

The Relationship between Media Literacy and Information Processing Ability in 360-degree Video

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DOI: <https://doi.org/10.18196/km.18182>

Article Info

Article history:

Received 16 Mar 2023

Revised 13 May 2023

Accepted 15 May 2023

ABSTRACT

Immersive journalism presents information of an event from a first-person perspective to the audience through 360-degree videos that can be watched on smartphones. However, an immersive experience does not guarantee that Gen Z audiences will understand the information conveyed, due to the attraction of short attention spans. Audiences need skills to be able to navigate the media they watch to get the information they consume. Literacy studies on immersive 360-degree video, especially in Indonesia, are still rare. Even though digital media is increasingly immersive in presenting content, it is not known how far young audiences are able to analyze and critically assess the content accessed. This study aims to measure the media literacy level of the audience and its influence on the ability to process 360-degree video. A survey was conducted of 400 students in Jakarta in November 2022. The findings show that the processing capacity of 360-degree videos is significantly affected by a person's level of media literacy. The better their media literacy ability, the easier it is for someone to process information from 360-degree videos.

Keywords: Immersive; Time Span; Media Literacy; Information Processing Ability

ABSTRAK

Immersive journalism menyajikan informasi suatu peristiwa perspektif orang pertama kepada audiens lewat video 360 derajat yang dapat ditonton melalui *smartphone*. Namun, pengalaman imersif tidak menjamin audiens Generasi Z paham akan informasi yang disampaikan karena adanya kesenjangan rentang perhatian yang singkat. Audiens membutuhkan keterampilan untuk dapat menavigasi media dan informasi agar seseorang memperoleh manfaat atas informasi yang ia konsumsi. Kajian literasi media video imersif 360 khususnya di Indonesia terbilang minim. Padahal media digital semakin imersif dalam menyajikan konten, tetapi tidak diketahui seberapa jauh audiens muda mampu menganalisis dan mengevaluasi secara kritis konten yang diakses. Studi ini bertujuan untuk mengukur tingkat literasi media audiens dan pengaruhnya terhadap kemampuan memproses informasi video 360 derajat. Survey dilakukan terhadap 400 siswa di Jakarta pada bulan November 2022. Temuan menunjukkan bahwa kapasitas pemrosesan video 360 derajat dipengaruhi secara signifikan oleh tingkat literasi media seseorang. Semakin baik kemampuan literasi medianya maka seseorang semakin mudah memproses informasi dari video 360 derajat.

Kata Kunci: Imersif; *Time Span*; Literasi Media; Kemampuan Memproses Informasi

INTRODUCTION

News is transformed into various formats, one of which is immersive journalism. This change occurs as a form of media development which is demanded to be multimedia oriented based on the behavior of Indonesian people in accessing information and news. This is because having widespread internet connection and access to a wide range of digital media will affect how people acquire and consume news and information (Prestianta, 2022, p. 138). The large number of people who have switched to smartphones to access news has made media become multimedia oriented to suit people's needs. The same thing was conveyed by Ambrosio & Fidalgo (2021) that the internet has caused the digitalization of media that caused the emergence of new types of news to meet public needs for information.

Immersive journalism is one product that emerges as an innovation of news carried out by the media. With a fundamental premise to let the viewers enter a digitally produced scene that depicts the news (Pena et al., 2010), immersive journalism made the line between the physical and digital worlds have been dissolved, making it a milestone in the field of digital journalism (Kang et al., 2019, p. 3).

The term 'Immersive Journalism' was first introduced by Nonny De La Pena et al. in her paper in 2010. It has come to be used to allow the participant to actually enter a virtually recreated scenario representing the news story (Pena et al., 2010) so that the audience can enjoy a first-person experience of an event or situation described in the news (Hardee & McMahan, 2017). The immersive journalism concept has been used by several media organizations, for example, The New York Times, BBC News, and ABC News. They produce 360-degree videos on their Youtube channel, for example, *The Displaced* by The New York Times on Youtube. Through 11 minutes of video, The New York Times produced a story of 3 children who had to flee to a shelter because the area they lived in was involved in a war. The video lets the audience see the entire environmental conditions by moving their cell phones. Therefore, by looking directly at the conditions experienced by the characters in the story, studies show it has the advantage of increasing audience involvement and trust, which triggers an emotional response from the audience when witnessing an event directly in cyberspace (Laws, 2017; Nielsen & Sheets, 2021; Sundar et al., 2017).

