

Internet Dependence and Fact-Checking among Senior High School Learners in Davao City

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ABSTRACT

The study aimed to determine the significant relationship between internet dependence and fact-checking among senior high school learners in Davao City. The study used a quantitative research design utilizing the descriptive-correlational method. A random sampling technique was employed to identify the 250 senior high school learners in three public secondary institutions in Davao City – one school per district. They served as the respondents of the study. To guarantee ethical standards in data gathering, the paper underwent an ethics review and secured an ethical clearance from the ethics board then, informed consent was accomplished. Data gathering was done online using Google Forms. In analyzing the data, mean, Pearson Product Moment Correlation of Coefficient, and Regression Analysis were used. The researcher found that there is a significant relationship between internet dependence and fact-checking among senior high school learners in Davao City. Further, the results showed that both levels of internet dependence and fact-checking among senior high school learners were high. Finally, the analysis, it was revealed that the indicators of internet dependence concerning the perception of internet dependence and the impact of internet dependence significantly influence the fact-checking of senior high school learners. Furthermore, the Department of Education may include further information about fact-checking to be embedded in the curriculum and make it one of the competencies that students must have. Moreover, the school heads may formulate policies and guidelines for the implementation of fact-checking skills among learners in the curriculum standards to ensure efficient implementation.

Keywords: Internet dependence, Fact-checking, Fake news, Senior high school learners, Lateral reading, Data validation, fact-checking mechanism, Internet Usage, and Fake News Vulnerability

INTRODUCTION

Internet usage has surged exponentially over the last decades as internet subscriptions and gadgets that are used to access it, become cheaper and more accessible. The surge implies that more and more people are now becoming dependent on the internet as most of them access it regularly for school, work, and leisure. The increased usage of the internet is followed by a growing issue of the proliferation of fake news on different platforms on the internet. This is because of the unregulated upload mechanism of the internet which gives anyone the power to upload information regardless if it's verified or not. This means that the more people spend time on the internet as they are becoming dependent on it, the more that they are exposed to fake news. The issue of fake news becomes rampant and more popular during elections as politicians harness the internet as a platform to reach multitudes of people in a cost and time-efficient manner. Such an issue becomes a social dilemma since people are being exposed to unverified information which will eventually result in misinformation or disinformation. A dilemma because it affects how people think which

will result in a change in behavior per se. Fact-checking is seen to be a mechanism that will help filter information to ensure its veracity.

Excessive use of the Internet to the cost of one's physical, psychological, social, or vocational well-being is referred to as Internet dependency (Christakis, 2011). According to www.villanova.edu, the majority of people use the internet regularly without becoming reliant on it. However, for some people, their online activities start to have major, negative implications. Internet dependence occurs when such repercussions are minimized or ignored while Internet use rises. Moreover, Fact-checking is most effective when it comes to reducing or preventing inaccurate narratives, and it may be most effective during important events such as novel societal issues (Amazeen, 2015). Currently, the internet has become an essential element of modern life, with about 3.8 billion people worldwide utilizing it with a growing frequency of access to it according to Argaez (2021). Globally, there has been an increase in internet dependence among nations. Based on the report published by The Recovery Village Drug and Alcohol Rehab by Hull (2021), internet dependence is prevalent at 6 percent across all nations. This might be seemingly small at a glance but considering that only 39 percent of the world population has access to the internet, the number appears to be significantly high.

Furthermore, despite their extensive use of the Internet and social media, college students rarely “read laterally” or fact-check to assess the quality of the information they come across online (Wineburg & McGrew, 2017). In the Philippines, the Internet became widely available resulting in a sluggish but steady increase in the number of Internet-savvy customers in the country. By 2020, the country's internet users have increased to 79.7 million, accounting for more than half of the total population. The digital population is primarily composed of those aged 16 and up (Statista Research Department, 2021). The Philippines is among the top countries with an average of 10 hours and 2 minutes of screen time each day compared to just 4 hours and 22 minutes per day in Japan (Kemp, 2021). With the staggering usage of the internet and the proliferation of “fake news” on the internet, the Department of Education launched a series of webinars to orient teachers and learners on how to spot whether the information they read online is legitimate or fake as well as to conduct their research in verifying the validity of information (Malipot, 2021). Furthermore, local media was urged to incorporate fact-checking abilities into regular reporting before publishing it, especially on live or real-time broadcasts. However, there is a need to move beyond the “gotcha” mentality to stop information manipulators in their tracks, focus on contextualizing misinformation, and fill data voids with high-quality content, especially during elections and emergencies as people depend more on information found on the internet (Chua, Curato, & Ong, 2021).

