Journal of Consumer Studies and Applied Marketing
Volume 1 Number 1, 2023: 37-45
DOI: 10.58229/jcsam.v1i1.47
https://jurnal.integrasisainsmedia.co.id/index.php/JCSAM

The Effect of Financial Contents on Social Media Towards Financial Literacy on Generation Z in Sumatra and Java

Agnes Enya Angelica[*1], Tuntun Salamatun Zen[2], Eneng Nur Hasanah[3]
School of Business and Management/Institut Teknologi Bandung[1,2,3]
Email: agnes_enya@sbm-itb.ac.id

Abstract

Contents with the topics around finances in social media can be utilized to improve financial literacy among Generation Z, considering that Generation Z took the highest proportion compared to other generations in Indonesia and since Generation Z has the highest internet penetration rate and spent the most time on the internet compared to other generations. This research aims to determine the impact of finances on financial literacy in Generation Z, the most significant factor of financial content that affects financial literacy, and to find out which social media and content type is the most impactful. The financial content on social media is measured by the number of social media and content types, the number of creators and topics watched, and duration, while financial literacy is measured by financial attitude, behavior, and knowledge. This research uses quantitative methods, and the data is collected using an online questionnaire. This research gathered 287 samples from Java and Sumatra, Indonesia, and 222 are financial content viewers. The multi-linear regression result found that financial contents affect financial literacy by 20.4%. The total amount of financial topics watched has the most significant impact on financial literacy, while the total amount of social media used to watch financial content has a significant negative impact. The ANOVA result discovered that people who are most often use YouTube to view financial content have the best financial literacy score average.

Keywords: financial content; financial literacy; generation Z; social media.

A. INTRODUCTION

The number of internet users in Indonesia is growing year after year. Indonesia's internet penetration rise from 73.7% to 77.02% in 2 years (APJII, 2022). Generation Z spends more time online than previous generations (Alvara Research Center, 2022). Generation Z also has the highest internet penetration rate, with people aged 13 to 18 having 99.16% penetration and those aged 19 to 34 having 98.64% penetration (APJII, 2022). The most used internet platform is social media (APJII, 2022). The increase in internet users corresponds to the increase in social media users, which nearly tripled from 62 million in 2014 to 167 million in 2023 (We Are Social, 2023). In general, approximately 78.5% of Indonesian internet users use social media.

With the increased use of social media, some users have taken the initiative to share their knowledge with other users, including financial content. In particular, the pandemic encouraged people to seek financial advice and information from public sources at a higher rate than before the pandemic (OECD, 2022). Viewing financial content on social media can be classified as financial education, an activity series intended to increase financial literacy.

In Indonesia, the financial literacy index has improved in recent years. Despite an increase in the financial literacy index in Indonesia, it remains low compared to other countries. There is also a gap between financial literacy and financial inclusion. Because Generation Z's internet penetration rate is higher compared to other generations, and they spend the most time accessing the internet compared to other generations, financial content on social media can be used to increase financial literacy.

Previous studies have used financial influencers on social media and financial content as independent variables. However, no research has been conducted that uses financial literacy as a dependent variable.

* Corresponding author

The dependent variable of previous research is the interest in investing in the capital market (Tazkia and Wijayanti, 2022; Ulmi, A. T. et al., 2022), investment decision-making (Adiningsih and Ghofar, 2020), financial planning awareness (Gunawan M. R. et al., 2022), and financial decision (Kurniawan and Damayani, 2022). Furthermore, no research has been conducted on this topic, including TikTok, YouTube, and Instagram, Generation Z's most popular social media platforms.

Therefore, this research will continue the previous studies regarding social media. However, it will focus more on examining the impact of financial content on social media on financial literacy, particularly in the most popular social media platforms among Generation Z, TikTok, YouTube, and Instagram, as well as identifying the most impactful social media and content type. This study will also investigate social media's most important financial content factors that impact financial literacy.

Financial literacy is the skills that include behavior, attitude, consciousness, and knowledge for making wise financial decisions that lead to financial well-being (OECD, 2012). According to (OJK, 2013), financial literacy has three indices: 1) Low financial literacy index: financial literacy score ≤ 60; Moderate financial literacy index: $60 <$ financial literacy score ≤ 80; and 3) High financial literacy index: financial literacy score > 80.

