



THE MEDIATING ROLE OF INFORMATION COMMUNICATION TECHNOLOGY LITERACY ON THE ATTITUDE TOWARDS LEARNING WITH SOCIAL MEDIA AND ONLINE NEWSPAPER READING BEHAVIOR OF STUDENTS

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ABSTRACT

The study aimed to determine if information communication technology literacy significantly mediates the relationship between the attitude towards learning with social media and the online newspaper reading behavior of the students. A quantitative correlation design and mediation technique was used to investigate the relationship between and among the three variables. This study used questionnaires that had been modified and pilot tested by experts. A stratified sampling technique was used to select and interview 300 college students. The questionnaire was personally handed to the respondents by the researcher via face-to-face and Google e-survey. The statistical tools used were a mean, product-moment correlation, and path analysis. The study's findings showed high levels of attitude towards learning with social media, online newspaper reading behavior, and information communication technology literacy. Moreover, the study's findings indicated a significant connection between and among the three variables. Results showed that information communication technology literacy partially mediated attitude towards learning with social media and online newspaper reading behavior.

Keywords: *ict literacy, social media, online newspaper, technology, path analysis, library science, Philippines*

I. INTRODUCTION

The foundation of effective learners' study routines in any area of expertise can establish by developing reading skills. Promoting newspaper reading may improve students' reading habits, knowledge, and awareness. As one of the most effective mass mediums for communication, newspapers serve four primary purposes as they gather media: they provide information, amusement, persuasion, and cultural transfer (Owusu-Ansah, 2017).

In the present, print news is now declining because of the presence of the internet and the availability of different information online. The heaps of this information become one of the most significant challenges in online newspaper reading behavior in distilling reliable and quality news; lack of knowledge of credible and trustworthy news sources usually leads readers to misinformation and fake news (Staff, 2017). The reliability of newspapers corresponds with the knowledge that the

material is pertinent to the readers. It is also essential, especially for students, to know the relevance of news topics to avoid becoming reluctant readers and considering them less valuable (Qayyum & Williamson, 2014)—besides, people who read newspapers online access news via digital platforms or websites. When people search for information online, they are influenced by many things, like their reading preferences, recommendation layout, popularity, and news content. Studies found it had difficulty recommending good online news when dealing with complicated online user behavior (Liu et al., 2019).

On the other hand, incidental exposure to online news is becoming a common approach to keeping up with current events. Furthermore, using social media platforms to share news has also become routine. While this information became available online, breaking news and stories spread rapidly without considering truthfulness. Spreading rumors and false information are rampant and will cause harmful effects on people if not detected efficiently (Alkhodair et al., 2020). While some students tend to read news



on social media because of convenience and easy access, it is also inevitable for them to acquire fake news and low-quality news that leads them to believe false information.

In the Philippines, internet use gradually increased during this pandemic, and most spent hours on social media. Filipinos became active internet users who disclosed themselves to misinformation and online manipulation. Various social media groups and news channels created a problem, as some have altered their concentration to hyper-partisan content, with some disinformation included (Tuquero, 2022). In Davao City, subscription numbers have dropped because digital media and newspaper distributors struggle to distribute newspapers to subscribers. The dramatic changes brought on by the Covid-19 epidemic have made this more difficult (Urquiza, 2021). Contrarily, despite the number of studies on attitude towards learning with social media, online newspaper reading behavior, and information communication literacy. The researcher has yet to discover any research examining the connection in determining the mediating role of Information Communication Technology literacy between attitude towards learning with social media and online newspaper reading behavior of college students, particularly in the Davao Region. Thus, the researcher believes it is essential to focus on the elements that can increase online newspaper reading behavior and student's perception of learning with online platforms as a learning tool. The researcher wants to know how ICT literacy directly affects students' attitudes about using social media for learning and online newspaper reading behavior.

II. LITERATURE REVIEW

This portion shows the related studies on the relationship between attitude towards learning with social media and ICT Literacy, ICT Literacy and online newspaper reading behavior, and attitude towards learning with social media and online newspaper reading behavior. The independent variable is attitude towards learning with social media. The dependent variable is online newspaper reading behavior, and the mediating variable is Information Communication Technology Literacy (A. Adeoye & B. Adeoye, 2017).

Social media platforms' existence has changed college students' news consumption and use behavior. The primary cause is the democracy of various media systems that declines news consumption. Additionally, the escalation of mobile access and exposure to social media news is one of the global trends (Yanardağoğlu, 2020). Factors include that news on social media directs news consumers to their favorite news outlet and enables them to browse within that outlet (Vermeer et al., 2020). Meanwhile, the study by Vraga and Tully (2019) stated that those who value news literacy and news literate are more likely to be cynical of the information quality presented on social media. In addition, readers with higher news literacy reduce the likelihood of using social media. In contrast, those who access news from social media are less suspicious of online news, leading to misinformation (O'Sullivan, 2019).

Social Media and technology have become news sources for a group of people. Their information-seeking behavior nowadays relies on this digital context to locate pertinent information on a topic that matters. Likewise, they initially utilize social networking sites to accumulate knowledge and share information (Aref, 2013). Additionally, students use social media to discuss political issues, and the more they use social media heightens their political knowledge (Intyaswati, 2021). Moreover, various news channels on social media sometimes result in a decrease in news effectiveness. According to Park's study from 2019, news overload links to a decline in news effectiveness, which raises the number of people who avoid news on social media. News efficacy influences the favorable relationship between social filtering and perceived news overload.

