

## Research Article

# The Impact of Hoax Educational Content on Instagram in Improving People's Digital Literacy Skills

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**Abstract.**

The main challenge of today's society is the massive use of digital media, providing benefits for its users and the potential for various problems to arise. The lack of digital literacy skills in using hardware and software causes the use of digital media that is not optimal, causing violations of citizens' digital rights. Low ethics in using digital media can create a digital space that contains much harmful content. Weak digital security has the potential to cause leakage of personal data and digital fraud. The purpose of the study was to use correlational research methods to find the educational impact of hoax content carried out by Jabarsaberhoaks through Instagram in increasing digital literacy. The study population were Instagram followers @jabarsaberhoaks, with a sample of 400 people. The results showed that the "Jabar Saber Hoaks" strategy in monitoring the spread of fake news on social media uses active and passive monitoring. Education to the public in minimizing the space of fake news on social media was carried out using digital literacy for all components of the society. The intensity of accessibility and the technique of presenting hoax educational content on Instagram @jabarsaberhoaks has no impact on people's digital literacy skills. Meanwhile, how hoax educational content is delivered on Instagram @jabarsaberhoaks, affects people's digital literacy skills.

**Keywords:** literacy, digital, hoax, hoax education

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## 1. Introduction

In the social media space, everyone can participate in producing informational content and disseminating it so that a new phenomenon of citizen journalism emerges. Individuals act as producers as well as targets of social media content at the same time. Ironically, various hoax information appears due to freedom of expression on social media, whether created and spread intentionally or not. Unfortunately, the abundance of hoax information is not balanced with the high understanding of hoax digital literacy in society. Hoaxes affect all circles, and they do not know the gender, educational background, and social and economic hierarchy; as a result, they cannot distinguish which news is trustworthy and which is a hoax.

West Java 2018 has made constructive and proactive efforts to overcome the spread of hoaxes on social media by forming West Java Sapu Bersih Hoaks (JSH). In 2020 and 2021 researchers have conducted research on how JSH conducts socialization utilizing various media . [1] In 2021, researchers researched digital literacy education strategies through social media by JSH in counteracting hoaxes in West Java. Theoretically, this 2nd year of research data only describes content about hoaxes circulating on social media. Therefore, it is necessary to conduct further research with a focus on how effective the education provided by @Jabarsaberhoaks through social media is to the public and increase media literacy regarding hoaxes.

Various ideas regarding digital literacy competencies are designed by various organizations, both community and government agencies that pay attention to the development of digital literacy in Indonesia. One of them is that Kominfo and Siberkreasi provide a framework of four competency areas consisting of Digital Skills, Digital Culture, Digital *Ethics*, and *Digital Safety* [2] Research on the benefits of Instagram resulted in a cognitive (informational), affective (emotional) and behavioral (behavioral) response in accessing, seeing, and searching for @parentalk.id Instagram account posts. [3] The importance of competence has also been reviewed in other studies where literacy competencies are needed by each individual as a provision to combat hoaxes so that they can encourage creative, innovative and collaborative in increasing digital literacy competencies in Indonesia.[4] Utilizing hoax content as educational material in the era of digital literacy will make people think critically, be wiser in filtering and responding to information so that they can participate and contribute to national peace and unity. [5] the ability to recognize information that is charged with hoaxes, a person who has low digital literacy is less able to distinguish between false information and actual information. [6]

Research on the handling of hoaxes about covid-19 shows. Every individual needs to increase digital literacy competence as an effort to counteract infodemics. [7] In another context, research on Instagram accounts can build digital literacy, focusing on constructivist ideas that are seen as being able to meet all aspects of building digital literacy. . [8] Another study stated that individual abilities supported by background and experience also determine the pattern of parental assistance to their children [9].

In research on digital literacy as a preventive effort to overcome hoaxes, it is considered that increasing digital literacy is a form of *self-control* and an effective way that can prevent the spread of hoaxes in the *post-truth* era by introducing the characteristics of fake news, verifying information, to [10] Research on digital media literacy that measures the effect of account effectiveness produces the effect of effectiveness on meeting the information needs of *followers*. [11] In fighting hoaxes, it is necessary to involve various parties from various circles such as the government, education actors, law enforcement officials, and digital literacy activists to jointly ward off hoaxes. Community participation in warding off hoaxes through digital literacy skills obtained formally and informally [12].