Financial attitudes, behavior, and knowledge are three components used to assess financial literacy (OECD, 2012). Pankow (2012) defines financial attitude as the viewpoints, perceptions, and state of mind regarding money. Financial behavior refers to controlling, using, and handling personal financial resources (OECD, 2012). Financial knowledge refers to understanding financial theories (Bajaj and Kaur, 2022; Saurabh and Tanuj, 2018).

Social media is a place to save, share, and create content while networking (Bashar et al., (2012). Financial content on social media can also be classified as a form of financial education. The information on social media comes in three formats: text, images, and videos. These three types of financial information are served in various types of content on Instagram, YouTube, and TikTok, which cover:1) Instagram Feeds: Instagram's first content type can include images, videos, and text captions; 2) TikTok and Instagram Live; 3) TikTok and Instagram Live is a real-time broadcast that allows creators to collaborate; 4) Instagram Story: Instagram Story is the content type that disappears after 24 hours but can be seen again if the content creator itself makes a story highlight; 5) Short Videos (TikTok Videos, Instagram Reels, YouTube Shorts): The three types of content share characteristics, particularly regarding navigation and algorithm. These types of content can run up to 60 seconds on YouTube Shorts, 3 minutes on Instagram Reels, and 5 minutes on TikTok; 6) YouTube Videos: YouTube videos have three length classifications which are short (less than 15 minutes), medium (16 to 30 minutes), and long (longer than 30 minutes).

Input and output are two indicators used to assess the effectiveness of financial content on social media (OECD, 2013). The output is financial literacy, and the variables used to measure the inputs are learning duration (OECD, 2013), learning media, and learning materials (Surahmad, 1986). People born between 1997 and 2012 qualify as Generation Z (Pew Research Center, 2019). Internet penetration among Generation Z is estimated to be 99% (APJII, 2022). Generation Z's financial literacy is 44.04% (OJK, 2019).

B. RESEARCH METHOD

This study is a descriptive quantitative study that uses both primary and secondary data. The secondary data are journal articles and previous studies. The primary data collection method is an online questionnaire distributed from May 30th to June 7th (9 days) to Generation Z in Sumatra and Java. The questionnaire is divided into six sections: the demographic, the financial contents, the financial attitude, the financial behavior, the financial knowledge, and the action measurement. The questionnaire contains a total of 80 items, excluding the demographic questions. The financial literacy section contains 47 items, the financial contents section contains nine items, and the action measurement contains 24 items. The financial

attitude, behavior, and knowledge sections are explained in the table below, where the scoring method is adopted from OECD (2012).

Table 1. Financial Literacy Scoring Method

Dimension	Question Type	Total Questions	Score
Financial Attitude	Likert	17	1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree 5: Strongly Agree
Financial Behavior	Likert	6	
	Yes or No	4	Yes: 1, No: 0
	Checkboxes	10	1 point for every response (Except FB9: 0 if using credit. Other answers: 1)
Financial Knowledge	Multiple choices	2	Correct response: 1 Other answers: 0
	True or false	5	
	Fill the blanks	3	

Source: processed data, 2023

The financial literacy questions, including financial attitude, behavior, and knowledge, are adapted from OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion. The questionnaire was translated into Indonesian. The survey was translated into Indonesian. Financial attitude focuses on the questions regarding money attitudes. (OECD, 2012). Financial behavior is divided into nine components: timely bill payment, considered purchase, keeping watch of financial affairs, retirement planning, achieving financial goals, active saving, money budgeting, avoiding borrowing to make ends meet, and choosing financial products (OECD, 2022). Financial knowledge has eight components: time value of money, division of money, the interest of the loan, compound interest, inflation, risk and return, interest plus principle, and diversification (OECD, 2022).

Table 2. List of Independent Variables

No	Indicator	Variable	Source
1	Learning Duration	Duration of watching financial content	OECD, 2013
2	Learning Media	The total amount of social media used to watch financial content	Surahmad, 1986
3		The total amount of content types used to watch financial content	
4	Learning Materials	The total amount of financial content creators watched	Surahmad, 1986
5		The total amount of financial topics watched.	

