrument are reliable and can be used to collect research data for all respondents.

5. Validity and Reliability Test Result of Social Competence

Variable Social Competence has 4 (four) indicators. Based on the validity and reliability testing of each indicator in Social Competence variable, the result can be explained as Table 6 below:

Table 6: Test Results Validity and Reliability Social Competence

Question code	r_{count}	r_{table}	Note	*Alpha Cronbach*	Note
SC1	0.647	0.163	*Valid*		
SC2	0.675	0.163	*Valid*		
SC3	0.757	0.163	*Valid*	0.662	Reliable
SC4	0.615	0.163	*Valid*		

Based on Table 6, the four statements for the Social Competence variable have met the requirements. Alike with the previous tests, there are two requirements that have been met, the validity and reliability. The first requirement is validity test by using Pearson / Product Moment correlation coefficients ($r_{count}>r_{table}$). This test also uses 145 respondents or n = 145, so r_{table} for Pearson / Product Moment correlation coefficient is 0.163. Due to the value $r_{count}>r_{table}$, so all items of Social Competence variable is valid. The second requirement is reliability test by using Cronbach's alpha. A variable is said to be reliable if the value of Cronbach's alpha is (a)> 0.6. Because the Cronbach's alpha of Social Competence is 0601 value, thus all items of Social Competence variable in this research are reliable and can be used to collect research data for all respondents.

6. Validity and Personal Competence Test Results

Variable Personal Competence has 7 (seven) indicators. Based on the test of validity and reliability on each indicator of Personal Competence, the result is displayed in table 5 below:

Table 7: The Result Test of Validity on Personal Competence

Question code	r_{count}	r_{table}	Note	*Alpha Cronbach*	Note
PC1	0.647	0.163	*Valid*		
PC2	0.675	0.163	*Valid*		
PC3	0.757	0.163	*Valid*		
PC4	0.615	0.163	*Valid*	0.662	Reliable
PC5	0.675	0.163	*Valid*		
PC6	0.757	0.163	*Valid*		
PC7	0.615	0.163	*Valid*		

Based on table 7, it is explained that the seven statements for the Personal Competence has met the requirements. The validity test is by using Pearson / Product Moment correlation coefficients (r_{count}>r_{table}). In the test of validity and reliability, 145 respondents are used or n = 145, so $r_{table}$for Pearson / Product Moment correlation coefficient is 0.163. Because the value r_{count}>r_{table}, it can be concluded that all items of the instrument variable Personal Competence is valid. Meanwhile, reliability test using Cronbach's alpha. A variable is said to be reliable if the value of Cronbach's alpha reaches (a)> 0.6. Because the value of Cronbach's alpha in Personal Competence is 0.601, then all items of the Personal Competence statement on this research are reliable and can be used for data retrieval for all respondents.

7. Descriptive Statistic

This section explains the research variable of this study. This study uses descriptive analysis to explain the tendency of answers given by the respondents. The tendency to the dimensions and the variables in this study were analyzed using the mean and mode analysis. The process of calculating data uses *SPSS*. The explanation of the data analysis regarding the respondents' assessment toward Naive Realism, Confirmation Bias, Social Identity, Normative Influence, Social Competence and Personal Competence and Hoax Spread is displayed below.

Table 8: Class Division Descriptive Analysis

Limit	*Naive Realism*
$1.00 < X \leq 1.80$	Really disagree/ very negative
$1.80 < X \leq 2.60$	Disagree/negative
$2.60 < X \leq 3.40$	Neutral
$3.40 < X \leq 4.20$	Agree/positive
$4.20 < X \leq 5.00$	Really agree/ very positive

Data distribution of respondents' answers based on Naive Realism, Confirmation Bias, Social Identity, Normative Influence, Social Competence and Personal Competence and Hoax spread is explained in table 9.

Table 9: Descriptive Research Statistics

Descriptive Statistics					
	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Naive Realism	145	1.5	5	3.8241	0.65094
Confirmation Bias	145	1	5	3.2253	0.77962
Social Identity	145	1.6	5	3.4483	0.65713
Normative Influence	145	2	4.8	3.4731	0.65099
Social Competence	145	1.5	5	3.4569	0.67014
Personal Competence	145	2	4.57	3.3566	0.53473
Hoax spread	145	1	2	1.5448	0.49971
Valid N (list wise)	145				

Based on the data presented in Table 9, the descriptive statistics of Naive Realism (X_1) shows most respondents responded positively to the questions about the Naive Realism with the total score of the average is 3.8241 averages. Considering the standard deviations of less than the average value, the data used in the Naive Realism variable has a small distribution but well in data applied.

