



The Impact of Social Media on Teenagers' Financial Literacy: A Quantitative Study of Influences and Interactions

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Abstract. This study investigates the impact of social media on financial literacy among adolescents aged 15 to 18. As social media increasingly becomes a primary source of information for young people, concerns have arisen about its influence on their financial understanding and decision-making. Adopting a cross-sectional quantitative approach, the study collected 120 valid responses from high school students through a structured online questionnaire. Key variables measured included daily time spent on social media, frequency of exposure to financial content, and financial literacy levels assessed via both knowledge-based and self-evaluation items. The results reveal that general social media usage has no statistically significant relationship with financial literacy. However, frequent exposure to credible financial content is positively and significantly associated with higher financial knowledge. Furthermore, the positive effect of content exposure is enhanced when supported by family involvement or school-based financial education. These findings highlight that the quality of content-not the quantity of screen time-plays a central role in influencing adolescents' financial literacy. The study contributes to current discussions on digital youth education and emphasizes the importance of integrating media literacy into financial learning frameworks.

Keywords: Financial literacy, Adolescents, social media, Finfluencers, Media literacy, Financial education.

1. Introduction

The rise of social media platforms such as TikTok, Instagram, and YouTube has dramatically reshaped the way teenagers consume information. According to a recent report by the Pew Research Center, over 95% of teens use social media daily, and nearly half report being online almost constantly [1]. Beyond entertainment, these platforms increasingly serve as informal sources of knowledge on topics such as politics, mental health, and finance. While this expanded access can be empowering, it also exposes young users to unregulated and potentially misleading content.

At the same time, international assessments indicate that adolescents' financial literacy remains insufficient. The OECD's 2018 PISA study found that only 12% of 15-

year-old participants demonstrated advanced financial knowledge, with large disparities across socioeconomic groups [2]. In an era of rising financial complexity—from mobile payments to youth-targeted investment apps—this gap poses risks not only for individuals but also for broader economic resilience.

Social media has introduced a new category of financial influencers, or "finfluencers," who produce content on saving, budgeting, and investing. While some provide accurate and practical information, others promote oversimplified advice or high-risk behaviors [3]. The viral nature of such content increases the likelihood of misinformation spreading among impressionable audiences. In the absence of formal financial education, adolescents may rely heavily on these unverified sources.

This study aims to examine how social media usage—both in terms of general screen time and exposure to financial content—affects financial literacy among adolescents aged 15 to 18. It also investigates how family support and school-based education moderate this relationship. The goal is to determine whether digital financial content enhances or undermines financial understanding, and under what conditions such content becomes most effective.

2. Literature Review

Financial literacy refers to the ability to understand and apply essential financial skills such as budgeting, saving, investing, and managing debt. It plays a critical role in long-term economic well-being, particularly when cultivated early in life [4, 5, 6]. However, findings from the OECD's 2018 PISA assessment indicate that most adolescents possess only basic or below-basic financial knowledge, with significant disparities across income and education levels [7, 8, 9].

Meanwhile, social media has emerged as a dominant force in shaping adolescents' behaviors and attitudes. Platforms such as TikTok, Instagram, and YouTube now rival traditional institutions in influencing youth perceptions of social issues, identity, and financial behavior [10]. Teenagers are regularly exposed to financial content online, ranging from personal budgeting tips to investment advice. While some of this content can be informative and empowering, much of it is unregulated and may present oversimplified or misleading messages.

A particularly notable trend is the rise of "finfluencers"—content creators who specialize in financial topics and amass large followings on digital platforms. Lopez and Kim found that while some finfluencers disseminate practical [5], evidence-based advice, others exaggerate potential returns or downplay financial risk. Given the viral nature of social media, such messages can rapidly reach wide audiences without undergoing formal vetting or peer review.

Despite increasing scholarly interest in the intersection of digital media and financial literacy, the majority of existing studies have focused on adults or college students. Few have isolated adolescents as the primary population of interest, and even fewer have differentiated between general entertainment use and purposeful financial content engagement. Allen et al. emphasized that digital content can support healthy financial habits, but only when paired with critical thinking and contextual support [1].

This study addresses these limitations by focusing specifically on adolescents aged 15–18 and examining both their general social media behavior and financial content exposure. It also considers the moderating role of family support and school-based financial education to provide a more comprehensive picture of how digital engagement shapes youth financial literacy.