Telepresence, the experience of being present at the scene, can be achieved through digital avatars in the form of 3D animations viewed through a Head Mounted Display (HMD) system (Pena et al., 2010, p. 292). This technology triggers the audience to respond as if they were in a live event, a feature of good journalism known as *Response As If Real (RAIR)* (Paíno Ambrosio & Rodríguez Fidalgo, 2021; Pena et al., 2010; Reis & Coelho, 2018). Other technological devices commonly used for consuming immersive journalism content include 360-degree video, CG-Based Mobile VR, Room-Scale VR, Handheld AR, and Head-Worn AR. Each of these technologies has capabilities and limitations, which can be categorized into five factors: presence, body ownership, engagement, emotion, and reduction of cybersickness (Hardee & McMahan, 2017, pp. 7–9). Despite these variations, 360-degree videos accessed through smartphones can still effectively convey a feeling of presence, giving audiences the experience of being directly at the scene (Hardee & McMahan, 2017; Kang et al., 2019). As such, this research focuses on immersive journalism in the form of 360-degree videos, which prioritize the audience's first-person experience when consuming news without needing specialized hardware.

According to a survey by the Association of Indonesian Internet Service Providers (2019), 95.4% of people are connected to the internet daily via smartphones or mobile phones. This accessibility is crucial since the use of VR devices is still very low in Indonesia, with only 228 units sold between 2016 and 2019 (wartaekonomi.co.id, 2019, para. 3), despite having 196.71 million internet users (Irawan et al., 2019). The high percentage of internet user penetration, especially among those aged 15-24, classified as Gen Z (Dimock, 2019; Ho et al., 2022; Katz et al., 2022), makes 360-degree videos an attractive option for immersive journalism. This technology is easy to access and requires no specialized hardware, making it an affordable and accessible option for most of the population, especially in urban areas like Jakarta.

Individuals in Indonesia are increasingly connected and have easy access to diverse forms of information due to the country's improved digital infrastructure and rising internet penetration. However, the extent to which media and information positively affect individuals and society depends on their capacity to effectively access, analyze, evaluate, and produce media content (Potter, 2013). There is a paucity of research on immersive news content, despite previous research demonstrating the benefits of immersive content for enhancing student comprehension of classroom material

(Mufida et al., 2022). While some international media outlets have created 360-degree video news content, there is a shortage of research on the audiences who consume such content, especially from the perspective of non-Western countries. Therefore, additional research is required to investigate immersive journalism's potential advantages and disadvantages, particularly in the context of non-Western nations such as Indonesia.

The Australian Media Literacy Alliance (AMLA) (2022) defines media literacy as "the ability to critically engage with media in all aspects of life. It is a form of lifelong literacy essential for full participation in society." Meanwhile, several scholars from the United States define media literacy as "the ability to access, analyze, evaluate, and communicate messages in a variety of forms" (Hobbs, 2019). From the European perspective, media literacy can be understood as citizen's ability to access, understand, analyze, and evaluate media information. Interestingly, nearly all of these ideas presented are complementary, and there is no evidence of scientific groups debating who has the best definition. Meanwhile, Potter (2013, p. 23) defines media literacy as a set of perspectives that are actively used to expose ourselves to mass media to be able to interpret the meaning of the messages we encounter. This perspective is built from a knowledge structure that requires tools, raw materials, and will. Tools (skills) are the skill someone has, raw materials (knowledge structures) are information from the media, and will (personal locus) comes from our personal locus. These three things are the basis of media literacy.

Information from the media is a raw material that requires tools (skills) to process it to become knowledge (knowledge). The higher ability and habits to transform information into knowledge structures reflect the increased ability of media literacy (Potter, 2013, p. 17). At the end of the day, these abilities will give us a clear map to navigate better when consuming media to get the right experience and information. Therefore, the concept of Potter's media literacy is used in this study to see whether a person's media literacy skills really affect their ability to process information, especially in 360-degree videos.