## 2. Method

This study uses a correlational method to relate variable X (The Impact of Hoax Educational Content on Instagram @jabasaberhoaks) to Variable Y (Community Digital Literacy Ability). While the population in this study was followers of @jabasaberhoaks which amounted to 59.3 thousand. So the minimum sample used was 399,997 rounded up to 400 respondents with 5% precision at a confidence level of 95%. Data collection techniques in this study are divided into 2, namely: (1) Questionnaire [13] , providing or disseminating a list of questions and statements to respondents through a google form; (2) Literature Study, there is this research the researcher also collects literature data for the relevant from various libraries and other references related to the material to be studied. The data analysis technique will explain the steps of researchers in processing the data obtained in the field into a research report.

## 3. Results and Discussion

This study aims to determine the impact of digital literacy education @jabasaberhoaks in improving people's digital literacy. The data used in this study was primary data based on questionnaires shared with followers @jabarsaberhoaks. The population of the followers @jabasaberhoaks amounted to 59.3 thousand. The calculated sample

using the slovin formula obtained a total of 399,997 rounded to 400 respondents with a precision of 5% at a confidence level of 95%. The questionnaire was distributed to followers through slash direct messenger Instagram @jabarhoaks. Within this period, the distribution of respondents' answers had reached 414 people, so the filling of the questionnaire was considered adequate and closed access to answer submissions. The responses of these 414 followers will be analyzed in this study.

Based on the questions and research objectives in this subsection, it has been statistically tested how the correlation between the variables X1 and Y is as follows:

### **3.1. Statistical Test correlation of the intensity of educational accessibility of hoax content on Instagram @Jabarsaberhoaks improves people's digital literacy skills.**

The 1st variable of this study is the correlation between X1 and Y which can be described in the following statistical tests Spearman correlation coefficient  $\rho = -0.018$  and significance value 0.709. Since the signification value is more significant than  $\alpha = 0.05$ ,  $H_0$  is accepted, and  $H_1$  is rejected. In conclusion, there is no relationship between the intensity of educational accessibility of hoax content on Instagram @jabarsaberhoaks to the level of people's digital literacy skills.

### **3.2. Correlation Statistical Test of How to Deliver Hoax Educational Content on Instagram @Jabarsaberhoaks in Improving People's Digital Literacy Skills.**

The 2nd variable of this study is the correlation between X2 and Y which can be described in the following statistical tests: Spearman correlation coefficient  $\rho = 0.119$  and significance value 0.015. Because the signification value is smaller than  $\alpha = 0.05$ ,  $H_0$  is rejected, and  $H_1$  is accepted. In conclusion, there is a relationship between the way hoax educational content is delivered on Instagram @jabarsaberhoaks to the level of people's digital literacy skills. The correlation coefficient of 0.119 indicates the relationship between the two variables is fragile.

### **3.3. Correlation Statistical Test of Hoax Educational Content Presentation Techniques on Instagram @Jabarsaberhoaks in Improving People's Digital Literacy Skills**

The 3rd variable of this study is the correlation between X3 and Y which can be described in the following statistical tests: Spearman correlation  $\rho = -0.061$  and significance value 0.213. Since the significance value is more significant than  $\alpha = 0.05$ ,  $H_0$  is accepted, and  $H_1$  is rejected. In conclusion, there is no relationship between the technique of presenting hoax educational content on Instagram @jabarsaberhoaks to the level of people's digital literacy skills.

### **3.4. Discussion of research results**

Based on the initial assumption that variable research, which includes access intensity, delivery methods, and techniques for presenting Instagram content @jabarsaberhoaks, is partially predicted to have an impact on the digital literacy ability of Instagram followers, it turns out that the results show that there is no correlation between the intensity of accessibility and presentation techniques with the high knowledge of digital literacy. However, there is a correlation between the way Instagram content is delivered @jabarsaberhoaks and the level of digital literacy skills.

