



# Analysis of Political Preferences on Information Acceptance Decision Making in the Perspective of Motivated Reasoning.

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**Abstract.** Fake news is information that is fabricated and presented deliberately for the purpose of misleading and obscuring true reality into false. In its presentation, the information is made in such a way as if it is a legitimate journalism editorial. Fake news information is usually related to important issues, especially in politics. With a massive spread and difficult to detect, fake news has unsettled policy makers and scientists. Some people who are vulnerable to the spread of false information become a social problem that disrupts the smooth functioning of society because it can have a negative impact on social life, such as the emergence of misinformation, polarization, political condemnation and hatred and the decline in the level of public trust in the government. This research aims to find out an in-depth description of the factors that influence individuals in the decision-making process of receiving information and trusting fake news. The method used in this research is a case study with 2 research respondents. The criteria for respondents are having a pro-government and opposition political orientation and having participated in the 2014 and 2019 elections in Indonesia. The theoretical framework in this study uses the theory of motivated reasoning which is used as the theoretical basis for researchers to explore the case under study. The results found that the political beliefs of individuals who have partisan bias or certain political preferences tend to accept information that supports their beliefs and ignore information that is irrelevant to their beliefs, regardless of whether the information is true or false. Several aspects of political preferences such as cultural values, religion, media, trusted person, and social environment have a role in shaping individual beliefs in the decision-making process of receiving information.

**Keywords:** Fake news; Decision making; Motivated reasoning; Political preference.

## 1 INTRODUCTION

Referring to Collins-Dictionary (2017), from 2016 until now, fake news spread through online news portals has become a serious problem in influencing the formation of public opinion. In its development, fake news is used as another tool in the repertoire of political propaganda. In addition, fake news has also developed in other fields such as health, consumer, and finance. Even leading scientific journals are not free from fake news in the form of deliberate reports with the aim to deceive based on manipulated or freely created

data (Bar-Ilan & Halevi, 2020). Other issues such as climate change (Lutzke et al., 2019) Covid-19 (O'Connor & Weatherall, 2020) are also not free from the target of fake news.

Fake news is news that is fabricated and presented deliberately for the purpose of misleading and obscuring true reality into false, by spreading false information (Buckingham, 2019). In its presentation, fake news is made in such a way as if it is a legitimate journalism editorial (Calvillo et al., 2021). Its rapid spread has a significant impact on society because manipulated and falsified content is easier to generate and harder to detect (Gupta et al., 2022). For example, the spread of fake news about the Covid-19 pandemic, such as claims of various "cures" for Covid-19 that can be cured through boiled garlic, chlorine dioxide drinks and others, has created panic in many countries. In addition, due to the hoax of the Covid-19 vaccine containing pork oil and haram (according to Islam), many people refuse Covid-19 vaccination (Maulana, 2021). In the political realm, there is an increase in political polarization and condemnation, beliefs and political attitudes of a person who no longer believes in the truth of information from the government and the media (Strandberg et al., 2018).

In Indonesia itself, political polarization developed, especially during the 2019 presidential election, which led to the division between two camps, we call it the *cebong* camp (pro-government) and the *kampret* or *kadrun* camp (anti-government). The enormity of the division still leaves seeds of hatred between the camps (groups). For example, the anti-government group will support and follow anyone who is against the government, and vice versa, both groups defend and justify their respective beliefs. This phenomenon is utilized by some people to strengthen their beliefs through the spread of fake news, hoaxes, hate speech and the like in order to maintain their group's ideology. The information is disseminated through social media platforms such as online news, fan pages, WhatsApp groups, Twitter, Facebook, Instagram and so on.

Seeing the impact caused by the spread of fake news, this then becomes a question, who is prone to believe in fake news, and why? Pedersen and Hartley (2017) mentioned that the belief and acceptance of inaccurate information such as fake news, hoaxes or fake news as truth is referred to by some researchers as false belief. The prevalence of false beliefs that develop in society is a social problem that disrupts the smooth functioning of society because it can have a negative impact on social life. False belief is defined as a form of false belief that is influenced by the strength of attitudes, and the level of individual confidence in believing the truth (Pedersen & Hartley, 2017). A number of psychological factors such as cognitive bias affect a person's belief in fake news, this bias affects a person in evaluating and understanding the news or information received. Some studies refer to it as confirmation bias, which means the tendency of humans to seek, select, and remember information that supports their beliefs or views. In the context of belief in fake news, confirmation bias can strengthen and maintain a person's belief in false information that

matches their views or interests (Roozenbeek, J & Linden, 2019).