Source: processed data, 2023

The sample size for this study is 100 at least. According to Hair (2018), the recommended sample size of 15 to 20 observations per independent variable, and this research uses five independent variables. The sampling method is non-probability sampling, especially purposeful sampling. Purposive sampling requires the researcher to employ specific desired sample criteria (Sugiyono, 2018). The sample criteria are Generation Z in Sumatra and Java, who like to view financial content on social media.

The statistical methods used are multi-linear regression for answering the first research objective, to determine the impact of financial content on social media on financial literacy. The second research objective, the most significant factor, will also be included in this test. A classical assumption test is also conducted beforehand as a pre-requisite for using regression. The third research objective, to find the social media and type of content that s the most impactful, is answered using ANOVA. The Levene test is also conducted beforehand as the requirement to use the ANOVA test. The statistical analysis is done using SPSS.

C. RESULTS AND ANALYSIS

The questionnaire gathered 287 respondents from Generation Z from Sumatra and Java. Of 287 respondents, 222 (77.35%) are viewers of financial content on social media. Therefore, the data from 222 respondents are used in the data analysis. Most respondents (71.17%) watch financial content for less than 30 minutes daily. Around 7.21% of respondents watch financial longer than 2 hours a day. Instagram (96.85%) is the most widely used social media platform, while TikTok (75.23%) has the fewest users. Along with this result, Instagram is the most favored social media platform for viewing financial content (40.09%). YouTube is the second preferred social media platform among respondents (37.39%). Short videos (84.68%) are the most favored type of financial content. These consist of Instagram Reels, YouTube Shorts, and TikTok Video. Investment (73.66%) and personal finance (71.88%) are social media's most demanded financial content topics.

Based on the result from the action measurement section, the respondents' conditions are improving after they often watch financial content. The proportion of respondents not informed of any investment or credit instruments has decreased from 48.20% to 12.61%. Likewise, the proportion of respondents owning credit and investment instruments rose from 4.50% to 20.27%. The final financial literacy score indicates that approximately 50.9% have moderate financial literacy, followed by high (36.04%) and low (13.06%). The overall financial literacy score average is 74.02%, classified as moderate.

Table 3. Financial Literacy Score Summary

Indicator	Financial Attitude	Financial Behavior	Financial Knowledge	Financial Literacy
Min	49.23%	40.56%	0.00%	39.24%
Average	79.11%	68.56%	74.38%	74.02%
Max	100.00%	88.21%	100.00%	93.39%
Median	78.46%	68.80%	75.00%	76.00%

Source: processed data, 2023

The classical assumption test result indicates that the data gathered is normally distributed, has no multicollinearity, and has no heteroscedasticity. Therefore, the data is eligible to be analyzed using multi-linear regression.

The validity test indicates that three questions in the financial attitude section and one in the financial knowledge section are invalid. Therefore the results from the questions are not used in calculating financial literacy. The reliability test results show that the financial attitude dimension has good reliability, while the financial behavior and financial knowledge section have fair reliability. Therefore all of the dimensions can be used for the analysis.

The regression result is presented in the table below; the dependent variable (Y) is financial literacy.

Table 4. Multi Linear Regression Result

Variable	Regression Component	Coefficient (b)
a	Constant	71.596
X1	Duration of watching financial content per day	-0.002
X2	The total amount of social media used to watch financial content	-0.068
X3	The total amount of content types used to watch financial content	0.047
X4	The total amount of financial content creators watched	0.035
X5	The total amount of financial topics watched	0.184

Source: processed data, 2023

The Adjusted R Square is 0.204, indicating that the model with five independent variables can represent 20.4% of financial literacy. The other variables included in the model factoring of the remaining 79.6%. The strength of the relationship between financial literacy with the overall model is 20.4%.

F-Test Result

The F-test determines whether the model has an impact on financial literacy. The significant value should be less than 0.05, and the F value should be greater than the F table (1.249) for the model to pass the F test. According to the table below, the model passed the F test, indicating that it is statistically significant.

