

Analyze Fact Checking of Haram Sinovac Vaccine Hoax on Twitter Social Media Status

¹Muh. Syaiful, ²Muh. Akbar, ³Tuti Bahfiarti

^{1,2,3} Hasanuddin University, Makassar, Indonesia

Email: muhsyaiful95@gmail.com

Abstract. This research discussed about haram Sinovac vaccine hoax on twitter social media status. There was something unique on Twitter social media which is trending topic system, one of the trending issue was Covid-19 vaccine that arrived from China (Sinovac) and got a lot rejection. This study aimed to determine about the fact of haram Sinovac vaccine. The research used fact checking method. Masyarakat Anti Fitnah Indonesia (MAFINDO) had standard operating procedure in checking the fact with the data collection from status in media social Twitter, on last six months (August 2020 - January 2021). This research indicated six tweets which stated that Sinovac vaccine were haram and also fifteen tweets stated that Sinovac vaccine are pure and halal based on the fact research. By analyze this checking fact, we can distinguish which information are hoax and fact.

Keywords: Twitter, Sinovac Vaccine, Hoax, Fact Checking.

1. Background

The development of information today was very advanced, by disseminating information people would have their own pride to be a source or reference for information [1]. Sometimes, this trend was often not followed by responsibility for the impact that may occur after the information was spread. People tend to be more concerned with the speed with which a message spreads than the accuracy of the message itself. Social media was a new place for spreading hoax information, especially regarding the Covid-19 vaccine. The rise of hoax information was a challenge in dealing with the Covid-19 crisis. In addition, hoax information can cause excessive fear and anxiety about the Covid-19 vaccine. The advancement of information technology has both positive and negative impacts.

Ability to create, disseminate information with incorrect content or messages to various social media platforms so new terms appear, such as hoaxes and information disorder. The hoax are mostly spread in social media [2]. The emergence of a new social divide caused by digital media is alarming, it has the potential to deepen existing differences [3]. Hoax information that related to Covid-19 makes people do not believe in the presence of the virus, let alone vaccines. There was a fear of getting vaccinated because of the many hoaxes that were spread on social media, especially on Twitter. For example, the issue of the arrival of the Sinovac vaccine from China to Indonesia had become a hot conversation among Indonesian netizens. Some parties alleged that the

Sinovac vaccine contained non-halal ingredients and the issue was a trending topic on Twitter social media.

Based on the Decree of the Minister of Health number H.K.01.07/Menkes/9860/2020 regarding Determination of Vaccine Types for the Implementation of Corona Virus Disease 2019 (Covid-19) [4]. There were six types of vaccines ordered by the government, namely, first, the Red and White vaccine was a collaboration between State-Owned Enterprises (BUMN), PT. Bio Farma (Persero) and the Eijkman Institute. Second, AstraZeneca was a vaccine produced by a company from London, England. Third, China National Pharmaceutical Group Corporation (Sinopharm) was a vaccine originating from China and Saudi Arabia was the first country to order the vaccine.. Fourth, Moderna claims its vaccine has an activity of 94.5 percent. At the end of November, Moderna claimed to have applied for an emergency used permit for the Covid-19 vaccine to US and European regulators. Fifth, Pfizer Inc and BioNTech claim 95% of their vaccines were effective against the Corona virus based on a trial on November 18, 2020. Sixth, the Sinovac vaccine was a vaccine originating from China. This vaccine was also being tested in Brazil, Indonesia and Bangladesh.

Information circulating in the community must be verified information. However, not every published information is accurate [5]. Verification needs to be done to found facts by doing this, searching for as much data as possible and getting sources of information through various legitimate sources. Two key elements in the verification process were the source of the media content and the media content itself. In addition, the emergence of the internet in almost all parts of the world was a new phenomenon. Internet technology, also popularly known as social media, is characterized as discursive space [6]. As known, social media was one of the online media where users can participate in finding information, communicating, and making friends, with all the facilities and applications it has such as Blogs, Facebook, Twitter, Instagram, and others. One of the characteristics of the internet that can interact (interactivity) was to blur geographical boundaries. The differences first media and second media are described in the tabel 1 [7]:

Table 1. The differences First Media and Second Media

No	First Media Era (Broadcast).	Second Media Age Era (Interactivity)
1.	Centralized (from one source to many audiences)	Spread (from many sources to many audiences).
2.	Communication is one-way.	Communication is reciprocal or two-way.
3.	Open source or media opportunities to be mastered.	Closed media control and free control over sources.
4.	The audience is fragmented and is considered a mass.	Media facilitates every audience (citizens).
5.	Media is considered to be able or as a tool to influence awareness.	Media involves the experience of audiences both in space and time.