In Davao City, where the researcher is currently residing, he observed that most of the students are utilizing the internet for their learning and are browsing online resources to deepen their understanding of a particular topic. When asked whether they validate the information they have searched by identifying whether the source is legitimate, some responded that they do not do it all the time. Now more than ever, the prevalent use of the internet leading to learners being dependent on it makes them vulnerable to unverified and twisted information. The researcher believed that there is a research gap on this particular social issue. The researcher has encountered few published papers discussing internet dependence among students and few published papers unraveling the fact-checking skills of students. There are few studies linking whether the dependency of students on the internet will lead them to do fact-checking and none have conducted it in the context of senior high school learners. This inspired the researcher to conduct a study to look into the relationship between internet dependence and fact-checking.

METHOD

This study made use of a quantitative research design utilizing descriptive correlation. The descriptive-correlational design is appropriate for this study because its purpose is to investigate the correlation between internet dependence and fact-checking among senior high school students in the city of Davao. The

respondents of the study were from three public national high schools in Davao City (one school per district), Division of Davao City, Region XI that offers different tracks in senior high school. The respondents of this study are 250 Senior high school students who are enrolled for School Year 2021 – 2022 and random sampling was done. The number of respondents was determined through the confidence level of data with approximately 10-15 thousand senior high school students in Davao City. For a population size of 1,000 to 100,000, a sample of 250 respondents yields a margin of error of around 6%, which is considered acceptable in many research contexts (Krejcie & Morgan, 1970; Cochran, 1977). To gather data for the independent variable of the study, which is internet dependence, the researcher adopted the internet dependency questionnaire of Conti, Bagsit, Claveria, Escalona, and Ramos (2019). It is a 15-item instrument and has the following indicators: time spent online, perception of internet dependency, and impact of internet dependence. In evaluating the internet dependency of learners, the respondents used the following in rating the questionnaire: 5 as always; 4 as often; 3 as frequently; 2 as Occasionally, and 1 as rarely. To gather the data for the independent variable which is fact-checking, the researcher adopted the fact-checking questionnaire of Weiss, Alwan, Garcia, and Garcia, (2020) and the CRAPP test from Meriam Library, California State University, Chico developed by Blakeslee (2010). It is also a 15-item instrument and has the following indicators: personal perception of fake news, vulnerability to fake news, and frequency of information verification. In evaluating the level of fact-checking of learners, the respondents used the following in rating the questionnaire: 5 as always; 4 as often; 3 as frequently; 2 as Occasionally, and 1 as rarely. In summary, the research instrument has a total of 30 items. Part 1 for the independent variable which has 15 items and Part 2 for the dependent variable which have another 15 items. This questionnaire has undergone thorough validation and scrutiny by experts. Afterward, a pilot test was conducted to establish reliability. The pilot test result was 0.792 which signifies that the questionnaire has an acceptable level of reliability. The result of the pilot test signals to conduct of the research properly as it established a reliable internally consistent result. Following the ethical considerations in the conduct of this study is crucial. The researcher is aware of the observance of this protocol. Thus, in compliance with the Research Ethics Committee, the researcher ensured that all nine elements of ethical considerations will be carefully followed and properly observed.

In analyzing the result of the study, the researcher used the following statistical tool. Mean was utilized to analyze the level of internet dependency and the level of fact-checking among senior high school learners. This answered the first and second statements of the problem raised in the first chapter of this study. Pearson-r was used to analyze if there is a significant relationship between internet dependence and fact-checking of senior high school students. This answered the third statement of the problem raised in the first chapter of this study. Finally, regression analysis was used to identify which among the indicators of internet dependence significantly affect the fact-checking of senior high school learners.

Ethical Considerations

Following the ethical considerations in the conduct of this study is crucial. The researcher is aware of the observance of this protocol. Thus, in compliance with the Research Ethics Committee, the researchers ensured that all nine elements of ethical considerations would be carefully followed and properly observed.

Social Value. The researcher believed that the study was relevant to the community and national needs. The researcher believed that teachers should conduct researches that comprehensively explain or address any relevant issues and needs in the community more importantly addressing the needs for the betterment of the Department of Education. Through conducting quality research, the academe will be able to source knowledge for the betterment of the processes and provide relevant improvement in the community. In consonance with social value, the result of this study can be a basis for an enhancement action plan for Social Studies Teachers in harnessing technology in building a skill of discernment through fact-checking of learners. This also benefited the Department of Education in formulating plans and development programs

and the School Heads in designing educational plans for more capacity-building programs that will help teachers enhance their skills and competence in shaping the said skills for students. Social Studies Teachers can become more productive and effective in upholding the veracity of information through fact-checking by students. As educational congruence becomes more significant, teachers will be able to improve the learning environment through improving student education, which is critical in national development. The researcher will be presenting the research paper at a public conference to spread the study's findings.