In contrast to the study of Soroya (2021), people mostly preferred traditional media to social media and only sought information from internet resources like official websites of newspapers and forums. Furthermore, Social media exposure, on the other hand, is significantly associated with information overload and anxiety among various information sources. Information overload was also linked to information anxiety, leading to information avoidance.

In fact, in the study of Karslen and Aalberg (2021), widespread fake news leads to people decreasing their trust in news presented on social media. Readers with higher news literacy increase the likelihood that people will use social media as one of their news sources rather than as their primary source (Schulz et al., 2022). It also added that news sharing via Facebook may contribute to declining trust in news. Nevertheless, people refrain from sharing low-quality news that can damage their reputation; however, the desire for information sharing on social media significantly influences news sharing for those who rely more on credibility and may use more heuristic selection methods (Tuquero et al., 2019). Besides, the instantaneous sharing of news for lack of time, religiosity and awareness positively impacted the spread of false information. However, verifying news before spreading it had no impact on the spread of false information. The study's findings also indicate that social platform users who actively take corrective action are less likely to spread false information due to a lack of time (Talwar et al., 2020).

ICTs, which are becoming more and more common in our society, offer opportunities for the pedagogical process. Our community increasingly relies on ICTs, which open up prospects for educators and students alike. Most educational institutions incorporate ICT for students to become globally competitive. Even libraries have the necessary skills to provide quality service. Acquiring ICT in the workplace helps the corporation accelerate its performance and develop inventions to transform production and increase economic growth through quality advancement. The same applications transpose the demand for different kinds of labor and workers (Bresnahan & Yin, 2017).



ICT comprehension moderates the association between social media and learning outcomes in developing students' language skills (Bakeer, 2018). Along with this, students develop technology skills, problem-solving skills, improved critical thinking, intensified knowledge, and feel a sense of connection in the industry they are taking (Son et al, 2018). Students increase their participation due to familiarity with social networking sites, and they can express themselves. Teachers can stimulate discussion, especially students who are non-participative in class (Agrawal, 2016). These educational technologies uplift independent and active learning, increasing students' motivation and self-reliance and becoming responsible for their learning (Adil, 2021; Akay, 2016; Carpenter & Harvey, 2020; Norman, 2019).

Nevertheless, the study by Supardi et al. (2021) shows a significant involvement of ICT competence and social media engagement tasks in students. The higher level of ICT basic skills creates a higher utilization of social media. Teaching digital literacy develops further in the project's lifetime and afar. With the aid of ICT, it could establish new methods in education to support non-formal learning. Social media enables students to connect globally, allowing them to connect and collaborate beyond the classroom (Using Social Media for Learning, 2021).

According to Soroya and Ameen (2020), the digital environment has a notable influence on the reading manner of individuals. The presence of digital environments affects readers on their reading habits. Students got hooked on digital forms of reading and started to rely less on printed ones (Nurfitriana et al., 2019). Freeman (2013) asserted that the majority of adolescents prefer online news instead of traditional news media. This behavior influences their exposure to the digital world at an early age (Belyh, 2019). Young adult reading habits manifest in their print preferences and behavior with physical books (Loh & Sun, 2019). As they get older, they shift to reading online from printed format. Additionally, digital newspapers are becoming common and replacing printed newspapers. Factors include the internet, habits, sex, and political interest in consuming digital news (Bergström, 2020).

With the massive shift from traditional news to online, many people read news on their digital devices. A study conducted by Pew Research Center found that more than 86% of US adults obtain news often or sometimes from smartphones, computers, or tablets (Shearer, 2021).

This development resulted in online newspapers adopting blogs, commenting features, and other interactive activities engaging news consumers. While news consumers interact with each other, studies also show that reading on-screen can increase the comfort, media-richness, engagement, and data-evidenced practice of education (Nicholas, 2016). Performance expectancy refers to a

person who is more likely to apply technology when they grasp that this will help to perform their job effectively (Hamzat & Mabawonku, 2018). Furthermore, news readers are more likely to access news articles online because they can multitask; while browsing information online, readers can browse ads without turning them away. Conversely, the study by Choi et al. (2016) shows that online news availability makes readers inclined to news topics rather than news articles. Besides, user sharing performance depends on motives for sharing news outlets, different content characteristics, and news outlets (Karnowski et al., 2020).

Students perceive online news as helpful in providing current and timely information. Students believe online news keeps users' needs and interests, goes into general audience interest and community well-being, and serves fresh information (Seguin et al., 2018). Additionally, students' performance improves when news combines with technology, such as the various online platforms. Like the study conducted by Kim et al. (2016), they created a platform to use academic resources in newspapers in the classroom called Twitter News in Education (TNIE). They found out that using TNIE gives the classification of the latest news and news content, and based on their selection of the news, students can quickly form productive discussion or debate groups. Furthermore, media platforms such as social media have been accepted and commonly utilized for social news. These platforms serve as a source of information for news consumers, offering them linked references, up-to-date sources, accuracy, promotion of current work, convenience, security, credibility, reliability, stability, easy identification, copyrighted, confidence-building, and information that has filtered. However, disadvantages were also enumerated, such as lack the knowledge to cite sources properly, time constraints, and lack of credibility and quality of information sources (Mansour, 2016).