Table 5. F-Test Result

Indicator	Statistics	Criteria	Result
F	12.005	1.249	Significant
Significance	<0.001	<0.05	Significant

Source: processed data, 2023

t-Test Result

The hypothesis is accepted if the significant value is less than 0.05 and the T value is greater than the t-table of 1.9715. Based on the result of the T-test, the statistically significant variable is the total amount of social media used to watch financial content and the number of financial topics watched. However, the total number of social media users negatively impacts financial literacy. Therefore, the accepted hypothesis for the first research question is the total amount of topics watched.

Table 6. t-Test Result

Variable	t	Significance	Hypothesis Result
Duration of watching financial content per day	-0.047	0.962	Rejected
A number of social media users view financial contents	**-2.2029**	**0.044**	Rejected
Number of content types used to view financial contents	1.046	0.297	Rejected
The number of financial content creators watched	0.815	0.416	Rejected
Number of financial topics watched	**4.697**	**<0.001**	Accepted

Source: processed data, 2023

Levene Test Result

The Levene test determines whether the variance in financial literacy scores between groups is equal. If the groups' variances are equal, the significant value should be greater than 0.05. The first grouping will be based on the respondents' preferred social media platforms for viewing financial content. The second grouping will determine the respondents' preferred content type for viewing financial content. The comparison is based on the mean of financial literacy.

Table 7. Levene Test Result

Grouping	Sig	Criteria	Result
Based on Social Media	0.158	>0.05	Homogene Variance
Based on the Content-Type	0.013		Different Variance

Source: processed data, 2023

Based on the results, the social media grouping has homogeneous or equal variance and, therefore, can be tested by the ANOVA test. Meanwhile, the content type grouping has an unequal variance. Consequently, the dataset cannot be tested for an ANOVA test.

ANOVA Test Result

Table 8. ANOVA Test Result

Mean Difference	Sig	Criteria	Result
Between Groups	0.036	<0.05	Different Mean (Accepted)

Source: processed data, 2023

According to the results, the significant value is less than 0.05. Therefore the hypothesis is accepted, and it is found that there are significant differences among respondents categorized by their most frequently used social media to watch financial literacy.

Tukey Test Result

Table 9. Tukey Test Result

Social Media (i)	Social Media (j)	Mean Difference (i-j)	Significance
Instagram	YouTube	-1.44%	0.627
	TikTok	2.54%	0.192
YouTube	Instagram	1.449%	0.627
	TikTok	3.99%	0.033
TikTok	Instagram	-2.54%	0.192
	YouTube	-3.99%	0.033

Source: processed data, 2023

According to the results of the Tukey test, the comparison of groups between TikTok and YouTube has a significant value of less than 0.05, indicating that a mean difference in financial literacy between those two groups exists. The other comparisons of groups are statistically equivalent. According to the mean difference column, YouTube has a positive mean difference from Instagram and YouTube. This indicates that people who watch financial content on YouTube the most frequently have the highest means compared to the respondents who often use other platforms to watch financial content. Therefore, people who watch financial content on YouTube more frequently have higher financial literacy scores, and YouTube is the most influential social media platform.

H1a: Duration of watching financial content in a day positively affect financial literacy

According to the t-test results, duration has a negative and insignificant impact on financial literacy. The financial literacy score will decrease by 0.002 for every additional unit of time spent watching financial content per day (X1), while the other variables remain constant. Therefore, the hypothesis is rejected. One explanation for this result is that people are exposed to different content and information when they open social media. Cognitive load theory states that exposure to a variety of information in a short period can exceed cognitive load capacity, reducing attention span and absorption of information. A prolonged cognitive effort can deplete cognitive resources, disrupt information processing, and eventually reduce learning outcomes.

H1b: Total amount of social media used to watch financial content positively affect financial literacy

The total amount of social media platforms used to watch financial content negatively and significantly impact financial literacy, according to the t-test results. For each additional unit of social media utilized to watch financial information (X2), the financial literacy score will drop by 0.068 when the other factors stay the same. The hypothesis is therefore rejected. The fact that most users access social media for purposes other than content discovery, especially for financial content, may contribute to this outcome. According to We Are Social in Indonesia (2023), the top motivations for using social media are to stay in touch with relatives (60.6%), to find inspiration for things to do and purchase (50.4%), and others. Moreover, influencers and experts are ranked fifth out of the most followed accounts on social media (We Are Social, 2023).