For this reason, this study was conducted to explore the process of belief formation in individuals related to belief in fake news in the political sphere. This research uses the theoretical framework of motivated reasoning as a foothold in thinking and analyzing individual motivations related to their beliefs about fake news. The case study analysis was conducted qualitatively using in-depth interview techniques with respondents who have different political preferences, namely the pro-government (*cebong*) and opposition (*kampret/kadrun*) political camps. This analysis is used to find out in depth whether an individual's political preferences can shape their beliefs in believing false information. Then, what factors have a role in shaping their beliefs.

## 2 THEORETICAL FRAMEWORK

**Motivated Reasoning.** The Motivated Reasoning approach was first raised by Kunda (1990), where according to this theory that the motivation to maintain beliefs or beliefs is the main factor that drives motivated reasoning. This occurs when individuals have strong beliefs or beliefs in an object, these individuals will only look for evidence that supports their beliefs, while ignoring contrary evidence. Kunda points out that motivated reasoning can occur in a variety of contexts, including politics, religion, and health. In political contexts, individuals tend to seek information that supports their political views and ignore conflicting information. In religious contexts, individuals tend to seek evidence that supports their religious beliefs and ignore evidence to the contrary. In the health context, individuals tend to seek information that supports their beliefs about health and ignore conflicting information.

Overall, Kunda's contribution provides further understanding of how psychological motivations can influence decision-making and how motivated reasoning can occur even when people are unaware of their motivations. Previous research on belief in false information found that individuals who have low cognitive abilities tend to believe fake news more easily, and they tend to use motivated reasoning to maintain their belief in fake news (Pennycook & Rand, 2020). In the political realm, Nyhan (2021) found that despite clear facts and information, biased individuals tend to maintain their belief in fake news that matches their political views. While Roozenbeek and Van der Linden, (2019), showed that individuals who are overconfident in their political beliefs tend to be more easily influenced by fake news and become cognitively biased. Then Clayton et al., (2019), who examined the message source cue where individuals exposed to false information tend to judge the false statement as accurate than individuals exposed to correct information, regardless of their political preferences.

In the realm of health, Kahan, (2010), conducted a study on the influence of psychological motivations such as group affiliation, political values and beliefs and beliefs about health

risks, affecting their views on human papilloma virus or HPV vaccination. Then Freeman et al, (2020), found that individuals who have high belief in the Covid-19 conspiracy are more likely to use motivated reasoning to assess information about the Covid-19 pandemic. They tend to be more skeptical of official information from the government and health experts and are more likely to accept untested or unproven information as fact. This is in line with Millar's (2019) research, which found that belief in the Covid-19 conspiracy is higher in individuals who tend to use motivated reasoning to evaluate information related to the pandemic. They found that belief in the Covid-19 conspiracy is related to "intuiting" that the information provided by the authorities is incorrect and tend to reject information that contradicts their beliefs. In another study by Allington et al. (2020), it was found that people who have a belief in the Covid-19 conspiracy tend to ignore information about the Covid-19 pandemic that does not match their beliefs. These factors are the motivations that underlie individuals in the decision-making process of receiving information. Some of these studies illustrate how decision-making in individuals is based on pre-existing motivations or beliefs. This is then the reason for researchers to conduct a deeper exploration of what factors and values are embraced by individuals with certain political preferences so that this can shape their beliefs in the decision-making process to receive information in accordance with their beliefs.

**Political Preferences.** Political preference refers to an individual's inclination or preference towards the views, policies, and political parties they support. It includes the political beliefs and values that underlie their views on certain political issues. An individual's political preferences tend to form the basis of their beliefs about political news and information. In motivated reasoning, individuals tend to seek and interpret information that is consistent with their existing political views. This means that they are more likely to believe fake news that matches their political preferences and doubt or ignore conflicting information. For example, an individual with conservative political preferences may tend to believe fake news that supports their conservative views, whereas an individual with liberal political preferences may tend to do the same with fake news that matches their views. Political preferences are shaped by various factors, including personal experience, cultural background, religion, education, and socioeconomic factors (Anthonius, 2012). This research proposes several factors that play a role in the formation of political preferences in individuals, which will be explored in more detail to get an in-depth picture of what motivates individuals psychologically, which involves subjective assessment of information in accordance with individual goals, values, and beliefs, as in the following chart:

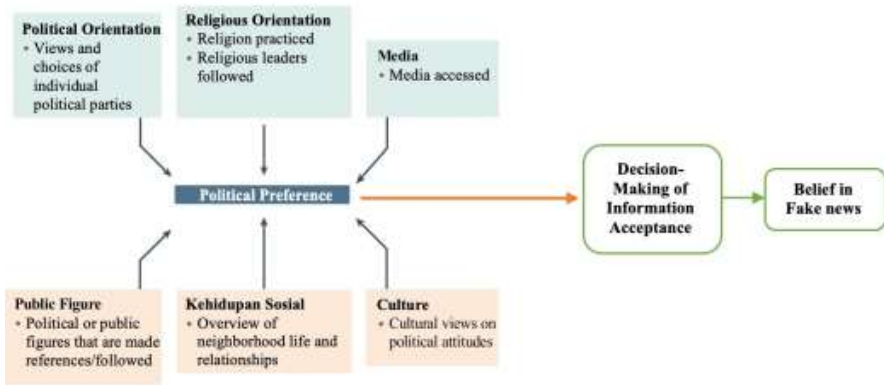


Figure 1. Driver's factor of decision-making of receiving information

### 3 RESEARCH METHODS

This research uses a qualitative method with 2 research subjects randomly selected using purposive sampling, with the criteria that respondents have participated in political contestants in 2014 or 2019 in Indonesia. Respondents have a political orientation background (right/left). Data collection methods in this study were carried out using observation, interview, and documentation methods. Before determining respondents, researchers conducted a search for prospective respondents by looking at the timeline history on their social media, the aim was to get an overview of the respondents' political orientation background. From the search results, finally obtained 6 respondents who came from different camps. After confirmation, 2 respondents were finally obtained who were willing to be involved in this study. Previously, respondents were given informed consent before the interview. The analysis technique uses narrative analysis which focuses on deepening the respondent's experience of the context to be studied.

### 4 ANALYSIS AND DISCUSSION

After conducting interviews with 2 respondents with different political orientation backgrounds (right/left), the researcher then conducted an analysis based on the model that had been proposed at the beginning. Here we explore why individuals believe in false information from their political preferences. The following is a one-by-one description of the analysis results obtained through interviews with respondents. Researchers distinguish between respondent A as a pro-government respondent (right) and Respondent B as an

opposition (left).

**Political Orientation.** The following is the data obtained regarding the description of respondents in their political views, here describing the political parties followed, political figures followed and trusted in terms of receiving information and government political policies.

**Table 1. Political Orientation**

Political orientation	Respondent A	Respondent B
Presidential Election 2014 & 2019	Prabowo - Hatta Rajasa (2014) Jokowi - Ma'ruf Amin (2019)	Prabowo-Hatta Rajasa (2014) Prabowo-Sandiaga Uno (2019)
Political party groups	PDS (peace and prosperity party), PDIP (struggle Indonesian democratic party), PSI (Indonesian solidarity party)	PKS (prosperous justice party), Gerindra Party, Democratic Party.
Public figures or political figures that are liked/followed	Jokowi, Megawati, Ahok	Susilo Bambang Yudoyono, Anies Baswedan, Yusuf Kalla
Public figures or political figures that are disliked/followed	Habib Rizieq, Anies Baswedan	Jokowi, Megawati, Luhut Binsar Panjaitan

From the description of the table above, the two respondents have different political orientations, and this illustrates the tendency towards preferred political groups. Respondent A tends to like political figures who have the same political background that he follows. And dislikes figures who are opposite to his ideology, namely Habib Rizieq and Anies Baswedan. *"Because it is frontal, if Habib Rizieq is preaching it is not soothing, leaning towards his group only"*

Respondent B also described a tendency to like political figures who have the same background and motivation as himself. In addition, the character in profile is described as having a good image in the eyes of the community.

*"I like someone because of his profile, from what I receive from the news, social media, media. Now Anies Baswedan is the most consistent, with the image that is spread and what I feel."*

Whereas dislike for the character is because the character is not consistent with what they say such as their political promises.