The internet's use allows news consumers to get updates 24/7 on screen without hassle. Aside from the timeless, fresh information that can be accessed online, several studies showed that reading information online is beneficial. Increased reading because more information is available online, increased reading speed, improved skimming ability, changed patience as readers, and multitasking (Allcott, 2021). Similarly, social influence affects how people adopt new technologies (Graf-Vlachy & Buhtz, 2018). As studied by Damerji and Salimi (2021) indicated that acceptance of new technologies is significantly influenced by technological preparedness. Technology readiness (TR) describes a person's propensity to adopt and use new technologies. Through the application of technology adoption, it contributes to society by enhancing their abilities and developing their capacities for intelligent use of technological tools (Huda, 2019). Students showed positive attitudes toward reading online because it improves their knowledge. Additionally, reading online varies with reading purposes, technology usage, and skills (Nga, 2021).



The study by Intravia et al. (2018) found that onlinenews readers are more likely to have unfavorable views of the legitimacy of the police. On the other hand, positive attitudes develop the students in reading newsin a digital format. The study also suggested adding electronic newspaper subscriptions to the collection development policy (Owusu-Ansah et al., 2017). Also, Ranaweera (2021) mentioned in their study that the adoption of reading newspapers online resulted from the positive influence of online behavior, online activities, and social media.

In contrast, reading online newspapers contains too many advertisements,small font sizes, poor internet connectivity, and a lack of knowledge on the properuse of technology, resulting in poor online news reading habits (Kumar, 2020). Furthermore, reading newspapers online stimulates the reading interest of the students. It is also an effective tool for developing the habit of reading and is effective for the general audience (Notari & Camassola, 2017). Online news reading is done regularly, such as done regularly, such as reading the news at a set time each day and keeping up with it all day. Additionally, incidental exposure to online news is increasingly popular to stay updated on current events. (Yadamsuren & Erdelez, 2011).

The study was anchored on the theory of the Technology Acceptance Model(TAM) of Fred Davis (1985). This theoretical model best explains users' behavior of accepting ICT. The acceptance of technology resulted in social changes in howpeople interact. With online platforms, mobile technology, and web applications, users can interact and feel a sense of belongingness even in the virtual environment. The Planned Behavior Theory by Ajzen (1991) is another theory thatbacks this research, describing a person's intention to execute a given behavior. This theoretical framework understands the underlying beliefs relating to the utilization of ICT in reading news. Likewise, if a user believes that using a particular technology provides better substitutes, news readers would likely read online newsas it provides users with engaging tools such as email that links to journalists andofficials, documents available to view, databases, and hyperlinks (Smith, 2005). Moreover, the study also supports Altheide's (2016) media logic theory, which clarifies the significance of media and information technologies for social life and communication. Social media is a news source; people can easily convey and communicate information by posting news articles on different social media platforms. Hence, social interaction will augment if the information can be easily shared.

Figure 1 displays the conceptual framework for this study, which lists the variables used in the investigation. This study's independent variable focuses on the attitude towards using social media, measured in terms of social media learning, social learning communications, interactive learning, information seeking, and information sharing. Social media learning is the knowledge acquired using social media platforms. Social learning communications refers to exchanging ideas and information through technology and online platforms. Interactive learning refers to the hands-on teaching method to help students to be more

engaged andretained in the lesson. Information seeking refers to students' information-seeking behavior in finding information through online platforms. Information sharing refers to sharing students' information using social media (Knezek et al., n.d.). The study's dependent variable is online newspaper reading behavior, which is depicted by the indicators: Performance expectancy, effort expectancy, social influence, facilitating conditions, attitude, habit, counter-intentional habit behavioral intention, and user behavior. Performance expectancy refers to a person who is more likely to utilize technology when they recognize this will help to perform their job effectively. Effort expectancy is the convenience of a particulartechnology without exerting too much effort. Social influence refers to human behavior in technology adoption. Facilitating conditions refer to the use of technology devices in reading online news. Attitude refers to the positive and negative influence of online newspapers. Habit refers to the reading habit of newsconsumers. Counter-intentional habit refers to the frequency of reading online news by news readers. Behavioral intention refers to the intention of news reading in accessing online news. Use behavior refers to students' technology use(Schoneville, 2007).