Significant differences exist between the characteristics of Gen Z and those of other generations. This generation has had less exposure to traditional news sources such as newspapers, television, and radio than its predecessors and prefers news that is more entertaining and interactive (Gentilviso & Aikat, 2019). Age influences media attitudes and preferences, with Generation Z being the first to have grown up with digital technology as a natural part of life (Gentilviso & Aikat, 2019; Prakash Yadav & Rai, 2017). Consequently, they favor visual media and interaction. This preference for visual media is also reflected in the learning preferences of Generation Z, who have short attention spans, dislike boredom, and prefer hands-on and interactive learning experiences. Due to their visual learning style and affinity for social media, Generation Z prefers visual learning media, such as YouTube videos, over text-based materials (Global Research & Insight, 2018; Roseberry-McKibbin, 2017; Sladek & Grabinger, 2014). Researchers have discovered that Generation Z has enhanced visual learning abilities, making visual learning a more effective form of education (Cickovska, 2020). To meet the visual learning requirements of the younger generation, educators should employ visual tools such as interactive textbooks and educational games (Sladek & Grabinger, 2014). With these characteristics, Gen Z is likely to prefer and better comprehend visual forms of news, highlighting the need for news outlets to adopt more visual and interactive news formats to engage this distinct audience.

However, even though they use the internet daily, Gen Z does not have a good attention span. It is much different from other generations, including the millennial generation, which averages 10 minutes. Meanwhile, Gen Z only has an attention span of around 6 minutes. Even the Vision Critical study in Montreat College Magazine (2022, para. 3) notes that the attention span of Gen Z when consuming media is only 8 seconds.

Meanwhile, immersive journalism mostly has a longer duration characteristic than the average news package. An analysis conducted by Jones (2017, p. 178) on 12 pieces of content from leading VR platforms, namely Jaunt VR, VRSE, RYOT, and NY Times VR, found that 360-degree video duration is usually around 5 minutes or 10 minutes with an average duration of 6 minutes and 39 seconds, while the average conventional news package is only about 1:30–2 minutes. In addition, 360-degree videos also take a much longer time to be absorbed because the audience needs to see all angles, not only one position like traditional media.

This inequality raises a question of whether immersive journalism news in the form of 360-degree videos can be well understood by the audience, most of whom are Gen Z. Seeing that the attention

span in media is meager, so far, there has been no research that measures whether the 360-degree video can be well understood by the audience.

Studies have shown that immersive learning methods create positive learning for students. User involvement in choosing storylines influences student immersion in digesting educational material. As a result, the material presented is easier to understand (Mufida et al., 2022; Muslem & Abbas, 2015; Muslem & Yulianti, 2015; Paulus et al., 2016; Pinasthika, 2022; Siahaan et al., 2021). Seeing the effectiveness of immersive technology in helping students' comprehension in the field of education, there is a possibility that the same concept can help the audience's understanding when consuming news, especially with direct involvement in selecting storylines.

However, so far, no research has proven the effectiveness of audience understanding when consuming immersive news content. Research conducted by Sundar et al. (2017) related to the effect felt by the audience after consuming immersive news content only measures the level of memory (recall), whereas simply remembering in memory does not reflect audience understanding because the two are different aspects. Memory is only in simple storage and retaining the information provided, while understanding is a process of storing more detailed information because conclusions are added (Findahl & Hoiijer, 1985, p. 381).

The aspect of understanding is important to this study because it is an important aspect of the process of news consumption. According to Tarigan (Fahrudin, 2009, p. 44), the audience needs to interpret the information in the news, to understand the intent or message conveyed by the author. To understand the message, the audience needs to process information in immersive journalism which requires more than just remembering the items in the news.

According to Potter (2013, p. 37), to process information, the audience needs to go through 3 stages, namely filtering (determining which parts to pay attention to), meaning matching (matching the information obtained with prior knowledge), and meaning construction (building meaning from the information obtained). Especially in immersive journalism, which can be enjoyed 360 degrees, it is not enough to remember the items in it. Instead, you need to go through the stages of the process to interpret the information, which requires some skills.