In term of Confirmation Bias analysis (X_2), it shows that most respondents gave neutral responses to questions about Confirmation Bias with a total average score is 3.2253. The standard deviation consideration which is less than the average value, the data used in the Confirmation Bias variables has a small distribution and good data.

Meanwhile, Social Identity observation (X_3) indicates that most respondents gave positive responses to questions about Social Identity variables with the total score of average reaches 3.4483. It means that its variable has small distribution and good data.

Additionally, the Normative Influence investigation (X_4) shows that most respondents gave positive responses to the questions about the Normative Influence variable with the total score of the average reaches 3.4731 average. Thus, the standard deviation whose value is less than the average causes small distribution and good data.

Similar the previous one, the descriptive statistics of Social Competence Research (X_5) shows that most respondents gave positive responses to questions about the Social Competence variable with the total score of the average is 3.4569 averages. Hence, the Social Competence variable also has a small distribution and good data.

Furthermore, Personal Competence Research (X_6), also shows that most respondents gave positive responses to questions about the Personal Competence variable with the total score of the average score is 3.3566 average. Therefore, the Personal Competence variable has a small distribution and applies good data.

In the end, Hoax Dissemination Research (Y) shows that most respondents responded strongly disagree / negative to the questions about the Hoax Distribution variable with the total score average is 1.5448. Considering the standard deviations of less than the mean value, so the data used in the Hoax Distribution variable has a small distribution and good data.

V. Conclusion

Based on the statistical test results on the three research variables, it's concluded that the six independent variables, i.e. Naive Realism, Confirmation Bias, Social Identity, Normative Influence, Social Competence and Personal Competence, in the present study simultaneously had significant effect on the dependent variable, i.e. Spreading Hoax (Y). Moreover, based on the result of correlation test among variables, it's concluded there was a positive relation between Naive Realism and Spreading Hoax, in which they have "moderate" relation. There was positive relation between Confirmation Bias and Spreading Hoax, in which they had "moderate" relation. There was a positive relation between Social Identity and Spreading Hoax, in which they had "moderate" relation. There was negative relation between Normative Influence and Spreading Hoax, in which they had "moderate" relation. There was negative relation between Social Competence and Spreading Hoax, in which they had "low" relation, and there was negative relation between Personal Competence and Spreading Hoax, , in which they had "low" relation.

Based on the result of partial regression test, it's concluded that Naive Realism had significant effect on Spreading Hoax, Normative Influence had significant effect on Spreading Hoax, Media Literacy (Social Competence) had significant effect on Spreading Hoax.

Based on the research findings, it's concluded as below points.

1. Positive feeling will occur if news or information supported reader's point of view (Naïve Realism), so one tended not to care whether the information they received was correct or not. One would be considered "naïve" if they trusted excessively. Therefore, naïve people were easy to fool. They were vulnerable to spreading unfiltered information. It was worse if one had poor knowledge in using the internet. Another tendency was user only looked at headline without checking content and instantly opined that the information was correct because the information in the headline supported their point of view. Particularly if the information was sent from reliable friends or credible media, people made comments based on headlines or immediately shared it.

2. Social acceptance and affirmation are important to one's identity and self-esteem (Normative Influence). People who didn't care about their self-esteem and identity were very vulnerable to spreading hoax. In supporting the spread of hoax, one tended to make "socially unsafe" choice in consuming and spreading information by not following the norms in the society. Social media wasn't only an important media, but had also turned into one's self-identity. We can see how a social media turned into someone's "second mouth", thus making social media virtual representative. As a virtual representative of self, one would show one's true self on social media. Although sometimes reality was different from what happened in the virtual world, not everybody acted this way as people used social media differently.

3. Media Literacy (social competence) is the ability to communicate and participate via media. Communicative abilities include ability to develop social relation and participate in community via media and ability to make and produce media content. It's also an ability to evaluate and communicate information in various formats, including written and unwritten, which strongly affected the spread of hoax.

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