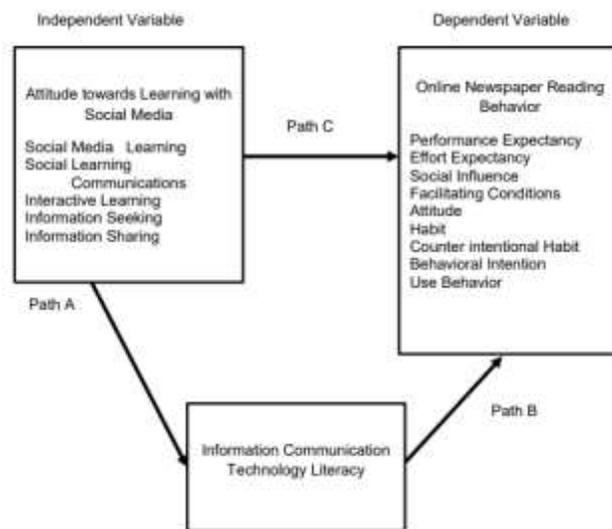


Fig. 1 Conceptual Paradigm of the Study

The mediating variable is Information Communication Technology Literacy(ICT Literacy) refers to the ability to aptly operate with modern information and communication technology (ICT) or think critically and creatively while utilizing ICT responsibly and ethically. ICT in a learning environment helps learners gain confidence in performing their respective activities (A. Adeoye & B. Adeoye, 2017). The researcher has not found any studies that correlate online newspaper reading behavior and attitude towards learning with social media, nor a study that evaluates the connection in figuring out the mediating role of information communication technology and online newspaper reading behavior of students inthe local setting. The researcher is interested in determining whether ICT literacy mediates the student's attitude towards learning with social media and online



newspaper reading behavior. As such, the study's findings may be an added literature and contribution to new knowledge.

Inadequacy of local studies on this topic, the results of this study's analysis are anticipated to add a reference in library and information science literature in the Philippines and the local setting. Additionally, this study will shed light on college students across the globe to become responsive to change and be optimistic and responsible in reading online newspapers. Likewise, on the social value of this research, this can be helpful to college faculty and administrators in reading the behavior of online newspapers, especially for students. Notably, the results of this investigation can serve as a foundation for college administrators to formulate specific programs and strategies that will enhance the attitude toward learning with social media of students in general. Additionally, this can be used as a basis for librarians to develop collections that enhance students' attitudes about reading newspapers. Lastly, this study can be used as secondary data for future researchers in other dimensions or for future expansion of this content.

METHOD

An overview of the research methodology, study setting, study participant and tool, data gathering techniques, statistical techniques, and ethical considerations are provided in this chapter.

Research Respondents

In this study, the participants were college students from higher educational institutions in Davao City. Each institution has 150 students, so the total number of respondents was 300. According to Minsel (2022), a sample size of 300 offers a reasonable margin of error. The number of respondents is adequate for mediating research.

Stratified random sampling was used in this research, and this technique divides various groups known as strata based on the comparison. The selection is made so that it accurately reflects the entire population. (CFI Team, 2022).

Similarly, this technique was chosen because it is a more practical approach to selecting a smaller number of respondents that would be used instead to represent the entire population. The researcher applies a specific fraction or percentage to its population subgroups to make it proportionate. Three hundred respondents multiplied by 0.05 with 150 respondents from each HEIs received questionnaires. Respectively, inclusion criteria were also used in selecting the college students from higher educational institutions in the Davao Region; hence, non-participants and students who declined to answer the questionnaire were excluded. Additionally, the researcher guarantees that all data included in the study, which may

generate conflict or threaten their work, will be treated with strict confidentiality.

Moreover, the research was conducted in Davao City, the Davao Region's administrative capital of Mindanao, where the third-most people live. Davao City is one of the island's most important economies, recognized for its booming economy, urban growth, and contemporary facilities (About Davao, 2022).

Materials and Instrument

The questionnaire created by different researchers was modified and adjusted for the study. Three sections comprise this questionnaire: Online Newspaper Reading Behavior, Attitudes toward Learning with Social Media, and Information Communication Technology. Furthermore, the survey questionnaire employed the five-point Likert scale identifying that 4.20-5.00 was very high in descriptive equivalent and measures were always manifested, 3.40-3.39 was moderate in descriptive equivalent and measures were oftentimes manifested, 2.60-3.39 was moderate in descriptive equivalent and measures are sometimes manifested, 1.80-2.59 was low in descriptive equivalent, and measures are seldom manifested, 1.00-1.79 was very in descriptive equivalent and measures are almost never manifested.

The research adapted and modified the 29-item survey questionnaire formulated by Knezek et al. (n.d) to the attitudes toward learning with social media. Attitude towards learning with social media had five indicators: social media learning, social learning communications, interactive learning, information seeking, and information sharing. On the other hand, the online newspaper reading behavior consists of a 27-item survey questionnaire adapted from the study of Schoneville (2007). The questionnaire measured the level of online newspaper reading behavior of College Students. Online newspaper reading behavior had nine indicators: performance expectancy, effort expectancy, social influence, facilitating conditions, attitude, habit, counter-intentional habit, behavioral intention, and use behavior. Information Communication Technology Literacy adapted and modified the 12-item questionnaire by A. Adeoye and B. Adeoye (2017). Cronbach's Alpha was utilized to weigh the reliability of this questionnaire. The Attitude towards Learning with Social Media gained a value of .959. Additionally, the Online Newspaper Reading Behavior got a value of .949. In contrast, Information Communication Technology Literacy obtained a value of .947. All variables in the questionnaire resulted in ≥ 0.9 , which means excellent and reliable for the study (Statistics How To, 2023). Moreover, internal and external validators also examined the questionnaire, which obtained a value of 4.68 by merely calculating the total number of values and dividing it by the total number of values in the data collection.



Design and Procedure

The study applied a design for descriptive-correlational research as a non-experimental quantitative research method.