Based on media literacy, someone with a low media literacy level has a weak and limited perspective on media. This causes a person's knowledge structure to be smaller, shallower, and less organized, so it does not provide an adequate perspective to be used in interpreting the meaning of media messages (Potter, 2013, p. 25). So, before reaching the stage of processing information, a person needs to have media literacy skills. Media literacy focuses on enabling us to adapt to a changing world by becoming skilled at interpreting the meaning in each type of message, arranging for that meaning to be useful, and then constructing the message to convey that meaning to others (Potter, 2013, p. 15).

These skills give us a clearer perspective to interpret the meaning consumed through immersive journalism news. This is supported by Potter (2013, p. 10), who states that media literacy gives us a clear map to help us navigate better when consuming media to obtain the right experiences and information. This ability is translated into seven media literacy skills, namely analysis, evaluation, grouping, induction, deduction, synthesis, and abstracting, which are used to filter large piles of facts to uncover specific facts needed and eliminate the rest (Potter, 2013, p. 18). So, the seven media literacy skills will help the audience determine which way they should look when watching a 360-degree video and, ultimately, process the selected information to become meaningful. Therefore, considering the importance of media literacy for audiences' ability to process data in 360-degree video, the research questions of this study are:

RQ1: How high is the ability of Gen Z to process information in 360-degree video?

RQ 2: How high is Gen Z's media literacy skill?

RQ 3: Do media literacy skills have an effect in helping Gen Z to understand the information in 360-degree video?

METHODS

To answer the research questions, we used an explanatory quantitative approach. This study seeks to determine the relationship between the degree of media literacy and the capacity to comprehend 360-degree video as independent factors. The method used in this study is an associative explanatory survey intended to explain the correlation between variables (Kriyantono, 2006, p. 153). This study

would measure the effect of media literacy level on the audience's ability to process information in 360-degree video, a journalistic product consumed digitally via the internet.

Looking at a large number of internet users in big cities and based on data from the Association of Indonesian Internet Service Providers (2018), the internet users located on Java Island are around 55.7% of the total population. Of the six provinces in Java Island, DKI Jakarta is in the first place, with a total of 80,4% internet users from the total population in the province. Meanwhile, based on age, internet users in Indonesia are dominated by ages 15-19 (91%) and 20-24 (88.5%). Thus, the population in this study is residents in DKI Jakarta aged 15-24 years, totaling 1,689,230 people.

Of the entire population, this study used a convenience sampling technique in which the sample was chosen based on convenience data owned by the people (Kriyantono, 2006, p. 319). Researchers started from acquaintances in accordance with the criteria and continued to respondents' recommendations that matched these criteria to meet the quota.

Gen Z, aged 15-24 years in Jakarta, was asked 20 questions derived items from variables x and y. Variable x measures the audience's media literacy level based on seven indicators: analysis, evaluation, grouping, induction, deduction, synthesis, and abstracting. In comparison, the variable y aims at the audience's ability to process information in 360-degree videos based on three indicators: filtering, meaning matching, and meaning construction.

Research instruments were deployed after testing their validity and reliability. The validity test in this study was conducted on 30 respondents with a significance level of 5%. The value of the r table based on Product Moment is 0.374. If the r count is > 0.374 , the question is declared valid, and vice versa (Ghozali, 2021, p. 67). Based on the results, six items were invalid out of 26 question items, so they were deleted before being distributed to 400 respondents. Even if omitted, each dimension in the variable has another representative question item.