The cognitive load theory can also explain why the amount of time spent on social media watching financial content has a negative impact on financial literacy. The more social media people use, the more

varied the information they receive. Cognitive load theory states that a wide variety of information exposure in a short time can exceed cognitive load capacity, eventually reducing attention span and information absorption.

H1c: Total amount of content type used to watch financial content positively affect financial literacy

The overall number of content types used to consume financial content has an insignificant and positive effect on financial literacy, according to the t-test's findings. For each unit of content categories used to watch financial content (X3) added, the financial literacy score will rise by 0.047 while the other variables stay the same. The hypothesis is therefore rejected. This is made possible by the fact that social media's financial content types on social media serve information in a variety of formats, including interactive features, text, video, and image. Various content types utilized to watch financial content can increase financial literacy scores. Seeing different information types will boost cognitive processes, including visual, auditory, and interaction processing. Multiple cognitive processes will boost the absorption of information.

H1d: Total amount of financial content creators watched positively affects financial literacy

According to the t-test results, the total amount of financial content creators watched has a negative and insignificant impact on financial literacy. The financial literacy score will rise by 0.035 for every unit increase in the number of financial content creators watched (X4), while the other variables remain constant. As a result, the hypothesis is rejected.

However, the regression coefficient indicates that this variable positively impacts financial literacy. The variable is included in the same indicator as the total amount of financial topics watched: learning material. Financial content creators specialize in various disciplines, but one can explain multiple topics. It is concluded that as the total amount of financial content creators watch increases, the total amount of financial topics will increase. Furthermore, the greater the amount of financial content creators watched, the greater the understanding of a single topic by enhancing the perspectives of various creators.

H1e: Total amount of financial topics watched positively affect financial literacy

According to the t-test results, the total amount of financial topics watched positively and significantly impacts financial literacy. The financial literacy value will increase by 0.184 for every unit of financial topics watched (X5), while the other variables will remain constant. As a result, the hypothesis is accepted. The theory of planned behavior can explain the positive correlation between financial literacy and the total amount of financial topics watched. According to this theory, information or knowledge will underlie attitude, eventually affecting behavior. Better financial knowledge and a better attitude arise from a comprehensive understanding of financial literacy topics, eventually affecting financial behavior and resulting in a higher financial literacy score.

H2: There is a financial literacy means Difference between the groups of respondents based on the most used social media to watch financial literacy.

The ANOVA result identified a difference in financial literacy between the groups of respondents based on the most frequently used social media to view financial content. As a result, the hypothesis is accepted. According to the Tukey test result, the respondents who most frequently use YouTube when viewing financial content have the highest financial literacy score. The second highest is Instagram; TikTok has the lowest financial literacy score mean. Therefore, YouTube is the most impactful social media platform. A previous study found similar findings stating that YouTube is the most socially influencing social media platform. Furthermore, individuals and organizations publish educational content on YouTube more than other social media platforms.

Regarding publishing educational content, Instagram is not as popular as YouTube. However, Instagram has various content types, enabling information sharing in interactive content, text, video, and image. This research discovered that the total amount of content used to watch financial content positively affects financial literacy, considering that the cognitive processes and absorption of information will be positively increased when using varied forms of information in the learning process. On the other hand, Tiktok is a short video-centric social media. Exposure to enormous and various information quickly will decline attention span and absorption of information.

H3: There is a financial literacy Difference between the groups of respondents based on the most often viewed content type to watch financial literacy.

The categorization based on the most frequently seen type of financial content watched by respondents failed the Levene test. Therefore this grouping was not eligible to be analyzed by the ANOVA test.

D. CONCLUSION

Financial literacy score is affected by 20.4% by financial content in social media. The variable with a significant and positive impact is the total amount of watched financial topics. On the other hand, the total amount of social media used to view financial content has a significant and negative impact. The t-test result shows that the most significant factor of financial content is the total amount of financial topics watched. This research has discovered that people who use YouTube most often to view financial content have better financial literacy scores than other social media users. The second order of the most impactful platform is Instagram, while the least impactful is TikTok. The potential cause regarding these findings is that previously conducted research discovered that YouTube is the most influential social media platform.