This method was used to compile data, facts, and study-related information. In this study, mediation was also tested. The researcher investigated the relationship between the three variables.

Correspondingly, the descriptive-correlational research design describes two or more variables to evaluate their relationship with little or no effort to control unnecessary variables. It also describes how one occurrence is related to another (Lappe, 2000). This research technique is appropriate in the study to explain and examine the correlation between online newspaper reading behavior, attitude towards learning with social media, and information communication technology literacy.

Furthermore, the general mediation test was used to measure the connections between the predictor and the criterion variables, the mediator and the criterion variables, and the predictor and the mediator variables. These associations should all be considered significant. The relationship between predictor and criterion should be diminished (to zero in the case of complete mediation) after the relationship between the mediator and criterion variables has been controlled. The mediator's variables control whether or when an impact or relationship happens. (Baron & Kenny, 1986). This research utilized information communication technology literacy as a mediator to explain the connection between attitude towards learning with social media and the online newspaper reading behavior of the students and equates between the two groups.

As a result, after pre-testing and using experts for validating the questionnaire and Cronbach Alpha to calculate, the researcher took the following steps to collect data for the study. The researcher prepared three questionnaire sets for internal validation in the first step. In the second step, external validations were done by some experts in the corporate section after the internal validations. After the questionnaires, the third step included validations, revisions, and suggestions. In the fourth step, the researcher asked for an endorsement from the university's adviser and dean of the graduate school to perform the investigation. In the fifth step, the researcher sought authorization from the Research Office of the target participants. In the sixth step, the survey questionnaire was distributed to the college students after the approval and endorsement form. Seventh step, the questionnaire was administered face-to-face and Google e-survey; then, the researcher sent the Google e-survey to students' email and stated the research tool's objectives, the same as the face-to-face survey. Eight step, after the respondents had responded to the survey questions, the researcher retrieved all the items in a week. Lastly, all information obtained from respondents was totaled and collated by the researcher, who then subjected it to statistical computation and analysis.

Survey results were treated thoroughly and scientifically validly using statistical tools. The statistical tools the researcher employed were mean, Product-Moment Correlation (Pearson r), and Path Analysis. Mean is a set of numbers' average or most prevalent value and measures the central tendency of a probability distribution along the median and mode (Taylor, 2023). This statistical instrument was utilized to characterize the level of Online Newspaper Reading Behavior, Attitudes toward Learning with Social Media, and Information Communication Technology Literacy in this study.

Additionally, the Product-Moment Correlation (Pearson r) was coined by Karl Pearson (1948), which is frequently used to evaluate associations of variables (Chee, 2015). In this study, Product-Moment Correlation (Pearson r) was used to analyze the importance of the correlation between variables as in this study. Lastly, Path analysis was utilized to establish the mediating effect of information communication technology literacy on the relationship between attitude towards learning with social media and online newspaper reading behavior. This statistical tool is a multiple regression analysis that evaluates causal theories by examining the connection between a dependent variable and two or more independent variables (Crossman, 2019).

Subsequently, this investigation has been evaluated by the University of Mindanao Research and Ethics Committee (UMERC). It has been assessed to have sufficiently completed the study of ethical protocol requirements with Compliance Certificate for Study Ethics Protocol Review no. U MERC-2022-169. Because the study's conclusions were confidential, the researcher ensured that the respondents were properly anonymized. Following that, the researcher followed the U MERC's suggestions or requirements. In addition, the researcher sought informed consent from survey respondents, demonstrating that they were aware of the study's goals.

RESULTS AND DISCUSSION

This portion emphasizes the study's main conclusions, the tabulated data, and the analysis and interpretation of the information gathered from the respondents, focusing on the mediating role of information communication literacy on social media learning and online newspaper reading behavior of students.

Level of Attitude towards Learning with Social Media

Table 1
Level of Attitude towards Learning with Social Media

Indicators	Mean	SD	Descriptive Level
Social Media Learning	3.79	.686	High
Social Learning Communications	3.81	.788	High
Interactive Learning	3.75	.885	High
Information Seeking	4.09	.663	High
Information Sharing	3.87	.769	High
Overall	3.86	.653	High



Table 1 shows the level of attitude towards learning with social media. The table reveals an overall mean score of 3.86, or a high level. The indicator that gained the highest mean is information seeking, with 4.09, which means high in level. The second highest mean is information sharing which gained 3.87, with a high descriptive level—followed by social learning communications which have a total mean of 3.81, which means a high level. Additionally, social media learning garnered a total mean of 3.79, with a high descriptive level, followed by interactive learning, which achieved the lowest mean of 3.75, with a high description. Furthermore, the participant's responses to the various indicators are consistent, as shown by the standard deviation of all indicators is less than 1.00.

As mentioned earlier, the findings indicated that the attitude towards learning with social media indicators was high, which implies that the student's attitude towards learning with social media is constantly observable. The result resonates with the study of Agrawal (2016) that students increase their participation due to familiarity with social learning sites, and they can express themselves. Additionally, using social media in teaching enables students to participate, especially non-participants in class. Nowadays, class interactions are integrated with technology and online platforms, resulting in students developing technology skills, problem-solving skills, improved critical thinking, intensified knowledge, and feeling a sense of connection in the industry they are taking (Son et al., 2018).