3. Research Questions and Hypotheses

Building on prior research and the identified gaps in the literature, this study aims to evaluate how adolescents' interactions with social media influence their financial literacy. Specifically, it focuses on both the quantity of social media usage and the quality of financial content encountered. The study also considers the moderating roles of family support and school-based financial education.

The following research questions guide the investigation:

RQ1: Is general time spent on social media negatively associated with financial literacy among adolescents?

RQ2: Does frequent exposure to financial content on social media platforms positively affect financial literacy?

RQ3: Do family support and school-based financial education moderate the relationship between financial content exposure and financial literacy?

Based on these questions, the study proposes three hypotheses: ·H1: General time spent on social media is negatively associated with financial literacy scores.

H1: General time spent on social media is negatively associated with financial literacy scores.

H2: Regular exposure to financial content on social media is positively associated with financial literacy scores.

H3: The positive effect of financial content exposure on financial literacy is stronger among students who receive financial education at school or support from their families.

4. Model Structure

To quantitatively assess the influence of social media on adolescents' financial literacy, this study applies a multiple linear regression model. The model includes two independent variables—general social media usage and financial content exposure—and two control variables: family support and school-based financial education. The dependent variable is the Financial Literacy Score, computed as a composite index from knowledge-based and self-assessment measures.

The regression model is specified as follows:

$$Y = \beta_0 + \beta_1 + \beta_2 + \beta_3 + \beta_4 + C_2 + \varepsilon \tag{1}$$

The variables and their measurement methods are summarized in Table 1.

Table 1. Variable Definitions and Measurement Methods.

Symbol	Variable Name	Type	Measurement
Y	Financial Literacy Score	Dependent	Composite score (0–10), based on knowledge and self-assessment
X1	Social Media Time	Independent	Self-reported average daily usage (in hours)
X2	Financial Content Exposure	Independent	Likert scale (1 = Never to 5 = Very Often)
C1	School Financial Education	Control	Binary: 1=Received instruction; 0=No instruction
C2	Family Support	Control	Parental involvement rated on a 5-point Likert scale
ε	Error Term	-	Unobserved variance

5. Methodology

This study employed a cross-sectional quantitative design to examine the relationship between social media engagement and financial literacy among adolescents. Data were collected through an online questionnaire administered to high school students aged 15 to 18 across both international and local secondary schools in China. A total of 120 valid responses were obtained.

The questionnaire consisted of three main sections:

- Section A gathered demographic and contextual data, including age, gender, grade level, school type, and parental involvement in financial discussions.

- Section B focused on social media usage patterns, including platforms used, average daily usage time, content categories followed, and the frequency of exposure to financial content.

- Section C assessed financial literacy using two components: (1) five multiple-choice questions based on OECD youth finance standards covering topics such as savings, interest, budgeting, and risk, and (2) five self-assessment statements measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

All participants were assured anonymity, and informed consent was obtained prior to participation. For respondents under the age of 18, consent was additionally secured from a parent or legal guardian.

5.1 Participants and Procedure

This study employed a cross-sectional quantitative design. Data were collected via an online questionnaire distributed to high school students aged 15 to 18 from both international and local secondary schools in China. A total of 120 valid responses were obtained. Participation was voluntary, and anonymity was assured. For respondents under 18 years of age, informed consent was obtained from a parent or legal guardian.

5.2 Instrument

The questionnaire consisted of three main sections:

Section A gathered demographic and contextual information, including age, gender, grade level, school type, and the extent of parental involvement in financial discussions.

Section B assessed social media usage patterns, including the platforms used, average daily screen time, types of content followed, and frequency of exposure to financial content.

Section C measured financial literacy using two components:

A five-item multiple-choice test based on OECD youth financial education standards (covering savings, interest, budgeting, and financial risk).

A five-item self-assessment scale using a 5-point Likert format (1 = strongly disagree, 5 = strongly agree).

5.3 Data Analysis Plan

Data were analyzed using SPSS. The analysis included:

Descriptive statistics: Means, standard deviations, and frequencies to summarize participant characteristics and variable distributions;

Correlation analysis: Pearson correlation coefficients to assess relationships among key variables;

Regression analysis: A multiple linear regression model to test the proposed hypotheses, including the effects of control variables (family support and school education).

6. Results and Analysis

6.1 Descriptive Statistics

A total of 120 valid responses were analyzed. Table 2 summarizes the participants' demographic and behavioral data.

Table 2. Descriptive Statistics of Sample Respondents and Key Variables.