*"Yes, it means that because from the news, from the statements, from the visions and*

*missions that they seem to utter in the media, the same actions are far different, upside down, it doesn't match reality, it doesn't prove their initial promises, what they said was all lies."*

In relation to its influence on trust in the information received, respondents tend to believe in information that supports their group and distrust it if the information does not support the group they follow. Even when the figures they follow say that the information is true, respondents will believe the figures they follow. Vice versa, when a figure he doesn't like says the real information, he doesn't tend to reject it even when the information supports his group. As obtained in respondent A as follows:

*"When a figure that I don't like is like Habib Rizieq, I think that at most he only leans towards his group, if Megawati is more Pancasila."*

While respondent B will only believe in figures who are consistent with what they say and come from their party sympathizers, namely PKS, they will believe in the information and statements they convey, following the data obtained from respondents:

*"Because we see the news of corruption cases coming mostly from the PDIP, Golkar parties, so they are less trustworthy, in contrast to the PKS party."*

**Religious Orientation.** The following is the data obtained regarding the description of respondents in terms of religious views, here describing the religion practiced, religious leaders followed and trusted in terms of information and government political policies.

**Table 2. Religious Orientation**

Religious orientation	Respondent A	Respondent B
Religion practiced	Kristen	Islam
Religious Ideology	Not relevant in Indonesia	Caliphate (khalifah), but not implemented now
Public figures or religious figures that are liked/followed	Pastor in the Church	Habib Rizieq, Abdul Somad, Adi Hidayat,
Public figures or religious figures that are disliked/followed	Habib Rizieq	Yusuf Mansur

The table above illustrates that religious orientations differ in their views on ideologies and religious figures that are followed or favored. This also shapes individual beliefs about the information they receive. When there is information coming from a favored religious figure, individuals will tend to follow and believe what is conveyed by that figure. The results of the data obtained from respondent A are as follows:

*"The pastor is my spiritual teacher, so if he says what we have to follow, for example in terms of elections, even if in 2024 he says to vote for Prabowo, we will vote for Prabowo, whether it is true or not is a matter of later, the important thing here is that we must submit*

*to what the cave pastor says, the point is that if the pastor says what we believe and follow what he says."*

Meanwhile, respondent B likes smart religious figures such as Adi Hidayat, Abdul Somad and brave clerics such as Habib Rizieq. These three figures are a reference for trust in information related to political, health and religious conspiracies, such as information related to Covid-19, government policies and so on.

*"I believe in whatever they say, even yesterday when the covid-19 vaccination, I will only get the vaccine if Ustadz Adi Hidayat participates in the vaccine."*

Meanwhile, related to covid conspiracy information, respondents only believe in people they consider credible and who they like. Those they do not like are considered to have no credibility. This means that the role of figures who are considered credible has an influence in shaping their beliefs in receiving information, whether the information is true or false.

*"If Ustadz Adi Hidayat says Covid-19 is a conspiracy, I believe it, but if Jokowi (a political figure who is not liked) says that Covid-19 is a conspiracy, I still don't believe it, whatever Jokowi says I won't believe it, or Yusuf Mansur says I don't believe it, they (Yusuf Mansur and Jokowi) are already a group."*

**Media Channels.** The following is the data obtained regarding the description of respondents in accessing information from the media. The type of media accessed illustrates the view of the truth of the news. For respondent A, news or information coming from anti-government media will not be followed or trusted, whether the information is true or not. Respondent B will only believe and follow news that supports her political beliefs. The following is a description of the media that respondents follow as shown in the table.

**Table 3. Media Channels**

Media Channels	Respondent A	Respondent B
Frequently accessed media to get information	Social media (IG, Tiktok), online news portals	Social media (IG, Tiktok, twitter), online news portals
A look at the media in Indonesia	Media is used as a propagandatool and political campaign	The media is used to throw issues, especially media that support the government
Preferred media and news references	Detik.com, Kompas, kumparan	Tempo, Republika, CNN, MetroTV (since 2022)
Media that are disliked and not used as news references	Lambe Turah, TV-One. Metro TV (since 2022), Pos Kota	Detik.com



From the table above, the tendency in accessing news for the two respondents has different sources, where according to the respondents, the media tends to be politically oriented in providing information. As it is known that detik.com online media tends to be more pro-government, this respondent A will be used as a reference in receiving information. In contrast to respondent B who will refer to Tempo and Republika, it is known that Tempo often publishes news that criticizes the government.

*"I trust news from detik.com if others don't" (respondent A)*

*"Whatever is reported by Detik I won't believe, I trust Tempo or Republika which are more neutral" (respondent B).*

In this case, the media also has a role in the decision-making process in receiving information. When the information or news comes from the media that he likes, it tends to be followed or believed. Vice versa, information that comes from media sources that are not followed, the information is considered to have no credibility.