Level of Online Newspaper Reading Behavior

Table 2
 Level of Online Newspaper Reading Behavior

Indicators	Mean	SD	Descriptive Level
Performance Expectancy	3.85	.870	High
Effort expectancy	4.05	.812	High
Social Influence	3.70	.882	High
Facilitating Conditions	3.88	.723	High
Attitude	3.77	.868	High
Habit	3.44	.987	High
Counter Intentional Habit	3.63	.838	High
Behavioral Intention	3.69	.713	High
Use Behavior	3.02	1.130	Moderate
Overall	3.67	.708	High

The data shown in Table 2 are the level of online newspaper reading behavior of students in selected schools in Davao City, which procured an overall mean of 3.67 or a high level. Effort expectancy garnered the highest mean of 4.05, a high level, followed by facilitating conditions with a 3.88 total mean, high at the descriptive level. Specifically, performance expectancy gathered the third highest mean of 3.85, meaning this indicator is

high. Attitude is next to performance expectancy, garnered 3.77, which means high at the descriptive level—followed by social influence, which has a mean of 3.70, with a high descriptive level. However, behavioral intention (3.69), counter-intentional habit (3.63), and habit (3.44) got the lower means but are still high in level. Use behavior garnered the lowest mean of 3.02, with a moderate descriptive level. Moreover, participants' responses to the various indicators are also consistent, as shown by the standard deviation of all indicators is less than 1.00.

The above results indicated that most participants have access to online newspapers. The digital environment has an essential effect on the reading behavior of individuals. According to Nicholas (2016), while news consumers interact with each other, studies also show that reading on-screen learning can increase the comfort, media-richness, engagement, and data-supported practice of education. Freeman (2013) also asserted that most adolescents prefer online news over traditional news media. This behavior influences their exposure to the digital world at an early age (Belyh, 2019). Digital environments affect readers' reading habits, resulting in a shift in reading online from printed format. Additionally, digital newspapers are becoming common and replacing printed newspapers. Factors include the internet, habits, sex, and political interest in consuming digital news (Bergström, 2020).

Level of Information Communication Literacy

Table 3
 Level of Information Communication Literacy

Indicators	Mean	SD	Descriptive Level
1. assess whether an online resource (e.g. web page, blog, wiki, video, podcast, academic journal article) or person is credible and trustworthy	4.24	.822	Very high
2. write online on a web page for private use	3.54	1.110	High
3. write online for blog entry for reading by my fellow students	3.32	1.230	Moderate
4. write online for a web page for reading by my tutor	3.21	1.190	Moderate
5. write online for a web page for reading by anyone in the world	3.30	1.219	Moderate
6. write in different media for people to read on-screen	3.46	1.122	High
7. communicate with others online	4.21	.847	Very High
8. keep up-to-date with information from organizations by subscribing to email alerts	3.97	.955	High
9. use advanced search options to refine search	4.05	.864	High
10. use advanced search options to limit search	3.98	.914	High
11. add comments to blogs, forums or web pages, observing netiquette and appropriate social conventions for online communications	3.74	1.074	High
12. use bookmarking to organize and share information	3.93	1.056	High
Overall	3.74	.740	High



Shown in Table 3 are the data on the level of information communication literacy which obtained a total mean of 3.74 or a high level. The high level could be ascribed to the respondents' positive score in most of the items; this infers that the participants' responses to information communication literacy were often manifested.

Moreover, items 1 and 7 garnered the highest mean with a very high description. While items 2, 6-12 garnered the higher mean or high level. Item no. 3-5 got the lowest mean of 3.32 and below, which means moderate level. The abovementioned results imply that students were indulging in technology. Their ICT literacy was high but moderate in writing online for blog entries. The results manifest today that more industries take in technologies, particularly in educational institutions incorporating ICT for students to become globally competitive. Even libraries have the necessary skills to provide quality service. Acquiring ICT in the workplace helps the corporation accelerate its performance and develop inventions to transform production and increase economic growth through quality advancement. The same applications transpose the demand for different kinds of labor and workers (Bresnahan & Yin, 2017).

Correlation Analysis of Variables

Table 4
Correlation Analysis of the Variables

Pair	Variables	Correlation Coefficient	p- value	Decision on Ho
IV and DV	attitude towards learning with social media and online newspaper reading behavior	0.656	0.000	reject
IV and MV	attitude towards learning with social media and information communication technology literacy	0.631	0.000	reject
MV and DV	information communication Technology literacy online newspaper reading behavior	0.622	0.000	reject

** Correlation is significant at the 0.01 level (2-tailed).

Presented in Table 4 above are the outcomes of the relationship between attitude towards learning with social media, online newspaper reading behavior, and ICT Literacy of the students. By doing a thorough analysis, it could be gleaned that the indicators of attitude towards learning with social media and online newspaper reading behavior of students revealed a computed r-value of 0.656 with a probability value of <0.05 which is significant at 0.01 level; this implies that there is a significant relationship between attitude towards learning with social media and online newspaper reading behavior. Thus, contrary to the null hypothesis, the two variables do not have a significant relationship. Indeed, the result above stated a significant correlation between attitude towards learning with social media and online newspaper reading behavior. In other words, people with higher news literacy increase the likelihood that people will use social media as one of their news sources rather than as their primary source (Schulz et al., 2022). Readers' trust in news presented on social media decreases due to the widespread use of fake news.