Measure	Value
Number of respondents	120
Average age	16.4 years
Gender distribution	58% female
Average dailiy social media usage	3.7 hours
Percentage exposede to financial content	60%
Percentage following financial creators	25%
Mean financial knowledge score (5 items)	3.2
Mean self-assessment socre (5-point)	3.6

These results indicate that although social media usage is high, only one-fourth of respondents actively follow financial content creators. The average financial knowledge and self-assessment scores reflect a moderate level of financial literacy across the sample.

6.2 Data Analysis

The Pearson correlation matrix is presented in Table 3.

Table 3. Pearson Correlation Matrix of Key Variables.

Variable	Y (Financial Literacy)	X1 (SM Time)	X2 (Fin Content)
Y (Financial Literacy)	1.00	-0.15	0.42
X ₁ (SM Time)	-0.15	1.00	-0.12
X ₂ (Fin Content)	0.42	-0.12	1.00

Financial literacy (Y) is positively correlated with financial content exposure ($r = 0.42$) and weakly negatively correlated with general social media time ($r = -0.15$).

To test the hypotheses, a multiple linear regression was conducted. Table 4 presents the results.

Table 4. Regression Coefficients and Significance Levels.

Predictor Variable	β Coefficient	p-value	Interpretation
Social Media Time (X ₁)	-0.07	0.28	Not statistically significant
Fin Content Exposure (X ₂)	0.39	< 0.01	Significant positive effect
School Education (C ₁)	0.15	0.08	Marginally positive, not significant
Family Support (C ₂)	0.21	< 0.05	Significant positive effect

The model explains 36% of the variance in financial literacy scores ($R^2 = 0.36$). Exposure to financial content is the strongest and most significant predictor. Family support also plays a significant role. In contrast, general social media time does not show a statistically meaningful relationship with financial literacy.

7. Discussion

The results of this study provide valuable insights into how adolescents' use of social media influences their financial literacy. Each hypothesis is addressed below based on the statistical findings and existing literature.

Hypothesis 1 (H1) posited that general time spent on social media would negatively correlate with financial literacy. This hypothesis was not supported, as the regression coefficient for general usage time was negative but statistically insignificant ($\beta = -0.07$, $p = 0.28$). This finding suggests that the quantity of time spent online is not a reliable predictor of financial outcomes, echoing the argument that content quality is more influential than duration [5]. It implies that passive consumption of social media may not directly impair or benefit financial understanding unless specific content is involved.

Hypothesis 2 (H2) predicted a positive relationship between exposure to financial content and financial literacy. The data strongly support this hypothesis, as exposure was significantly associated with improved financial knowledge ($\beta = 0.39$, $p < 0.01$). This finding reinforces previous research suggesting that well-designed digital content

can promote financial awareness when users engage with it meaningfully. It emphasizes the potential of social media as an educational tool—if used critically and deliberately.

Hypothesis 3 (H3) addressed the moderating roles of school education and family support. The results show that family support had a statistically significant positive effect ($\beta = 0.21$, $p < 0.05$), while school-based education showed only marginal significance ($p = 0.08$). This indicates that parental involvement may offer more immediate and personalized reinforcement of financial principles, aligning with findings by Lusardi and Mitchell on early-stage financial socialization [2].

Taken together, the results suggest that content quality and supportive offline environments play a far more critical role in shaping adolescents' financial literacy than simple screen time. The findings highlight the importance of guiding young people not just on how long they spend online, but also on what they engage with and how they critically interpret it.

8. Conclusion

This study examined the influence of social media on the financial literacy of adolescents aged 15 to 18, using data from 120 high school students in China. By distinguishing between general social media usage and exposure to financial content, the research identified important patterns in how digital engagement shapes youth financial understanding.

The findings demonstrate that general social media time does not significantly impact financial literacy. Instead, frequent and intentional exposure to credible financial content is positively associated with stronger financial knowledge. Moreover, this positive relationship is further enhanced by family support and, to a lesser extent, school-based financial education.

These results underscore that the quality of digital content and the presence of offline guidance are key to fostering financial literacy in the digital age. Simply increasing screen time without critical evaluation or support structures is unlikely to improve financial outcomes among adolescents.

This research contributes to the literature by focusing specifically on secondary school students—a group often overlooked in financial education studies—and by clearly differentiating between types of social media use. It highlights the need for integrated strategies that combine media literacy, financial education, and parental engagement.

Future research may expand on this work by incorporating cross-cultural comparisons, tracking long-term behavioral outcomes, or exploring the role of algorithmic content delivery in shaping financial knowledge and attitudes.

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