**Public Figure or Political Expert.** Next, respondents described the role of public figures or political experts who are used as references in trusting information.

**Table 4. Public Figures or Political Experts**

Public Figure / Political Expert	Respondent A	Respondent B
Favored public figure/ political expert	Megawati, Luhut Binsar, Renald Kasali, Ahok	Rizal Ramli, Susi Pudjiastuti, Fadli Zon, Rocky Gerung
Unfavorable public figures/ political experts	Rocky Gerung	Sri Mulyani, Mardigu, Renald Kasali, Ade Armando
Political experts followed on social media	Renald Kasali	Rocky Gerung

The table above illustrates that respondents with different political orientation backgrounds also have a preference for different figures. It can be seen that the figures or experts they like are figures who have similar political orientations. In fact, they will only believe the information conveyed by the political figures or experts they follow.

*"If Sri Mulyani says that Indonesia is experiencing economic stability, I don't believe it, but if Rocky Gerung says that Indonesia is not doing well, I will believe it" (Respondent B).*

**Social Life.** The respondents' description is related to their social life, where friendship relationships that have a background of similar political orientation have a role in shaping beliefs in political information trust. Information conveyed by fellow friends who have the

same belief relationship through media portals or WhatsApp groups, further strengthens their beliefs.

**Table 5. Social Life**

Social Life	Respondent A	Respondent B
Activities that are often participated in	Religion in the Church	Business Training
Intensity of interaction with friends who share your political orientation	Often in WhatsApp groups, in church	Often in WhatsApp groups, at work.
Intensity of interaction with friends who do not share political orientation	Rarely occurs	Rarely occurs

The table above illustrates that respondents with different political orientation backgrounds tend to interact only with friends or neighborhoods that have similar political orientations. They will strengthen each other and maintain their beliefs in their group through the political information they receive.

**Culture.** The cultural background attached to individuals is believed to be something that can shape individual beliefs in the process of trusting the information they receive. In the Indonesian political scene, cultural views can also be a strong issue in the selection of leaders.

**Table 6. Culture**

Culture	Respondent A	Respondent B
Cultural background	Java	Java
Preferred culture	Javanese, Chinese	Minang
Unfavorable culture	Arabic	Chinese
Cultural background views with political/government leaders	Leaders who are suitable to be leaders come from Javanese and Chinese tribes	Leaders who are suitable to be leaders come from Javanese and Minang tribes

Looking at the table above, cultural background also plays a role, meaning that they will only trust or like leaders or figures from certain cultures.

*"Because of my Javanese background, I trust Javanese more, and secondly because most of my church friends are Chinese, I also trust Chinese, and I find it difficult to trust Arabs, sometimes I think their statements are only for their own group" (Respondent A).*

Meanwhile, Respondent B did not describe his cultural background in receiving information. *"Culture doesn't seem to matter bro, so I depend on the person, culture doesn't seem to affect trust in information, sometimes there are Chinese people who can be trusted sometimes not, Javanese and Minangs are the same."*

## 5 Conclusion

From the results of the analysis above, it can be concluded that political preferences play a role in the process of forming beliefs and making decisions on the acceptance of information, regardless of whether the information is false or true. Regarding fake information or fake news, the results of the analysis above illustrate that a person will accept fake news as the truth if the information supports and is relevant to their beliefs. These beliefs are formed through values such as the same political preferences, religion, cultural background, social environment and relationships with figures or public figures. In political orientation they will only believe in a trusted person and are considered to have credibility. If someone does not agree with their political orientation, that person is considered an untrusted person or someone who is considered to have no credibility so that information coming from an untrusted person will tend to be ignored and not trusted. Other factors such as religion, cultural background strengthen their beliefs regarding the decision-making process of receiving information. This factor acts as a person's motivation when receiving information, someone will accept the information as truth if it is relevant to their motivation.