In contrast, those who value news literacy and news literate are more likely to be cynical of the information quality presented on social media (Vraga & Tully, 2019). In addition, people with higher levels of news literacy are less likely to access news from social media. In contrast, those who access news from social media are less suspicious of online news, leading to misinformation (O'Sullivan, 2019).

Moreover, table 4 shows the test results of the relation between attitude towards learning with social media and ICT literacy. The results found that attitude towards learning with social media and ICT literacy displayed a computed r-value of 0.631 with a probability value of <0.05 which is significant at 0.01 level. The findings indicate a significant relationship between the variables mentioned above. Hence, the null hypothesis stating that there is "no significant relationship between attitude towards learning with social media and ICT literacy" is rejected.

Furthermore, the attitude towards learning with social media are found to be substantially correlated with ICT literacy which notes that the students with high literacy level in ICT are more positive towards using social media in their learning activity. The previous statement supported the study of Supardi et al. (2021) that ICT skills and social media engagement activity contribute significantly to students. The higher level of ICT essential skills creates a higher utilization of social media. Teaching digital literacy develops further in the project's lifetime and afar. With the aid of ICT, it could establish new methods in education to support non-formal learning. Social media enables students to connect globally, allowing them to connect and collaborate beyond the classroom (Using Social Media for Learning, 2021).

Additionally, the findings of the relationship between ICT literacy and online newspaper reading behavior of the students can be found in the table. By doing a comprehensive analysis, it could be inferred that the indices of ICT literacy have a strong correlation toward online newspaper reading behavior of the students, which has a significant relationship with an r-value of 0.622 and a probability value of <0.05, which is significant at 0.01 level. Therefore, the null hypothesis between the two variables is rejected. In addition, results imply that the student's ICT skills affect their reading habits which hook them to read digital news content.

Performance expectancy refers to people being more inclined to use technology when they believe it will help them perform their job effectively (Hamzat & Mabawonku, 2018). In the same way, online news enables news readers to multitask while browsing information on the web, and readers can browse ads without turning them away. Further, students showed positive attitudes toward online reading because it improves their knowledge. Additionally, reading online varies with reading purposes, technology usage, and skills (Nga, 2021). The study by Intravia et al. (2018) found that online news readers are more likely to have unfavorable views of the legitimacy of the police.



On the other hand, students develop positive attitudes by reading news in a digital format. The study also suggested adding electronic newspaper subscriptions to the collection development policy (Owusu-Ansah et al., 2017). Also, Ranaweera (2021) mentioned in their study that reading online news resulted from the positive influence of online behavior, online activities, and social media.

Mediation Analysis of Three Variables

Table 5
Mediation Analysis of Three Variables

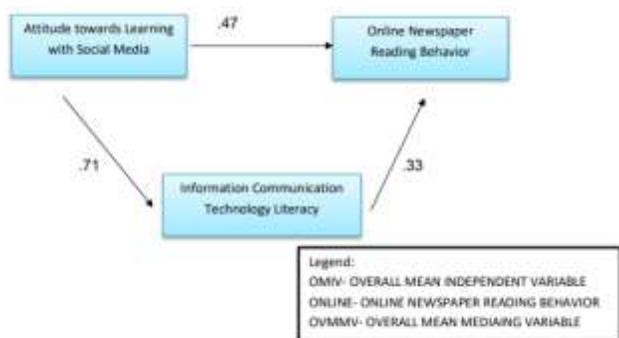


Figure 2 Results of the Mediation Computation

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
OVMMIV ← OMIV	.715	.051	14.052	***	
online ← OMIV	.474	.057	8.305	***	
online ← OVMMIV	.332	.050	6.602	***	

Partial Mediation

There are numerous debates and schools of thought in existence that serve as mediators. The mediator, information communication technology literacy, explains how or why the predictor, attitude toward social media learning, and the dependent variable, online newspaper reading behavior, are related in this research.

The initial step evaluated whether a mediating effect exists between or among the variables. The casual stages method analysis is terminated if the impact is not statistically significant. Complete mediation has occurred if the IV's impact on the DV is no longer significant after the study. It implies that all effects are under the control of the mediating variable. Furthermore, only partial mediation is accomplished if the path analysis is significantly reduced but still significant in the final stage; this shows that although the MV mediates some of the IV, the remaining amount is either direct or mediated by non-framework components. Only partial mediation was employed because the impact of the IV on DV is still significant even after MV is reduced.

The mediation of information communication technology literacy, attitude towards learning with social media, and online newspaper reading behavior is shown in Table 5. Figure 2 shows the impact size calculations in the mediation test among three components. The third variable, information communication technology literacy, had to pass through three stages, as shown in the table, to serve as a mediator. In the table, steps 1 through 4 are labeled. At the significance level of 0.01 in step 1, online newspaper reading behavior was shown to predict information communication technology literacy, the mediator. Step 2's attitude towards learning with social media at a significance level of 0.01 predicts the relationship between online newspaper reading behavior and significance. At the 0.01 level of significance, it was also demonstrated in step 3 that information communication technology literacy significantly influences attitude towards learning with social media. The significance of the three steps (Paths A, B, and C) calls for additional mediation analysis using path analysis. Information communication technology literacy is one of the independent variables (attitude towards learning with social media) the mediator mediates in some measure. Additionally, other aspects are either directly or indirectly mediated by variables not considered in the model. Additionally, partial mediation was successful because the impact was significant at 0.01.