The result of this study can benefit the content creators to give more varied financial topics materials, considering that the most significant factor of social media is the total amount of financial topics watched. This study can also be a consideration for financial institutions interested in Generation Z's financial literacy. This research has several limitations regarding the data-gathering method, timeline, and variables used in the model. This study utilized an online questionnaire to collect the data. There are probabilities that the answer of the respondents are not showing the real condition.

Further studies regarding this topic can consider using the interview method, following the suggestion from OECD, the questionnaire source used in this study. The interview method increases the possibility that the respondents' answers reflect the actual condition. The timeline of this research is quite narrow, and the questionnaire is distributed in 9 days in Sumatra and Java. The respondent composition is not proportional between Sumatra and Java.

Further study can consider gathering respondents from Indonesia and pay attention to proportions between provinces. This topic also needs further enhancements, particularly for the variables in the financial contents part. The analysis based on a single social media is also lacking, considering that every social media is completed with different features and uniqueness, which can be personalized for audiences to boost the effectiveness of the financial content.

REFERENCES

Journal Article:

Adiningsih and Ghofar (2020). Pengaruh Financial Inluencer dan Webinar Investasi Terhadap Pengambilan Keputusan Investasi Mahasiswa. https://reaksi.ub.ac.id/index.php/reaksi/article/view/52

Gunawan M. R. et al., (2022)." The Effect of Social Media Content and Personal Background Performance on Financial Planning Awareness of Generation Z Muslim". https://doi.org/10.58968/eii.v2i2.50

Bajaj, I. and Kaur, M. (2022), "Validating multi-dimensional model of financial literacy using confirmatory factor analysis", Managerial Finance, Vol. 48 No. 9/10, pp. 1488-1512. https://doi.org/10.1108/MF-06-2021-0285

Kurniawan, D., & Damayani, S. M. (2022). The Effectiveness of Financial Content on Youtube Towards Financial Literacy, Financial Behavior, And How It Influences Generation Z Financial Decision in Indonesia During Pandemic. http://www.ijafb.com/PDF/IJAFB-2022-43-09-24.pdf

Pankow, D. (2003). Financial Values, Attitudes and Goals. Available at: https://library.ndsu.edu/ir/handle/10365/5038

Saurabh, K. and Nandan, T. (2018), "Role of financial risk attitude and financial behavior as mediators in financial satisfaction: Empirical evidence from India". Available at: https://doi.org/10.1108/SAJBS-07-2017-0088

Tazkia, A. and Wijayanti, R. (2022). Pengaruh Influencer Keuangan dan Literasi Keuangan terhadap Minat Investasi Generasi Milenial di Pasar Modal. http://dx.doi.org/10.21776/jmrk.2022.01.2.05

Ulmi, A. T. et al., (2022). The Influence of Social Media Influencer on Students' Interest in Investing in the Capital Market. http://doi.org/10.26487/hjbs.v4i1.512

Book

Surahmad, W. (1986). Metodologi Pengajaran Nasional. Jenmars.

Internet Source

Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), (2022). Profil Internet Indonesia 2022. Retrieved from: https://apjii.or.id/gudang-data/hasil-survei.

Atkinson, A. and F. Messy (2012). Measuring Financial Literacy: Results of the OECD/International Network on Financial Education (INFE) Pilot Study. Retrieved from: http://dx.doi.org/10.1787/5k9csfs90fr4-en

OECD (2022). "OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion 2022". Retrieved from: www.oecd.org/financial/education/2022-INFE-Toolkit-Measuring-Finlit-Financial-Inclusion.pdf

OECD (2022). The impact of the COVID-19 pandemic on financial consumers in Asia. Retrieved from: www.oecd.org/financial/education/the-impact-of-the-covid-19-pandemic-on-financial-consumers-in-asia.htm

Pew Research Center (2019). "Defining generations: Where Millennials end and Generation Z begins". Retrieved from: https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

We Are Social (2023). "Digital 2023 Indonesia (February 2023) v01". Retrieved from: https://www.slideshare.net/DataReportal/digital-2023-indonesia-february-2023-v01?from_search=0#.