Meanwhile, the reliability test used in this study is the Alpha Cronbach technique with criteria that if the Cronbach Alpha coefficient value was > 0.60 , the questionnaire was declared reliable, and vice versa (Pramesti, 2014, p. 42). The reliability test result for variable X (media literacy level) is 0.881, greater than 0.60. Therefore, variable X (media literacy level) can be declared reliable. Meanwhile, the reliability test of variable Y (information processing ability) results show a different number, 0.769, which is also greater than 0.60. Thus, variable Y (ability to process information) is also declared reliable. After being declared valid and reliable, the questionnaire was distributed to 400 respondents from 6-29 November 2022 via Google Form. Respondents would be allowed to watch the 360-degree video on Youtube, "The Displaced" by The New York Times, that has been provided before. In answering the questionnaire, respondents were given four multiple choices in the form of a Likert scale which is used to measure responses when the audience faces a 360-degree video. The choices for the answer are strongly agreed, agree, disagree, and strongly disagree. The answer shows a gradation from very positive to very negative, which determines the location of a person's position in an attitude continuum (Widoyoko, 2012, p. 104). Neutral choices were omitted in this study because the existence of a doubtful or neutral choice often made respondents choose the middle way as the safest answer.

After the sample quota was met, the study continued with normality and linearity tests. The data in this study is interval data included in parametric statistics, so it must be tested for its normality. The normality test used in this study was performed by graphical analysis through histogram graphs and normal plots. According to Ghozali (2021, p. 38), if the results of the data distribution on the histogram graph are curved upwards like a bell, the data is normally distributed. Based on the graphical histogram test, the graphic is curved upwards like a bell, so the data is normally distributed. Then, the normality of the data can also be seen from the normal plot graph. According to Ghozali (2021, p. 198), if the data spreads around the diagonal line and follows the direction of the diagonal line, the regression meets the normality assumption. The results show that the dots are close to the diagonal line. So, it can be assumed that the data is normally distributed. After the data is known to be normally distributed, the research can be continued with a linearity test to find out whether the two variables tested have a significant linear relationship or not.

Analyzing linearity can be seen from the F value on linearity. The F linearity value indicates the degree to which the predicted dependent variable lies precisely in a straight line. If the result is significant (< 0.05), the linear model can be applied to the model relationship. This research shows that the F linearity value is 0.000, which indicates the value is smaller than 0.05. So, it can be concluded that the linear regression model can be applied to this study.

RESULT AND DISCUSSION

With the characteristics of Gen Z, who prefer visual content, the media continues to transform. One is through immersive journalism in the form of 360-degree videos to meet the specific needs of Gen Z audiences who spend a lot of time using the internet in their daily lives. This study found that journalism that presents news in 360-degree videos successfully conveys information or messages to Gen Z audiences. This applies to Gen Z, who have high media literacy skills. This aligns with the concept of media literacy, which gives the audience a clear map to help them navigate better when consuming media to obtain the needed experience and information (Potter, 2013, p. 10).

Gen Z’s News Comprehension

Looking at the characteristics of Gen Z, who tend to easily understand visual content in learning (Cickovska, 2020; Global Research & Insight, 2018; Roseberry-McKibbin, 2017; Sladek & Grabinger, 2014), this study measures Gen Z’s ability to process visual news information in 360-degree video. In fact, Gen Z shows a very high ability to process information in 360-degree video. Based on the average ability of filtering, meaning matching, and meaning construction indicators of measuring the ability to process information (Potter, 2013), Gen Z gets an average score of 3,27, which is included in a very high classification. This shows that Gen Z has a very good ability to process information in 360-degree video.

Table 1. Information Processing Ability Level Variable Average

Dimension	Mean
Filtering	3,31
Meaning Matching	3,23
Meaning Construction	3,27
Total	3,27

Media Literacy

Meanwhile, media literacy skills are a concept coined by Potter (2013) with the premise that by having media literacy skills, the audience has a clearer perspective to interpret the meaning consumed through 360-degree video. Based on the results of the questionnaire on 400 respondents, the average score of Gen Z’s media literacy level as measured using seven media literacy skills, including analysis, evaluation, grouping, induction, deduction, synthesis, and abstracting, yields a value of 3,31.

Table 2. Media Literacy Level Variable Average

Dimension	Mean
Analysis	3,44
Evaluation	3,3
Grouping	3,31
Induction	3,3
Deduction	3,23
Synthesis	3,26
Abstracting	3,35
Total	3,31

This shows Gen Z in this research population has a very high media literacy level. With that in mind, this capability should be a provision for Gen Z, which supports them in processing information by consuming 360-degree video. This hypothesis will be proven by simple linear correlation and regression tests.