Furthermore, distinguished in Figure 2, the Path analysis results show that the path online newspaper reading behavior to information communication technology literacy, information communication technology literacy to attitude towards learning with social media, and attitude towards learning with social media to online newspaper reading behavior are significant, with signs unchanged; this means that information communication technology literacy influences the relationship between attitude towards learning with social media and online newspaper reading behavior. The initial results revealed a 0.71 rise in attitude towards learning with social media for every unit increases attitude towards learning with social media. Additionally, every unit increase in attitude towards learning with social media is accompanied by a 0.47 rise in online newspaper reading behavior. Also, for every unit increase in information communication technology literacy, there is a corresponding 0.33 increase in online newspaper reading behavior.

In summary, because information communication technology literacy is just a partial mediator, it cannot be deemed that attitude towards learning with social media influences online newspaper reading behavior only through information communication technology literacy. Thus, it is just one of the many factors that affect online newspaper reading behavior. The figure depicts the mediation analysis of the study's three variables.



CONCLUSION AND RECOMMENDATION

Students perceived the attitude towards learning with social media as often manifested, meaning they use this online platform in their learning; this would imply that social media is now part of the pedagogical method of teachers to stimulate students' participation and intensify the learning strategies of students as well. Several studies affirm that these educational technologies uplift independent and active learning, increase students' motivation and self-reliance, and become responsible for their learning (Adil, 2021; Akay, 2016; Carpenter & Harvey, 2020; Norman, 2019). Given that students perceive the attitude towards learning with social media as high, there is still room for improvement, particularly in intensifying class activities that increase students' interactive learning when social media is used.

Consequently, the results have shown a high level of online newspaper reading behavior resulting from most of the items receiving high scores from the respondents. In like manner, students perceive online news to help provide current and timely information. Students believe online news keeps users' needs and interests, goes into general audience interest and community well-being, and serves fresh information (Seguin et al., 2018). Students should be encouraged to learn sufficiently, primarily that news and information nowadays can be accessed in digital format. Libraries should intensify online newspaper literacy programs to increase access and enhance students' attitudes about reading online news. They should use this information to add reliable literature to their study and lesson. As a result, the use behavior, one of the lowest mean indicators of the dependent variable, will rise to a higher level.

Aside from the timeless, fresh information that can be accessed online, several studies showed that reading information online is beneficial. Increased reading because more information is available online, increased reading speed, improved skimming, change in patience as readers, and multitasking (Allcott, 2021). Likewise, schools should continue to integrate ICT in all programs and formulate activities that could improve and increase the ICT literacy of their students.

The results above and the findings presented that the variables under the study are significantly correlated. The former discussed data support the idea that attitude towards learning with social media is statistically significant with online newspaper reading behavior. Also, the study's findings signify that information communication technology literacy strongly affects the correlation between attitude towards learning with social media and the online newspaper reading behavior of the students. As a result, it is necessary to comprehend the role of information communication technology literacy in influencing the attitude towards learning with social media and online newspaper reading behavior of students' relationships. Furthermore, the above-mentioned describe the relationships between the variables in the study. These assumptions are similar because the current study concerns

the student's attitude towards learning with social media and online newspaper reading behavior as mediated by information communication technology literacy. Indeed, using the mediating effect causal steps technique, this study found a significant correlation between information communication technology literacy and attitude towards learning with social media, demonstrating that the variables had a limited mediating impact. Schools should establish and implement these programs and policies to guarantee that ICT and social media services are fully utilized as fundamental teaching, learning, and business tools within appropriate use restrictions; this applies to students increasing their ICT literacy level and becoming responsible users of social media.

The results resonated with Baron and Kenny's (1986) perspective, which contends that a mediator influences the outcome rather than vice versa. There have been identified that online newspaper reading behavior influences attitude toward learning with social media via information communication technology literacy; however, this result does not change the direction. As a result, only a portion of the mediation was successful. The regression coefficient was significantly decreased in the last phase, but it remained significant with the same signs. An MV mediates some of the IV, but some are directly or mediated by non-model components. Only limited mediation was used in this case because the influence was still substantial. The deficiencies of the IV and DV should be considered in future research, and the gap should be filled with an intervention program. Finally, additional characteristics not included in the analysis should be the focus of future research because they might weaken the interrelation between the variables.

Finally, the findings are supported by the following theories, which are anchored in this study, such as the Technology Acceptance Model (TAM) theory, coined by Fred Davis (1985), which explains users' behavior of accepting ICT. Similarly, Ajzen's (1991) Theory of Planned Behavior outlines an individual's desire to carry out a specific behavior. This theoretical framework comprehends the underlying beliefs associated with using ICT in news reading. Lastly, the study resonated with the media logic theory by Altheide (2016), which explains the importance of media and information technologies for people's social life and communication.

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