The community's dependence to obtain information from digital media and thus a good level of digital literacy is required to be followed [8].

Therefore, the increasingly sophisticated information and communication technology (ICT) requires users to improve their digital literacy skills. According to Paul Gilster, digital literacy is the ability to understand and use information from various digital sources and regard it as literacy in the digital age [9]. Skills such as reading, writing and dealing with information using technology Digital sources produce many forms of information such as images, sound, text and video. This is the process of the contemporary information society is aided by information technology [10]. It was very important to have digital literacy skills in today's information age.

2. Theoretical Framework

2.1 Social Media Twitter

Solis in his book *Engage the Complete Guide for Brands and Business to Build, Cultivate, and Measure Success in the New Web* describes the meaning of social media. According to him, social media is a platform that facilitates a conversation between friends, co-workers, influences each other, collaboration, calls for humanizing people and exchanging stories. Social media contains words, pictures, videos, chats, audio; experiences, observations, opinions, news, insights and all its users have the same opportunities and rights [11]. Social media is one of new media platforms [12].

Other than that, social media has many forms, among which the most popular are microblogging (Twitter), Facebook, and Blogs. This limitation has given rise to a unique set of features, protocols, and behaviors in media. The basic elements of social media Twitter as follows [13]:

2.1.1 Account

Creating an account on Twitter social media was very easy, we can create personal, company and other accounts. It's very easy to create a Twitter account by entering your first and last name or used the name of the agency or company. Sometimes in creating an account, our name has been used and numbers are usually added so that it does not resemble other accounts.

2.1.2 Avatar

In computing system, an avatar was defined as a user's profile picture or photo. Most of these images are square 48×48 pixels. The image serves to identify someone's account or tweet. Selection of quality images/photos was the best choice for personal accounts, companies so that they can be recognized.

2.1.3 Bio

When creating an account, we have 160 characters called "Bio" to describe who we are. It takes very little time to write a bio on a Twitter user account. Basically, Twitter users have relationships for example from content or user bio. Entrepreneurs tend to have more followers than others, such as official-labeled accounts, founders, experts and authors. I also saw a relationship between followers, gender and family.

2.1.4 Background

Twitter provides the facility to design and upload background images for Twitter user pages. Some users take advantage of adding additional information about themselves,

their social life, the site, and where they can be found. Background images was the best thing to have to strengthen the user's image such as company, logo, color, etc. to make it look attractive.

2.1.5 Following/Followers

When following someone on Twitter, we can see the timeline and vice versa. The number of followers you had was the number of people who had the potential to see your tweets. To increase the reach to see your tweets, should try to get more followers. This was not a bad idea for those who have a corporate account or who want to be famous to follow their followers.

2.1.6 Tweeting

The essence of Twitter was tweet, messages posted to the Twitter wall. The Twitter limit for typing was 280 characters. Users can post such as daily activities, business products, news and others. In addition, users can greet each other or respond to each other.

2.1.7 Replies

Conversations on Twitter are carried out via “@” to do a reply. For example include “@username” to invite or have a conversation between fellow Twitter users.

2.1.8 Retweets

Retweets was the most powerful mechanism for spreading or sharing a post on Twitter. For example, followers of the account would see and be able to share the post. The more Retweets, the more people would see the post.

2.1.9 Direct Message

Direct messages was private messages from Twitter. This feature allows users to send private messages to each other.

2.1.10 Trending Topics

Twitter has developed an algorithm to track words or phrases of up to three words to highlight what topics are most talked about. In addition, users can check what topics were hotly discussed today.

2.1.11 Hashtags

To regularly connect ideas and conversations on Twitter, users frequently use the hashtag. Just a word preceded by sign “#”. Hashtags also shows specific tweets on the same topic. For example, in Twitter searches, users can see conversations using that hashtag.

According to the research from Antoine Jeri Yabar stated that Twitter is the most prioritized social media site in people with depressive symptoms [14].