Informed Consent/ Assent. The respondents must understand their role in this research. The respondents were informed about the purpose, methodologies, and possible results of the study through Google Forms by using their email addresses to access this form. The researcher wrote a letter of permission to the school's division superintendent and school principal for this purpose. Informed consent was given to the parents of the students since the respondents are not of legal age as stipulated under our constitution. The informed consent was thoroughly discussed the purpose of the research, methods, and roles of the respondents including the possible outcome of the research. Parents were also informed that participation in the study is purely voluntary and their son/daughter can withdraw anytime they want should they feel that they no longer want to participate in the study. The researchers have thoroughly explained the risks associated with their participation in this research on the consent form. After securing the signed informed consent of parents, informed assent was distributed to respondents of the study. To meet the criteria for informed assent, the researcher asked the respondents to click the appropriate box section of the Google forms to give their consent. It was also emphasized that the respondents are free to withdraw from participating in this study. In addition, the researcher required the target respondents to complete a consent form. Since the respondents are minors, informed consent was given to the parents of the students through Google form and asked them to send a picture of the form with their signature and upload it in a drive to ensure that they are aware that their sons/daughters are participating in a survey.

Risks, Benefits, and Safety. The safety of the respondents is the paramount concern in conducting this study. To minimize the risk especially in this time of pandemic, the data gathering mechanisms were done through an online platform. Respondents of the study got an opportunity to participate in a study that adds value to the current knowledge in the academe as it can be used for evaluation and policymaking in the Department of Education. Through this study, they were able to relay their current situation towards the objectives stipulated in the study. Other than the mentioned benefits, the respondents did not have any direct gains in participating in the study, and such information is also stipulated in the assent and consent forms. The expected benefit of respondents' involvement in this study is that it was likely to assist the researcher in better understanding the extent of internet dependence and fact-checking among senior high school students, as well as their relationships. The research questionnaire was distributed to the research respondents through Google Forms as well and the retrieval of it is through this platform. The collected responses of the respondents that contained sensitive information were only accessible to the researcher. After the important information was gathered and utilized for this study, responses were kept and properly disposed of. All Google form responses were deleted from the researcher's Google Drive and other electronic storage devices. Moreover, the researcher also secured the informed consent and assent given by the respondents and their parents and kept their identities anonymous and the information given was confidential. The respondents were also given the freedom to withdraw from participating in the study at any time. The Schools Division Office and the School were furnished with the result of the study on internet dependency and fact-checking among senior high school learners in Davao City.

Privacy and Confidentiality of Information. Respondents had the option of sharing or not sharing information, including sensitive information. The information that was gathered was only used for the research's original purpose and was not shared with anybody else. Throughout the study, the respondents' names and other personally identifying information were kept private. Only the researcher had access to the forms submitted by the respondents to maintain the confidentiality of the personal data of the students in

observance of the existing Republic Act 10173 otherwise known as the Data Privacy Act of 2012. All data were kept locked and secured at all times. Furthermore, when the data and information collecting were completed successfully, any responses that contained sensitive information were erased from the researcher's Google Drive and other electronic storage devices to avoid data leakage that could affect the respondents.

Justice. The selection of respondents for this study is based on the objectives and the criteria that were set by the panel. Furthermore, no respondents were selected based on ethnicity, socioeconomic background, or other criteria that could jeopardize the study's fairness and impartiality. Care, recompense, and reimbursement were guaranteed, thanks to the rules of informed consent. The researcher was charged for data provision used to access the Google forms online. If necessary, use whatever means that were available and as agreed upon with the researcher and the respondents. Compensation for their time and labor, on the other hand, was provided in the form of prepaid load or other agreed-upon measures. The researcher informed the respondents that any benefits derived from the study would be freely available to them.