Table 3. Variable Correlation Test

		Media Literacy Level	Information Processing Ability
Media Literacy Level	Pearson Correlation	1	.702
	Sig. (2-tailed)		.000
	N	400	400
Information Processing Ability	Pearson Correlation	.702	1
	Sig. (2-tailed)	.000	
	N	400	400

The correlation test in this study used the Pearson Product Moment Correlation Test, carried out through SPSS 26. In the correlation test, if the significance value is <0.05, the data is considered correlated and vice versa. Based on the table above, the significance value in the Sig. (2-tailed) of 0.000, which means below 0.05. So, it can be concluded that the two variables correlate. Furthermore, to see how strong relationship between variables can be seen in the Pearson correlation line with a correlation coefficient value of 0.702. This shows that the two variables have a strong relationship.

Table 4. Significance Test Value (F) of Variable X to Y

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1520.573	1	1520.573	386.676	.000
Residual	1565.104	398	3.932		
Total	3085.677	399			

Then, based on the F test in the table above, the calculated F value is 386.676 with a significance level of 0.000. This signature value is much smaller than 0.05, which states that there is an influence between the variables X and Y, so the regression model can be used to predict the information processing ability variable. It can be concluded that the level of media literacy (variable X) influences the ability to process information (variable Y).

Table 5. Coefficient of Determination of Variable X against Variable Y

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702	.493	.492	1.983

Based on the table above, the coefficient of determination shows the number 0.493. This means that the level of media literacy (variable X) is predicted to have an effect of 49.3% on the audience's ability to process information (variable Y). In comparison, the remaining 50.7% is influenced by other variables not discussed in this study. Furthermore, to find out the regression equation, a t-test was carried out, as shown in the table below.

Table 6. Significance Test Value (t) Variable X to Y

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	4.055	.959		4.227	.000
Media Literacy	.436	.022	.702	19.664	.000

a. Dependent Variable: Information Processing Ability

The table above shows a significance value of 0.000 which is below 0.05. Based on these values,, variable X has a significant influence on variable Y. Furthermore, it can be predicted from the linear regression equation to determine the extent to which the influence of variable X on Y. Based on the

table above, it is known that the value of the constant (a) is 4,055, while the value of the regression coefficient (b) is 0,436. Therefore, based on the formula, the regression equation can be written as follows:

$$Y = a + bX$$

$$Y = 4,055 + 0,436X$$

From the above equation, it is known that the constant value is 4,055. This means the consistent value of the variable ability to process information is 4,055. Then, the regression coefficient X is 0,436. The linear regression equation shows that for every one-unit increase in the media literacy level value, the value of the ability to process information in the 360-degree video is predicted to also increase by 0,436 units.

Discussion

Based on the research results, the respondent's media literacy level indicates that Gen Z in Jakarta has a very good ability in analyzing, evaluating, categorizing, inducting, deducting, synthesizing, and abstracting consumed information. The average value of 3,31 from this variable answers RQ 1 regarding how high the ability of Gen Z to process data in the 360-degree video is very high.

In theory, these abilities enable the audience to obtain the desired experience and information (Potter, 2013, p. 10). So, the media literacy level should support their ability to process information, especially in 360-degree video, which is more complex than other forms of journalistic products. The results also show that Gen Z can process data from 360-degree videos with an average value of 3,27. Therefore, this result also answers RQ 2 regarding how high the level of Gen Z's media literacy skills is.

However, the result did not show whether this ability is influenced by the level of media literacy that the audience has. Therefore, this research offers these hypotheses:

H₀: there is no effect of the level of media literacy on the ability of Gen Z to process information in 360-degree video.

H_a: there is an effect of the level of media literacy on the ability of Gen Z to process information in 360-degree video.

Hence, to prove these hypotheses, a simple linear correlation and regression test is carried out, first to find out whether the two variables are related and how big the influences were. The correlation test results showed a significance value of 0.000, which was far below 0.05. So, it can be concluded that the two variables have a relationship. The strength and direction of the association are then seen through the correlation coefficient, which has a value of 0.702 which is included in the strong category.