2.2 Hoax

According to Umaimah Wahida hoax is defined as an untruth faced against a truth [15]. The meaning of hoax as a deceptive activity. We all know that the flow of information was so swift and floods all aspects of life, but the ability to filter, process, organize, and used it critically was still weak. In other words, they underline the degree of factuality of the information being shared [16]. Mature is the speed of the spread of information amid a society quite so rapidly [17].

There was an imbalance between the development of information and poor literacy. The phenomenon that was easiest for us to observe the occurrence This can have a negative impact and turn the situation into confusion and stress or even mistakes in forming perceptions, opinions, and decision, confusion of superficial perceptions, opinions, and mindsets. On the other hand, people are also so easy to believe with all the information presented on the internet. The Press Council provides 4 criteria or characteristics of human rights, namely first, hoax information can cause anxiety, hostility and hatred in people who were exposed to it. Second, unclear sources. Third, imbalance and fifth provocative.

According Warlde and Derakhsan in Nugroho (2020) put forward the types of hoax information into three, namely mis-information, dis-information, and mal-information [9]. Mis-information or mis-information when it was false or false information was shared. One of the products presented by social media was the emergence of false information or hoaxes [18]. Dis-information when information was intentionally false or falsified and was intentionally shared with the public with the aim of causing harm to individuals or certain parties. Mal-information when true information was shared to cause harm to individuals or other parties, it was usually designed to transfer private information for public consumption.

Furthermore, Warlde and Derakhsan in Nugroho (2020) explain the criteria for mis-information and disinformation, namely the first, satire or study program, namely information that was made without any intention to cause damage or harm to others but has the potential to fool. Second, misleading content or content that was misleading with the aim of framing a problem or issue for a particular individual or party. Third, the content that occurs when the original source was imitated. Fourth, fabricated content, new content that was 100% false with the aim of deceiving and harming others. Fifth, false connection or incorrect connection occurs when the header, visuals and captions don't match or don't support the content. Sixth, false wrong context when original content was shared with fake contextual information. Seventh, manipulated content was manipulated when information with the aim of deceiving or harming other parties [9].

2.3 Digital Literacy

Glister was the first to use the phrase digital literacy. According Paul Gilster in Nugroho (2020) digital literacy is the ability to understand and use information from various digital sources and regard it as literacy in the digital age [9]. Digital literacy to be able to suppress the circulation of hoax information and become a useful example for others [19]. Hague and Paton in Nugroho (2020) "Digital Literacy Across The Curriculum" put forward eight components of digital literacy [9]:

First, functional skills and beyond are technological operations related to one's ICT-skills ability to view content from various media. Operational use of technology is related to familiarity with technology, use of technology, and generating data.

Secondly, creativity was how we thinking, build ideas, and share knowledge by utilizing digital technology.

Third, collaboration emphasizes individual participation in the process of dialogue, discussion, with the aim of building ideas to create an understanding.

Fourth, communication was the ability to communicate through digital media such as social media. In addition, having the ability to understand the audience so, when creating or sharing content on social media considers the impact of the content.

Fifth, the ability to find and select information was the ability to search and select information. How a person thinks carefully in seeking information and used sources selectively. Technical dimension concerns Necessary skills to use IT competently [20].

Sixth, critical thinking and evaluation was a component that emphasizes that do not just receive information and interpret information passively but used reasoning skills in analyzing information or material, questioning, researching and evaluating it with the aim of making an argument about information. The cognitive dimension involves seeking, evaluating, and critically synthesize digital information while focusing on ethics, morals and Legal Issues [20].

Seventh, cultural and social understanding was an understanding of the social, cultural community. The social-emotional dimension involves the skills needed to socialize online in an appropriate manner [20].

Eighth, e-safety was a component that emphasizes the safety of users when exploring, creating, collaborating with digital technology, developing skills that allow one to critically question the use of personal property or others.

3. Research Methodology

In this research using the method Fact Checking to browse the facts of sinovac vaccine information. Originally, fact checking referred to checking the truth in a news article before it was published. However, in its development this term refers to the examination of journalists or citizens who are concerned about certain topics. For example political issues, debated scientific works, writings (articles, tweets, speeches, etc. According Cazalens et al (2018), the process of the basic concept of fact-checking investigations as follows [21]: (1) Extracting claims from multiple discourses, (2) Looking for facts that form the basis of the claim, (3) Assessing the accuracy of claims in respect of these matters, (4) Provides perspective for claims for which there was no immediate settlement.