Transparency. The researcher divulged any conflict of interest that arose and was addressed appropriately in a manner that eliminated bias. The researchers also ensured that only accurate data were reported with full honesty in sharing information to ensure truthful answers. If the respondents wanted to know the result of the study, it was disclosed and made available to them. Then the result was sent through electronic mail if asked. The researchers will make sure that the respondents confirm the receipts of the mail to guarantee that they received the important result of the study. The substantial information that the study collected was shared with the participants before it was made available to the public. Each respondent was able to check and have a copy of a summary of the results. There was also a proper forum to let people involved discuss more about the topic which was announced to each one of the respondents. Following the forum, the researcher published the results so that other interested and future researchers and peer reviewers may learn from the study. Above all, the conduct of this study was made sure that nothing was attributed to the identified participants directly by name.

Qualification of the Researcher. The researcher is confident that the study was conducted successfully as evidenced by its academic background in education. The researchers are currently teaching at Lyceum of the Philippines University, one of the leading private institutions in the country that provides world-class and quality graduates. The researcher assures that the study will undergo deliberations, consultations, and constructive suggestions of the content by esteemed research examiners. Thus, provided approval sheets and other necessary documents that the study will be conducted from the Graduate School of Holy Cross of Davao College, Inc. This study will also undertake an Ethical Review.

Adequacy of Facilities. This study was carried out through the Internet. The researcher offered all of the necessary support in terms of gaining access to the forms and any other significant internet instructions that were required. This also guaranteed that the tools were easily accessible to the respondents, making the process simple, easy, and pleasant for them while removing any obstacles that may have been there.

Community Involvement. This study guaranteed that no local traditions, culture, or people were disrespected or discriminated against and were put at risk. However, the study was publicly shared for academic purposes and the benefit of the community concerning the research topic. In the context of this research, the results of this study were presented in the international and local research forums to share with the audience the findings and may apply some recommendations on the involvement of parents of the learners' education. In the context of this study, community refers to the school community. This includes the administrators, teachers, students, and other stakeholders. In the conduct of the study, the researcher ensured the coordination and cooperation with the community. Internal guidelines including any proscriptions and protocols of the school community were observed. Moreover, the researcher made sure that there was the utmost respect for the community, school administration, and more importantly, the

students who are the direct participants of this study in reporting findings and results of the study. Participation in the school community was also given due acknowledgment and consideration.

RESULTS AND DISCUSSIONS

This section presents the analyses and interpretations of the research problem presented in the previous chapter of this paper based on the statistical results of the data gathered by the researcher. Discussions are presented categorically based on the sequence of the statement of the problem.

Summary of Level of Internet Dependence in Senior High School Learners in Davao City

The first objective of this study is to determine the level of internet dependence among senior high school learners in Davao City. Table 1 presents the level of internet dependence per indicator.

Table 1 Summary of the Level of Internet Dependence among Senior High School Learners in Davao City

Indicators	Mean	Description
Frequency of Time Spent Online	3.90	High
Perception on Internet Dependency	3.78	High
Impact of Internet Dependency	3.60	High
Overall	3.76	High

The level of internet dependence of senior high school learners in Davao City in terms of frequency of time spent online, perception of internet dependency, and impact of internet dependence is shown in Table 1.

In particular, the average of three indicators of internet dependence is high at 3.76. The highest among the three indicators is the frequency of time spent online and the seemingly lowest still descriptively high is the impact of internet dependence which leaves the perception of internet dependence being the middle among the three indicators. The results reverberate the results of the data gathered by Tonioni et al., (2014) that the number of people being dependent on the Internet has significantly increased in the recent year. In their study, they found out that individuals are becoming increasingly accustomed to having access to the Internet, and more and more people are becoming Internet users every day. Home, school, and university environments all make use of the Internet in some capacity. It appears that understanding how to use the internet has become a need for everyone these days, regardless of age. Moreover, according to research by Ani (2010), He discovered that students frequently access the Internet for a minimum of five hours a day. As a result of a lack of infrastructure, the vast majority of those who responded depended on private, commercial internet services and cybercafés. It was also discovered that respondents require Internet education to use electronic resources and databases, as seen by their participation. According to the data, the vast majority of students, including those who are new to the internet, use this technology for course-related reading and research purposes.

The frequency of time spent online was the highest among the three indicators of internet dependence in this study with a mean of 3.90. This denotes that most of the learners spend most of their time on the internet in a day. The result supports the findings of the research conducted by Kemp (2021) where the number of internet users is growing at a rate of more than 5.5 percent per year worldwide, although the rate of increase is substantially quicker in many developing countries. This implies that senior high school learners frequently access the internet and that it indicates a significantly high internet dependence.