### **3.5. The Impact of The Intensity of Accessibility of Hoax Content Education on Instagram @Jabarsaberhoaks in Improving People's Digital Literacy Skills.**

The results of research that statistics have tested show that there is no relationship between the intensity of educational accessibility of hoax content on Instagram @jabarsaberhoaks to the level of digital literacy ability of the community. This means that the level of digital literacy is not caused by whether or not an individual often accesses Instagram content. When viewed from the distribution map of accessibility intensity, it shows that the level of accessibility is in a position that is not related to the competence of digital literacy. Hence, the picture shows that digital literacy competence is relatively high but is not the cause of the intensity of access to Instagram @jabarsaberhoaks.

Based on the scattering diagram in Figure 2, the points do not converge around the line that crosses between the x-axis and the y-axis, which means that the correlation between the variables x and y is absent or weak. If you look at the picture above, the comparison between field data and correlation shows a difference between the reality

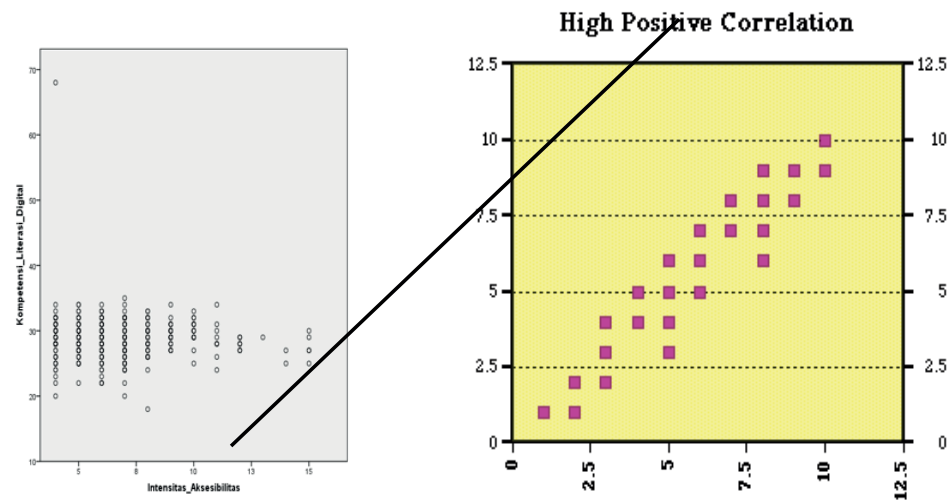


Figure 1: accessibility intensity distribution map.

of the research data and the ideal correlation. So even if the follower only accesses it once, there is a possibility that it can have an impact on digital literacy skills, or the opposite could happen. Another contributing factor to why it is not correlated between the intensity of accessibility and the complexity of digital literacy is the factor of the level of education. Based on the data in this study, the majority of delinquents @jabarsaberhoaks have equivalent high school education levels (61.8%) and D4 / undergraduate (30%), meaning that at this level of education generally tend to be open to an issue that allows for deeper information mining to receive more information and make highly educated people not only look from one point of view but see from another point of view.

The results of the measurement of the 2021 Indonesia Digital Literacy Index held by the Ministry of Communication and Informatics in collaboration with the Katadata Insight Center (KIC). Overall, Indonesia’s Digital Literacy Index 2021 reached 3.49 on a scale of 1-5, up from the previous year’s achievement of 3.46. and the condition of the West Java digital literacy index can be seen in the illustration of Figure ??.

Based on a survey conducted by the West Java provincial communication and information service, the value of the City / Regency index in West Java is in Need Consistency; the communication and collaboration variable index is at a better level compared to other varying indices; this shows that respondents can communicate and cooperate reasonably. From this data, it shows that, in general, the level of digital literacy of the people of West Java already has good potential, so it is natural that it is related to the research that researchers conducted on the level of digital literacy competence as a follower of the official channel of West Java province, namely @jabarsaberhoaks