In other than, Indonesian Anti-Defamation Society (MAFINDO) in conducting fact checking, it is very much tied to standard operating procedures (SOP) as a principle in generating facts against hoax information. This principle was caused by Harry Sufehmi in Satyawati (2019), in interview 14 September 2014 [22]: (1) Fair and neutral in terms of political and religious preferences from not influencing the results of fact checking, (2) Reliable in the sense that the fact-checking process must use reliable and accountable sources, (3) Explain at what point the hoax; (4) Screenshots include evidence of hoax articles/information; (5) Does not violate the law in the sense that the dismantling of hoaxes in the process was only carried out by the relevant agencies or was racial in nature. (6) It was forbidden (hunting) to hunt down hoax spreaders and expose their data to the

public. Fact checkers only deny hoaxes, nothing more. The question of finding out who the perpetrator was left to the authorities (police, etc.).

This research has been carried out on social media Twitter related to the Covid-19 vaccine. One of the advantages of Twitter social there was a hashtag system, trending topics, and search engine features that make it very easy for researchers to collect data, especially when vaccines are trending on Twitter.

The data collection process was carried out from 17 August 2020 to 17 January 2021 (last 6 months).

4. Results and Discussion

Results and discussion contain results obtained by the author during the research. The results of the research submitted in advance as a whole, which continues by doing the process of discussion. Results may be presented through text, tables, drawings, graphs, maps, plans, and schema. Discussion must proceed from the general to the specific. Discuss your results in reference to the theoretical background supporting your research, and indicate any novel findings in the

However, to describe the results of the study, the researcher first compiled and provided points so that the results of this study could be understood clearly. The following was information about the illegal Sinovac vaccine hoax based on the findings of researchers within the scope of Twitter social media and hoax information was one of the challenges in overcoming the Covid-19 pandemic.

4.1 Haram Sinovac Vaccine

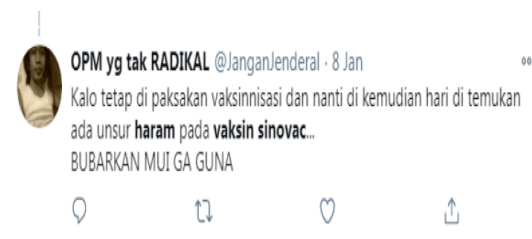


Figure 1. OPM yg tak Radikal @JanganJender



Figure 2. Joy Fanra @FanraJoy

Joy Fanra also retweet Media Oposisi Cerdas @OposisiCerdas about MUI: Sinovac has not completed Halal documents for Covid-19 Vaccines to strengthen the argument of the Tweet account @FanraJoy shared a tweet from @OposisiCerdas about MUI: Sinovac has not completed halal documents for Covid-19 Vaccine even though the contents of the news did not mention the issue of the illegality of the Sinovac vaccine. However, there was several documents that must be completed for the halal certification process.

The excerpt of the tweet above shows a tweet questioning the halal of the Sinovac vaccine. Sometimes these twitter users state that the Sinovac vaccine was haram without being based on clear data and sources. On Twitter account @von_edison ordered Mr.

Jokowi, the Minister, advisors and special staff to be vaccinated first. In addition, the account justifies that the vaccine was made of haram components.