Impact on internet dependence came in last among all three indicators for internet dependence although the result is significantly high at 3.60. Based on the survey results, students feel the impact of being dependent

on the internet in their lives. The results give us numerical data showing how the internet impacts the cognitive and behavioral perspectives of students. This translates to the overt behaviors that teachers commonly observe in students who are exposed too much to the internet. The finding of this study supports the study of Conti et al. (2019) state that the majority of respondents said that internet dependency resulted in a short attention span, attitude difficulties (such as impatience and anger), changeable perception, poor decision-making, and uncertainty or feeling doubtful about oneself. Overall, the substantial correlation between internet dependency and the previous psychological circumstances is established when analyzing the impact of internet reliance from a cognitive-behavioral perspective. When a person is exposed to the use of the internet, the problem of internet consumption occurs. The result is supported by the theory used in this study which is the Media Dependency Theory of Rokeach and DeFleur, (1976). According to this theory, the more time a person spends on a specific media, the more reliant they get on it. The high result on all questions that represent the frequency of access to the internet indicates that such behavior is an indication of internet dependence.

This implies that internet dependence has an impact on the holistic well-being of students. As the students spend more time on the internet, they are being controlled and fed by it which makes it a part of their system. Hence, it affects their mental and behavioral perspective. These behaviors can easily be observed even in a simple family gathering young adults are oftentimes seen not to join any discussion or form a group where they discuss anything but rather, they are observed to be glued on their mobile devices spending time browsing or watching online videos the next thing they know; hours have been spent. Learners also were seen to have been so affected whenever the connection becomes internet or worse if the connection is slow or not available. The impact of internet dependence on senior high school learners based on the result of this study is a representation that the dependence on the internet has influenced their behavior which includes their mood which can easily observed by teachers on both physical and online platforms.

Level of Internet Dependence among Senior High School Students in terms of Frequency of Time Spent Online in Davao City

Table 1.1 shows the level of internet dependence among senior high schools in Davao City in terms of the frequency of time spent online. This indicator has five statements with mean and description.

Table 1.1 Level of Internet Dependence among Senior High School Learners in Davao City in terms of Frequency of Time Spent Online

Frequency of Time Spent Online	Mean	Description
The students have...		
1. used the internet every day.	4.26	High
2. accessed social media sites.	4.17	High
3. spent time doing research for assignments every day.	4.07	High
4. played online games every day.	2.71	Moderate
5. checked online messages every day.	4.30	High
Overall Mean	3.90	High

The table shows that among the five statements, the highest mean belongs to the statement “Checked online messages every day” with a mean of 4.30 and a description of high. This means that senior high school learners have significantly higher activity in terms of checking online messages every day. The result further the findings of the study of Akin-Adaeamola (2014), wherein it was discovered that accessing online messaging applications and chatting is the most popular activity among secondary school students, followed

by downloading videos and songs from a repository website, watching videos online, surfing the web, using the internet to study for school assignments and projects, looking for other websites such as sports websites and or for hobbies, reading news online, playing games online, and finally online shopping. Furthermore, people checking online messages has surged over the last decade as people become busier, and online messaging tools allow people to reconnect with their friends and relatives even to those acquaintances that were lost for years. Online messages provide convenience as well as swift communication to people (Smith, 2011).

The statement “played online games every day.” got a moderate average of 2.70 which means that high school learners in Davao City spend their time fairly on the internet playing online games. It suggests that senior high school students have control over how much time they spend online and that they do not spend the majority of their time playing video games. The result is somewhat surprising as it is contrary to the behavior observed among students. The result echoes the study of Muezzin (2015), where he found that students, particularly adolescents, spend an average of 1-3 hours every day playing online games, and this activity has an impact on their behavior and financial situation. As mentioned by the study of Dockrill (2016), wherein found out that new evidence to the contrary of the popular idea that video games are detrimental to your brain comes from a recent study that demonstrates that everyday participation in video game activities is related to improvements in academic achievement. Furthermore, the researcher is a bit surprised why the question garnered a low mean although considered to be high in this study which is contrary to the overt behavior shown by students based on the teacher’s observation. The result is similar to the information gathered by Wang and Zhu (2011) who discovered that after interviewing students, they discovered that students conceal their internet activity after spending an average of 14 hours per day online to avoid being cornered and questioned by their parents.

Although it can be considered to be low compared to previous statements on this indicator, it is still significantly high which means that several students frequently spend their time on the internet playing online games. This might be due to students wanting to make some diversion from potential burnout brought by overwhelming academic and personal tasks or simply breaking the ice of spending too much screen time on academic stuff.