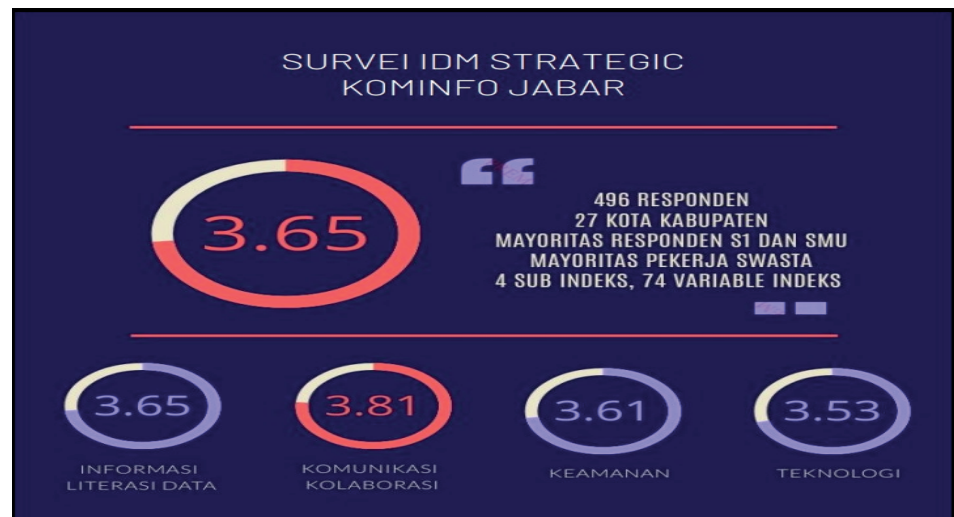


Figure 2: West Java Strategic Kominfo IDM Survey.

are included in the high category. However, the cause is not solely from the frequent opening of the medium.

### 3.6. The way to deliver hoax educational content on Instagram @jabarsaberhoaks in improving people's digital literacy skills.

How to deliver content is a step taken by the @jabarsaberhoaks Instagram account in educating digital literacy. Based on the hypothesis test results, there is a relationship between the way of delivering hoax educational content on Instagram @jabarsaberhoaks and the level of people's digital literacy skills. The results of this study mean that the more attractive the way digital literacy educational content is delivered on Instagram, the higher the level of digital literacy ability. Educational content is intended to convey information in the form of things that **increase** the knowledge of its audience. Educational content usually includes **learning materials, health content, tutorials**, and many other types of academic content that can be created.

The focus on how Instagram content is presented by @jabarsaberhoaks is to use the Fact Checking Journalism method, a new trend in online journalism today. This phenomenon has developed since the International Fact-Checking Network (IFCN) emerged as an international media network to reduce hoaxes. In the global region, fact-checking activities were spearheaded by Poynter, the Google News Initiative, and Facebook to campaign for facts in digital information. There are two types of fact-checking organizations in Indonesia, namely:

1. Media organizations that create special divisions to conduct fact checks, such as Tirto, fact checks Liputan6.com, Tempo.com, and Kompas.com, that the IFCN has accredited.
2. Association organizations consist of media as well as non-media. In Indonesia itself, what is included in this category is the Cekfakta.com made by the Anti-Defamation Society (Mafindo), the Indonesian Cyber Media Association (AMSI), the Alliance of Independent Journalists (AJI), the Google News Initiative, and the First Draft.

Meanwhile, @jabarsaberhoaks is a channel that clarifies hoax news using the fact-checking organization mentioned above as a clarification number. One of these factors contributes to improving digital literacy skills. The presentation of the steps taken by this Instagram account in clarifying information that is indicated to contain hoaxes is a consideration for the audience in digesting its content so that it has an impact on increasing knowledge about digital.

### **3.7. The Impact of Hoax Educational Content Presentation Techniques on Instagram @Jabarsaberhoaks in Improving People's Digital Literacy Skills**

The results of the third variable hypothesis test from Vinni's research are that there is no relationship between the technique of presenting hoax educational content on Instagram @jabarsaberhoaks and the level of digital literacy skills of the community. This means that the high and low digital literacy skills are not solely from the presentation technique on Instagram. Content presentation techniques are various formats and information presented through media, especially new media, in writing, images, sound (audio), or video.

The findings of the study, which show that there is no correlation between these two variables, give an idea that the variation in forms that have been the attraction of followers to listen to Instagram does not apply to the context of the search for information about hoaxes. This also hints that the importance is not only the writing and audio but video but precisely the content that is the attraction. It can be analyzed that digital literacy skills regarding hoaxes are formed from several wrong factors, including research that has been carried out that academic achievement has a significant effect on digital literacy ability, so it is necessary to have a unique understanding that the intellectual or educational dimension is essential in performance digital literacy. This indicates that people must be aware of the importance of education. Other research also shows that the factors that affect the level of competence in digital literacy are not only



the level of education but also environmental support consisting of the environment and factors of socioeconomic conditions, which include the financial situation of individuals and the criticality of the media [14], [15].