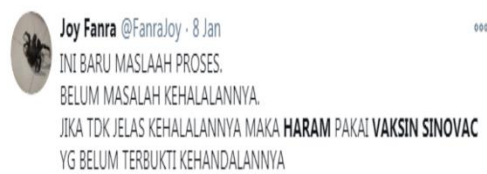


Figure 3. Joy Fanra @FanraJoy

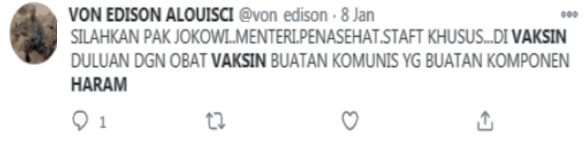


Figure 4. VON EDISON ALOUISCI @von_edison

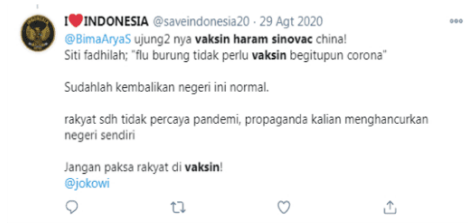


Figure 5. @saveindonesia20



Figure 6. medicine phhysic ideology al chemist al jabar @Ibnxine

4.2 Vaccines of Holy and Halal

The phenomenon of hoax or false information was a new challenge in Indonesia, this was inseparable from the characteristics of the Indonesian people today who generally like to shared information, especially the issue of the Covid-19 vaccine on Twitter social media in the face of the pandemic. Information is one of the important factors in dealing with the Covid-19 crisis. Not infrequently, the information circulating, especially on Twitter social media, was hoax information. Based on the findings, researcher found various hoax information related to the Covid-19 vaccine.

The illegal Sinovac vaccine had become a trending topic on Twitter social media and became a hot conversation among Indonesian netizens. Through the features on Twitter social media such as shares, likes, hash tags, trending topics, it greatly affects the interest in reading and consumption of public information such as news and information that can be shared virally, widely spread and occurs in a short time like a disease outbreak spread by a virus.

There were six tweets indicated as hoaxes stating that the Sinovac vaccine was haram. The six tweets were not based on credible sources and clear data. The Indonesian Ulema Council (MUI) was a related institution or agency that has the right to issue halal or haram certifications from a product, be it food or medicine. In addition, the researchers did not find a fatwa from the Indonesian Ulema Council (MUI) that the Sinovac vaccine was haram. According to the Press Council, one of the characteristics or criteria for hoax information was provocative. For example on account @JanganJender said that if in the future the Sinovac vaccine was declared unlawful, the Indonesian Ulema Council (MUI) would be dissolved. The Twitter account calls for a provocative tone to the public and the information has not been confirmed. Accuracy of information was very necessary so that

it is free from errors and was not biased or misleading. Other than that, the information shared by the account is not based on a clear (credible) source.

Next on account *@FanraJoy* which states that the Sinovac vaccine was Haram. The account has tweeted twice stating that the Sinovac vaccine was haram on January 8, 2021 and December 13, 2020. For example, December 13, 2020 there has been no decision from the Indonesian Ulema Council (MUI), but the account has claimed that the Sinovac vaccine was haram and the verdict has been issued on January 8, 2021 which states that the Sinovac vaccine was halal. Likewise with the account *@von_edison* which states that the vaccine is made with haram components.

The holy and halal Sinovac vaccine was good news that was announced directly by the Indonesian Ulema Council (MUI) through a process and in-depth study. Friday (8/1/21). The Indonesian Ulema Council (MUI) was an agency that has the authority to provide halal certification for a product so that the information they spread can be trusted. Whereas the process of determining the halal Sinovac vaccine through an in-depth study carried out by the Indonesian Ulema Council (MUI) as the relevant agency in providing halal certification. The ingredients used in the Sinovac vaccine do not contain haram elements. Therefore, the role of digital literacy is very important in finding and selecting information.

5. Conclusion

Through this research we can distinguish which information is hoax and which information was correct, especially regarding the Sinovac vaccine. Thinking critically, checking every information received before spreading the information, especially on Twitter social media so that the information received was credible information and the need to improve digital literacy skills..

References

- [1] N. A. Rika Lusri Virga, "Digital Literacy and HOAX on Social Media," in *1st Annual Internatioal Conference on Social Sciences and Humanities (AICOSH 2019)*, 2019.
- [2] C. Juditha, "Interaksi Komunikasi Hoax di Media Sosial serta Antisipasinya," *Jurnal Pekommas*, vol. 3 No. 1, pp. 1-44, 2018.
- [3] M. PIETRASS, "Digital Literacy Research from an International and Comparative Point of View," *Research in Comparative and International Education*, vol. 2 Number 1, 2007.
- [4] covid19.go.id, "Keputusan Menteri Kesehatan Republik Indonesia nomor 9860 Tahun 2020," covid19.go.id, Jakarta, 2020.
- [5] R. O. Vicki Sofyani, "Issue Management by the Ministry of Communication and Informatics in Minimizing Hoax During Covid-19 in," in *Proceedings of the International Conference on Economics, Business, Social, and Humanities (ICEBSH 2021)*, 2021.