Overall, it can be inferred based on the data gathered for the first indicator of internet dependence that senior high school learners of Davao City have high or fairly above average in terms of frequency which signifies high internet dependence. The result is supported by the theory used in this study which is the Media Dependency Theory of Rokeach and DeFleur, (1976). This theory states that the more time spent by a person on a particular media, the more that they will become dependent on it. The high result on all questions signifying the frequency of access to the internet concludes that such activity is an indication of internet dependence. The items on the indicator allow us to peek into the behavior of internet dependence of students in terms of how often they access the internet, spend time on social media, and any other activities online.

Level of Internet Dependence among Senior High School Learners in Davao City in terms of the Perception of Internet Dependence

Table 1.2 shows the level of internet dependence of senior high school learners in Davao City in terms of their perception of internet dependence. Similar to the previous table, this also has five statements with mean and corresponding descriptions.

Table 1.2 Level of Internet Dependence among Senior High School Learners in Davao City in terms of Perception on Internet Dependency

Perception on Internet Dependency	Mean	Description
The students have...		
1. stayed online more than 10 hours just to be occupie	3.75	High

2. though that there is more life on the internet.	3.41	High
3. used all information found on the internet to guide his decisions and perspectives	3.74	High
4. thought that life with internet is fun	3.91	High
5. remained calm and at ease if having stable internet connection.	4.11	High
Overall Mean	3.78	High

It can be seen in the next table that the statement “the students have remained calm and at ease if having stable internet connection.” has the highest mean score out of the five statements tested. as indicated by a mean of 4.11, which is high in terms of mean description. This implies that students’ reliance on the internet has an impact on their mood. Furthermore, the outcome indisputably demonstrates that students rely on the internet and its dependability in terms of stability and that this has an impact on their capacity to remain calm and at ease throughout their studies. The result substantiates the study of Lorenzo (2017) in which students are suffering as a result of poor internet connectivity which affects their mood, with some dropping out altogether. It can be inferred based on the result that having a stable internet connection affects the mood of students which means that it can also become an underlying pressure on students, especially on a learning modality that mainly runs online where an internet connection is paramount.

The last statement that received the lowest mean among five statements but still considered to be descriptively fairly high is the statement “the students have thought that there is more life on the internet.” with a mean of 3.41. This means that learners have a fairly above-average perception of having more life spent on the internet. Learners find that there is more life online which can become their scapegoat for their monotonous and sedentary lives. This result also substantiates the article written by Dentzel (2014) where he wrote that people find more joy in spending online than ever before. In his paper, he wrote that the internet provides a variety of ways for people to enjoy and make their time worthwhile while in the comfort of their home or personal physical space, making more and more people think that there is more life on the internet. The result also supports the study of Aggarwal, et al (2020), where they found that people have perceived that the internet improved their life satisfaction. According to the study, internet dependence is perceived to provide people with several benefits, including the opportunity to contact their family and friends, maintain a large social network, have access to knowledge, and engage in online leisure activities. The result implies that people have a strong image of the benefits of the internet as a result of its characteristics, and this perception has led them to believe that the internet will be one of the most useful tools of both this century and the years to come. As a result of the fact that the Internet eliminates barriers to connection and closes the gap that vast distances create between individuals, an increasing number of people view it as a source of life rather than merely a tool that is only essential for academic engagement or whatnot.

Level of Internet Dependence among Senior High School Learners in Davao City in terms of the Impact of Internet Dependence

Table 1.3 shows the level of internet dependence of senior high school learners in Davao City in terms of the impact of internet dependence. The table shows five statements, the mean score, and its description.

Table 1.3 Level of Internet Dependence among Senior High School Learners in Davao City in terms of Impact of Internet Dependence

Impact of Internet Dependence	Mean	Description
The students have...		
1. been easily irritated or short tempered	3.68	High

2. been distracted from tasks whenever engaged online	3.97	High
3. desired to socialize physically with others	3.27	High
4. troubled managing time	3.73	High
5. been productive engaging online	3.35	High
Overall Mean	3.60	High

In the table above, among all five questions, the one that got the highest mean which is considered to be the question with the highest impact among senior high school learners is the statement “Students have been distracted from tasks whenever engaged online” with a mean of 3.97. The mean of this statement is describing what it means in a descriptive sense when it says that internet dependency has an impact that is fairly above average on senior high school learners, causing them to become distracted from any duties anytime they are engaged online. This substantiates the study published in Media Monthly by Plustilli (2020) wherein they found out that students’ attentiveness can deteriorate gradually over time if they use the internet regularly.