The value of 0.702 is also positive, so the relationship between the variables X and Y is strong and has a positive direction. This means that someone with a high level of media literacy will also be able to process information in 360-degree video. This result complements the theory of media literacy explained by Potter that the ability of media literacy possessed by individuals helps the audience to obtain the desired experience and information so that it supports them to be able to process information properly.

Based on previous research, it was stated that immersive journalism takes longer to be consumed despite the brief attention span of Gen Z. On the other hand, media literacy is one of the basic abilities of the audience to understand the message of information. So far, even though immersive journalism continues to develop with many advantages, there has been no research to see whether the audience captures and understands the information while watching the 360-degree video. Therefore, based on the results of the linear regression test, the F test value is known to be worth 0,00, whose value is below 0.05. It can be concluded that there is an influence between variable X on variable Y. Based on the results of this study, H_a is accepted, and H₀ is rejected. It also answers RQ 3 regarding whether media literacy skills have an effect in helping Gen Z to understand the information in 360-degree video. Thus, it can be concluded that the level of the youth's media literacy influences their ability to process information in 360-degree video.

Furthermore, the coefficient of determination (R square) scores 0,493, which means that the magnitude of the influence of variable X on Y is predicted to be 49.3%. Thus, the level of media literacy is predicted to have an effect of 49.3% on the audience's ability to process 360-degree video. Meanwhile, the remaining 50.7% is influenced by other variables not discussed in this study.

The results of this study add to the findings in the realm of immersive journalism because there has not been researched related to immersive journalism that has proven the audience's comprehension when consuming immersive journalism. Sundar et al. (2017) researched the effect the audience feels after consuming immersive journalism, only to the memory (recall) level. In the 360-degree video concept, many visuals must be seen and absorbed by the audience. Other studies have found that by looking at the 360-degree video, the duration the audience consumes immersive journalism news is actually longer because the audience needs to look around to select and process the information presented (Jones, 2017), which allows the process of absorbing information by the audience to become longer.

In previous research, this was referred to as the advantage of immersive journalism, which presents exclusive events and locations for the audience. Still, it does not guarantee that the audience can process all the information correctly because, with the freedom to look in all directions, the order of obtaining knowledge can differ from one person to another. According to Kang et al. (2019, p. 13), this free choice requires the audience to understand the context of the news when consuming immersive journalism because the audience's interpretation of the news depends on the framing of each individual. Therefore, audiences must see and interpret information appropriately when consuming immersive journalism news in 360° videos.

This research shows that Gen Z, with a very good level of media literacy, can also process information in 360-degree video. This proves that with media literacy skills, Gen Z has a clearer perspective to interpret the meaning consumed through 360-degree video. This is in accordance with Potter's statement (2013, p. 10) that media literacy gives the audience a clear map to help navigate better when consuming media to obtain the right experience and information.

However, with a positive relationship between the level of media literacy and the ability to process information, it can be interpreted that someone with poor media literacy cannot properly process information in 360-degree video. Seeing the strong relationship and the relatively high number of predictions of influence, it can be concluded that for a 360-degree video to be understood correctly by the audience, media literacy ability is required for each individual to interpret the message conveyed correctly. If the audience does not have a good level of media literacy, they might not understand the information conveyed properly.

Therefore, it becomes important to increase the audience's media literacy. Looking back on its roots, media literacy is a set of perspectives used by audiences to actively expose themselves to the mass media to be able to interpret the meaning of the messages they encounter. This perspective is built from a knowledge structure that requires tools, raw materials, and will. In this study, the tools or skills possessed in media literacy have been discussed.

Nonetheless, besides skills, two other things support media literacy, namely raw materials (knowledge structures), which are information from the media, and will (personal locus), which comes from our personal locus (Potter, 2013, p. 23). These three things are the basis of media literacy. The first thing important to have in media literacy is personal locus which is one's goal when looking for information. These goals shape the information processing task by determining which parts to filter out and ignore. The clearer the goal, the easier it is to direct the process of seeking information and control the influence of the media on us (Potter, 2013, p. 15).