- [6] A. Salam, "The Hoax Phenomenon in Indonesian Society: Observing Anti-Diversity Memes since 2014," *jurnal.ugm.ac.id/jurnal-humaniora*, vol. 30 Number 3 , p. 15–324, 2018.
- [7] R. Nasrullah, *Teori dan Riset Media Siber (CYBERMEDIA)*, Jakarta: PERANADAMEDIA GROUP, 2014.
- [8] Yovita Sabarina Sitepu, Hendra Harahap, Februati Trimurni, "DIGITAL LITERACY OF SOCIAL MEDIA USERS IN MEDAN CITY IN FACING HOAX," *INTERNATIONAL JOURNAL OF MODERN TRENDS IN SOCIAL SCIENCES (IJMTSS)*, vol. Volume 4 Issue 15 (March 2021), pp. 97-113, 2021.
- [9] Catur Nugroho, *Cyber Society: Teknologi, Media Baru dan Disrupsi Informasi*, Jakarta: Prenada Media Group, 2020.
- [10] Ali Mustofa, "The New Normal Way in the Post-Truth Politics: Reinterpreting the Concept of New Normal in Indonesian Mainstream Daily Newspaper," in *Proceedings of the International Joint Conference on Arts and Humanities (IJCAH 2020)*, 2020.
- [11] BRIAN SOLIS, *ENGAGE The Complete Guide for BRANDS and BUSINESSES to Build, Cultivate, and Measure Success in the New Web*, Canada: Published by John Wiley & Sons, Inc., Hoboken, New Jersey., 2010.
- [12] F. D. R. R. A. K. L. Dedeh Fardiah, "Media Literacy for Dissemination Anticipated Fake News on Social Media," *MediaTor*, Vols. 13 (2), December, pp. 278-289, 2020.
- [13] Dan Zarrella, *The Social Media Marketing Book*, Canada: O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472., 2009.
- [14] A. S.-C. K. T. J. R.-d. A. T.-A. D. D. a. Y. C. Antoine Jeri-Yabar, "Association between social media use (Twitter, Instagram, Facebook) and depressive symptoms: Are Twitter users at higher risk?," *International Journal of Social Psychiatry* , vol. 65(1), p. 4–19, 2019.
- [15] Umaimah Wahida, Iswandi Syahputra, "Hoax Logic in the Political Activities of Indonesian Netizens on Twitter," *International Journal of Innovation, Creativity and Change*, vol. 2, no. 2, 2020.
- [16] Antony Lee, "ONLINE HOAXES, EXISTENTIAL THREAT, AND INTERNET SHUTDOWN: A Case Study of Securitization Dynamics in Indonesia," *Journal of Indonesian Social Science and Humanities (JISSH)*, vol. 10, no. 1, pp. 17-34, 2020.
- [17] Salma Qotrunada S, Agus Machfud Fauzi2, "The Role of Religious Leaders and the Regional Government of East Java in Tackling Hoax Chain Message," in *International Joint Conference on Arts and Humanities 2021 (IJCAH 2021)*, 2021.
- [18] Rizky Amalia Syahrani, Kheyene Molekandella Boer, "Student's Digital Literacy Abilities Against Hoaxes (A Case Study of University Students in East Kalimantan)," *ICLSSE* , 2020.

- [19] Nur Octavi Mandasari, Primardiana Hermilia Wijayati, Rizman Usman, "Does Digital Media Literacy Influence Students' Perception of Hoax," *BRILIANT: Jurnal Riset dan Konseptual*, vol. 6 Number 1, pp. 11-20, 2021.
- [20] Chun Meng Tang, Lee Yen Chaw, "Digital Literacy: A Prerequisite for Effective Learning in a Blended Learning Environment?," *The Electronic Journal of e-Learning*, vol. 14, no. 1, p. 54-65, 2016.
- [21] Sylvie Cazalens, Philippe Lamarre, Julien Leblay, "A Content Management Perspective on Fact-Checking," in *L'archive ouvertes (HAL)*, Lyon, France, 2018.
- [22] Niken Pupy Satyawati, Prahastiwi Utari; Sri Hastjarjo, "Fact Checking of Hoaxes by Masyarakat Antifitnah Indonesia," *International Journal of Multicultural and Multireligious Understanding*, vol. 6, no. 6, pp. 159-172, 2019.