Furthermore, in a study, individuals who had their phones accessing the internet readily available throughout the study not only used them more frequently than those who kept their phones hidden, but they also reported feeling more preoccupied and enjoying the experience less (Luna, 2018). Similarly, Koessmeier and Buttner (2021) find in their study that social media is a significant source of distraction, and as a result, it can prevent users from effectively completing particular tasks by luring them away from them to use social media instead.

The result implies that the internet has several impacts on learners, and people are becoming more aware of this. Few people can juggle or multitask whenever they are engaged on the internet especially if websites are too engaging not to give their full attention to. The result further suggests that learners cannot compartmentalize their tasks easily if such tasks overlap with internet usage.

The least among all statements on the category in terms of the means from the results of the survey is the statement “students have desired to socialize physically with others” with a mean of 3.27 which descriptively means that internet dependence impacts the senior high school learners to have a fairly desire to socialize physically with others. On the contrary, the study of Yusuf and Rachmawati (2020) states that there is a strong correlation between internet dependence and socialization. In his study, adolescents’ interactions with their peers might be altered in a variety of ways as a result of their internet dependence. On another hand, the study of Mwangi, et al (2016) suggests that according to the findings of their study, internet use may not have the harmful impact on socialization that has been suggested in the literature. When comparing internet users to non-users, the data confirm that internet users spend more time socializing with their peers. The result implies that although the results of the impact of internet dependence on learners in having the desire to socialize with others are fair or average, data cannot be neglected as supported by other literature that students feel of not having the desire to socialize with others when becoming dependent on the internet. The impacts of being dependent on the internet are also discussed in the theory to where this study is anchored to. The Media Dependency Theory of Rokeach and DeFleur, (1976) discussed that media dependency has several impacts to one’s behavior. The result of this indicator simply reverberates the said impact discussed on the theory utilized in this study.

Summary of the Level of Fact Checking of Senior High School Learners in Davao City

The second objective of this study is to determine the level of fact-checking among senior high school learners in Davao City. Table 2 presents the level of fact-checking per indicator.

Table: 2 Summary of the Level of Fact-Checking among Senior High School Learners in Davao City

Indicators	Mean	Description
Personal Perception on Fact-Checking	3.81	High
Frequency of Information Verification	3.60	High
Vulnerability to Fake News	3.35	Moderate
Overall Mean	3.58	High

The level of fact-checking of senior high school learners in Davao City in terms of personal perception of fact-checking, frequency of information verification, and vulnerability to fake news is shown in Table 2. In particular, the general mean of all three indicators is 3.58 which means that the level of fact-checking of senior high school learners of Davao City is fairly above average. It implies that students have a high personal perception of fact-checking and frequently verifying information but are also highly vulnerable to fake news.

Among all three indicators, the highest mean belongs to personal perception of fact-checking with a mean score of 3.81 which interpreted that students have fairly above average perception towards fact-checking. This result substantiates the study of Pennycook, et al (2021) who found out that even though students find fact-checking to be time-consuming and sometimes difficult, they believe it to be an increasingly important skill to have in today’s world, as more and more information on the internet is discovered to be false or written solely to promote a particular propaganda campaign. Furthermore, borderline signals such as “Lack of Evidence” may be interpreted as false rather than neutral by the recipient. To understand these biases, researchers look to human cognitive systems that reduce danger and uncertainty (Park et al., 2021). The result implies that the perception of senior high school learners on fact-checking allows them to be confident when confronted with information as it becomes a filter that carefully selects valid information.

The lowest mean among the three indicators is the vulnerability of fake news with a mean of 3.35 which means that senior high school learners in Davao City have an average level of vulnerability to fake news. The result indicates that learners have an average tendency to believe information without double-checking its source. The result substantiates the study of Hambrick (2018) wherein he found that to understand how and why people are susceptible to fake news, one possibility is to consider the hypothesis that a person’s cognitive competence reflects how well they can regulate the contents of working memory, which serves as their “mental workspace” for processing information. The result also substantiates the study of Pennycook and Rand (2021) who wrote that poor truth discernment is associated with a lack of detailed thinking and relevant knowledge, as well as the use of familiarity and source heuristics. As a result, people are more exposed to fake news or inaccurate and distorted information on the internet. This indicator’s results may conflict with the previously discussed indicator because students responded that they verify information online on a fairly regular basis. However, regardless of how frequently students verify information online before believing it, they are still vulnerable to fake news and misinformation. The result is relevant to another theory where this research is anchored– the Signal Detection Theory. According to Thomas Wickens’ (2002) Signal Detection Theory, the frequency with which individuals verify information is determined by whether they perceive something suspicious in terms of the narrative, type, and origin of such information. The signal that pupils create within themselves triggers the action of how frequently they check knowledge.