Then, media literacy also requires knowledge structures which are collections of information organized in one's memory (Potter, 2013, p. 16). This structure helps us see patterns which are then used to determine the direction of the information search. Based on these two bases, it appears that media literacy skills basically come from each individual. The same thing was conveyed by Restianty (2018, p. 86), that to be productive in media, users need to consciously select, recognize and respond to media. This awareness needs to start from the elementary school level to higher education because, according to her research, media literacy also stimulates development and knowledge and improves audience skills in interpreting media texts. This is consistent with the results of this research, which states that media literacy skills affect the audience's ability to interpret information in 360-degree video.

Therefore, it can be concluded that the audience needs to actively and consciously expose themselves to media literacy knowledge to properly process information from the media. Not only the audience but the press as the creator also has a role in increasing audience media literacy so that the messages that have been made can be conveyed properly. However, it should be noted that this research still has drawbacks. The sampling technique used in this study was a convenience sampling technique, so there were potential inaccuracies in the research criteria and the resulting sample

selection. So, the results of this study can only be generalized to populations and samples that meet the criteria mentioned in the previous chapter.

In addition, this research still has some drawbacks. Given the lack of studies on the effect of media literacy on the ability to process 360-degree video, no questionnaire has been tested in previous studies. Therefore, the results of this study can only be generalized to the population in this study, namely, Gen Z aged 15-24 in DKI Jakarta. In addition, seeing the significant results related to the effect of media literacy on a person's ability to process information, this study emphasizes the application of media literacy aspects rather than proving the theory itself. This angle is chosen to examine the importance of implementing media literacy, especially for Gen Z, who consume various forms of information.

CONCLUSION

Many studies related to immersive journalism have been carried out. Yet, no research has addressed the aspects of audience comprehension. Even though news with a visual concept of 360-degree has a lot of space to be seen, it does not guarantee that the audience can catch the information conveyed correctly. On the other hand, there is a fairly large gap between the attention span of Gen Z and the duration of 360-degree video products. The question in this study is whether the young generation can absorb the information watched from 360-degree videos.

Meanwhile, media literacy gives the audience a clear map to help them navigate better when consuming media to get the right experience and information. Therefore, this research was conducted to find out whether media literacy affects the audience's ability to process information in 360-degree video. The results showed that the average value of the variable media literacy level (X) was 3.31, which included the very high category. So, it means that young people in Jakarta have a very good media literacy level. Meanwhile, the average value of the information processing ability (Y) variable is 3.27, which is also included in the very high category. These results indicate that young people in Jakarta also have a very good ability to process 360° news information.

Furthermore, from the correlation test, it is known that the significance value is 0.000, which scores below 0.05, so it can be stated that the two variables have a relationship. Meanwhile, the directional and strong relationship between variables is 0.702. This positive result means that the higher the media literacy variable (X), the higher the information processing ability variable (Y), and vice versa. It is also included in the strong category so that the relationship between variables X and Y is considered strong.

Finally, the results of the linear regression test show that in the F test is known that the significance value scores are 0.00, which is shown below 0.05. It can be interpreted that the level of media literacy did affect the ability of the youth to process information in 360-degree video. Therefore, H_a is accepted, and H_0 is rejected. Furthermore, based on the coefficient of determination (R square), which has a value of 0.493. It means that the level of media literacy is predicted to have an effect of 49.3% on the youth's ability to process 360-degree video. Meanwhile, the remaining 50.7% is influenced by other variables not discussed in this study.

The results of this study have become new findings for media literacy and immersive journalism, given their strong relationship and considerable influence. The higher level of media literacy is followed by higher Gen Z's ability to process 360-degree video. However, at the same time, it means that young people with low literacy levels will have difficulty processing 360-degree video. This indicates that extra effort is needed from both the media and individuals to improve media literacy skills so they can interpret messages properly. The results of this study highlight the importance of media literacy in the process of information processing that can be absorbed by readers and the media industry so that 360-degree video can develop effectively among the public.

In addition, the findings in this study suggest that media develop news with the 360-degree video concept. Considering that there have not been many media in Indonesia that have implemented 360 videos with long stories. The findings in this study show that Gen Z in Jakarta can absorb 360-degree video information so that the media can consider developing content similar to international media to attract the youth who prefer visual content.

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