## References

1. Allington D, Duffy B, Wessely S, Dhavan N, Rubin J (2020) Health- protective behavior, social media usage and conspiracy beliefs during the Covid-19 public health emergency. *PsycholMed*. <https://doi.org/10.1017/S003329172000224X>
2. Bar-Ilan, J., & Halevi, G. (2020). Retracted articles: The scientific version of fake news. In R. Greifeneder, M. Jaffé, E. J. Newman, & N. Schwarz (Eds.), *The psychology of fake news: Accepting, sharing, and correcting misinformation* (pp. 47-70). London: Routledge.
3. Buckingham, D. (2019). Teaching Media in a 'Post-Truth' Age: Fake News, Media Bias and the Challenge for Media Literacy Education. *Cultura y Education*, 31 (2), 1-9. <https://doi.org/https://doi.org/10.1080/11356405.2019.1603814>
4. Calvillo, D. P., Rutchick, A. M., & Garcia, R. J. B. (2021). Individual differences in belief in fake news about election fraud after the 2020 U.S. election. *Behavioral Sciences*, 11(12). <https://doi.org/10.3390/bs11120175>
5. Clayton, K., Davis, J., Hinckley, K., & Horiuchi, Y. (2019). Partisan motivated reasoning and misinformation in the media: Is news from ideologically uncongenial sources more suspicious? *Japanese Journal of Political Science*, 20(3), 129-142. <https://doi.org/10.1017/S1468109919000082>

6. Collins-Dictionary. (2017). Collins 2017 word of the year shortlist. Retrieved May 20, 2023, from [www.collinsdictionary.com/word-lovers-blog/new/collins-2017-word-of-the-year-shortlist,396,HCB.html](http://www.collinsdictionary.com/word-lovers-blog/new/collins-2017-word-of-the-year-shortlist,396,HCB.html)
7. Freeman D, Waite F, Rosebrock L, Petit A, Causier C, East A, Jenner L, Teale AL, Carr L, Mulhall S et al (2020) Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in England. *Psychol Med.* <https://doi.org/10.1017/S0033291720001890>
8. Gupta, A., Kumar, N., Prabhat, P., Gupta, R., Tanwar, S., Sharma, G., Bokoro, P. N., & Sharma, R. (2022). Combating Fake News: Stakeholder Interventions and Potential Solutions. *IEEE Access*, *10*, 78268-78289. <https://doi.org/10.1109/ACCESS.2022.3193670>
9. Kahan, D. M. , B. D. , C. G. L. , G. J. , S. P. (2010). Who fears the HPV vaccine, who doesn't, and why? An experimental study of the mechanisms of cultural cognition. *Law and Human Behavior*, *34* (6), 501-516.
10. Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, *108*(3), 480-498.
11. Lutzke, L., Drummond, C., Slovic, P., & Árvai, J. (2019). Priming critical thinking: Simple interventions limit the influence of fake news about climate change on Facebook. *Global Environmental Change*, *58*. <https://doi.org/10.1016/j.gloenvcha.2019.101964>
12. Maulana, A . (2021). Survey: 45.7 Percent of Residents Still Afraid of being Vaccinated with Covid- 19. <https://Www.Cnnindonesia.Com/Nasional/20210909184452-20-692201/Survei-457-Persen-Warga-Masih-Takut-Divaksin-Covid-19>.
13. Millar, B. (2019). The Information Environment and Blameworthy Beliefs. *Social Epistemology*, *33*(6), 525-537. <https://doi.org/10.1080/02691728.2019.1676840>
14. Nyhan, B. (2021). Why the backfire effect does not explain the durability of political misperceptions. *Proceedings of the National Academy of Sciences of the United States of America*, *118*(15). <https://doi.org/10.1073/pnas.1912440117>
15. O'connor, C., & Weatherall, J. O. (2020). *Modeling How False Beliefs Spread*.
16. Pedersen, A., & Hartley, L. K. (2017). False beliefs about asylum seekers to Australia: The role of confidence in such beliefs, prejudice, and the third person effect. *Journal of Pacific Rim Psychology*, *11*. <https://doi.org/10.1017/prp.2017.5>
17. Pennycook, G., & Rand, D. G. (2020). Who falls for fake news? The roles of bullshitreceptivity, overclaiming, familiarity, and analytic thinking. *Journal of Personality*, *88*(2), 185-200. <https://doi.org/10.1111/jopy.12476>
18. Roozenbeek, J., & van der Linden, S. (2019). The fake news game: actively inoculating against the risk of misinformation. *Journal of Risk Research*, *22*(5), 570-580. <https://doi.org/10.1080/13669877.2018.1443491>
19. Sitepu, P, Anthonius. (2012). *Studi Ilmu Politik*. Graha Ilmu; Yogyakarta
20. Strandberg, T., Sivén, D., Hall, L., Johansson, P., & Pärnamets, P. (2018). False beliefs and confabulation can lead to lasting changes in political attitudes. *Journal of Experimental Psychology: General*, *147*(9), 1382-1399. <https://doi.org/10.1037/xge0000489.su>

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