## 4. Conclusion

Based on the study results, the intensity of educational accessibility of hoax content on Instagram @jabarsaberhoaks has no impact on people's digital literacy skills. Then it is necessary to improve the strategy of utilizing content so that in one view or post, it can be attractive so that the audience digests useful, simple, and easily digestible content. Meanwhile, the strategy of delivering hoax educational content carried out by @jabarsaberhoaks needs to be maintained and can be the passion of the @jabarsaberhoaks team to provide education through the delivery of clarification of content indicated by hoaxes through a fact-checking model from credible official sources so that it becomes a reference for the audience in seeking the truth of information. Another thing that needs to be improved is the extension of exciting content that has been done so far, such as narration, audio, visual, or audio-visual, where this technique is in demand by *followers* so that it correlates to improving digital literacy skills.

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## References

- [1] Fardiah D, Rinawati R, Darmawan F, Abdul R, Lucky K. Media literacy for dissemination anticipated fake news on social media. *Mediat J Komun.* 2020;13(2):278–289.
- [2] Kusumastuti F, et al., *Modul Etis Bermedia Digital.* 2021.
- [3] Sari DN, Basit A. Media Sosial Instagram Sebagai Media Informasi Edukasi Parenting. *PERSEPSI Commun J.* 2020;3(31):23–36.
- [4] Monggilo ZM. ANALISIS KONTEN KUALITATIF HOAKS DAN LITERASI DIGITAL DALAM @KOMIKFUNDAY. *Interak J Ilmu Komun.* 2020;9(1):1–18.

- [5] Palupi MT. HOAX: PEMANFAATANNYA SEBAGAI BAHAN EDUKASI DI ERA LITERASI DIGITAL DALAM PEMBENTUKAN KARAKTER GENERASI MUDA. *J Skripta*. 2020;6(1): <https://doi.org/10.31316/skripta.v6i1.645>.
- [6] L. AK. "Literasi Digital Sebagai Penangkal Infodemi Covid-19: Sebuah Literature Review." *LIBRIA*. 2021;13(1). [Online]. Available: <https://kompaspedia.kompas.id/>
- [7] Fatmawati E. Kompetensi Literasi Digital dalam Menangkal Infodemi. *KOLABORASI, RISET. DAN VOLUNTERISME MEMBANGUN RESILIENSI DALAM GEJOLAK PANDEMI*; 2020.
- [8] Wahyudin D, Adiputra CP. "ANALISIS LITERASI DIGITAL PADA KONTEN INSTAGRAM @INFINITYGENRE." *WACANA J Ilmu Ilmu Komun*. 2019;18(1): <https://doi.org/10.32509/wacana.v18i1.744>
- [9] Wiratmo LB. "Kompetensi Literasi Digital Orang Tua dan Pola Pendampingan pada Anak dalam Pemanfaatan Media Digital," *representamen*, vol. 6, no. 02, 2020, <https://doi.org/10.30996/representamen.v6i02.4269>.
- [10] Sabrina AR. Literasi Digital Sebagai Upaya Preventif Menanggulangi Hoax. *Commun J Commun Stud*. 2019;5(2):31.
- [11] Nofha Rina SN. Literasi Media Digital: Efektivitas Akun Instagram @infobandungraya Terhadap Pemenuhan Kebutuhan Informasi Followers. *MEDIALOG J Ilmu Komun*. 2020 Mar;3(1):13–24.
- [12] Fardiah D, Darmawan F, Rinawati R. Hoax digital literacy on Instagram. *J Komun Ikat Sarj Komun Indones*. 2021;6(2):171–186.
- [13] Sugiyono, Sugiyono. *Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D*. 2015.
- [14] Syah R, Darmawan D. Pemanfaatan Media Sosial Instagram Sebagai Literasi Visual Pada Pendidikan Orang Dewasa. *J AKRAB*. 2019;10(1).
- [15] Rosalina D, Yuliari K, Setianingsih D, Zati MR. Faktor – Faktor Yang Berpengaruh Terhadap Kompetensi Literasi Digital Mahasiswa di Era Revolusi Industri 4.0. *EKONIKA J Ekon Univ Kediri*. 2021 Sep;6(2):294.