Level of Fact Checking among Senior High School Students in Davao City in terms of Personal Perception on Fact Checking

Table 2.1 shows the level of fact-checking among senior high schools in Davao City in terms of personal

perception of fact-checking. This indicator has five statements with mean and description.

Table 2.1 Level of Fact-Checking among Senior High School Learners in Davao City in terms of Personal Perception on Fact-Checking

Personal Perception on Fact-Checking	Mean	Description
The students have...		
1. found fact-checking too easy to do	3.07	Moderate
2. found fact-checking helpful in validating information	3.97	High
3. Found fact-checking important	4.16	High
4. Found fact-checking a needed skill to have	4.01	High
5. Found fact-checking needed especially if information is from an unknown source	3.86	High
Overall Mean	3.81	High

Based on Table 2.1, the highest mean among all statements under the indicator of personal perception on fact-checking is the statement “students have found fact-checking important” with a mean of 4.16 which can be interpreted as students have fairly above average perception towards the importance of fact-checking. This substantiates the study of Babaei, et al (2019) in which on their study, they confirm that people have a high personal perception towards fact-checking and also find it important. The result implies that the result of the study and the related literature agree that fact-checking is important in the context of this study – for senior high school learners.

The lowest mean among all five questions in this indicator is the statement “Students have found fact-checking too easy to do” with a mean score of 3.07. However, related literature suggests that such activity is not an easy task. In the study of Lim (2018) based on the conclusion of her study, she found out that fact-checking and validation are challenging undertakings. Fact-checkers rarely investigate similar statements, and they often disagree, particularly when politicians use ambiguous wording. The result implies challenges and difficulties experienced by some fact-checkers which was also mentioned in the related literature although it was not felt by senior high school learners of Davao City.

Level of Fact Checking among Senior High School Students in Davao City in terms of Vulnerability to Fake News

Table 2.2 shows the level of fact-checking among senior high schools in Davao City in terms of vulnerability to fake news. This indicator has five statements with mean and description.

Table 2.2 Level of Fact-Checking among Senior High School Learners in Davao City in terms of Vulnerability to Fake News

Vulnerability to Fake News	Mean	Description
The students have...		
1. believed on information from the news	3.83	High
2. limited parameters in determining whether information is fake or not	3.71	High
3. found most information on the internet to be true even without checking the source	2.89	Moderate
4. Found most websites are credible sources of information	2.79	Moderate
5. found information is more believable if it’s coming from influential people	3.51	Moderate
Overall Mean	3.35	Moderate

Based on the above table, the highest mean among five statements under the indicator of vulnerability to fake news is the statement “the students believed on information from the news” with a mean of 3.83. Such vulnerability based on the result of this study is also stated in the related literature wherein in the study of Bradshaw, et al (2019) where the only data available is about what people post and what they visit when they go to news sites off-platform, vulnerability assessments have major limitations. The results imply that news in social media news needs to be fact-checked as it also might potentially share unverified information or enable information to slip through the public that only represents one part of the story which will eventually lead to misinterpretation. Furthermore, Individuals are often swayed by news, especially if the news comes from well-established news organizations. Because of the reputation that these news organizations have built up through time, people no longer feel the need to double-check their facts. Reputable news organizations, on the other hand, have established a team to counter-check material before it is made available to the public to safeguard the sacred nature of information (Anderson & Rainie, 2020).

The results imply that news in social media news needs to be fact-checked as it is also might potentially share unverified information or enable information to slip through the public that only represents one part of the story which will eventually lead to misinterpretation. In lieu of verifying further, since learners feel that the information came from a known news media online, they tend to believe it right away making them highly vulnerable.

The lowest mean score among all statements under vulnerability to fake news is the statement “the students have found most websites are credible sources of information” with a mean score of 2.89 which interprets that students have fair vulnerability to fake news for fairly believing that most websites are credible sources. The result of this study substantiates the study conducted by Carter (2013), 2.2 percent of Internet users — and a far more astounding 4.7 percent of nonusers — believe all information found on the Internet is trustworthy and accurate. This implies that people have a notion that websites are credible sources of information without validating the website or the author writing for the website. In this study, senior high school learners of Davao City are not too vulnerable as they fairly think that websites are credible sources of information, unlike the result of the study of the related literature mentioned in this study. This could be due to the internet and media literacy subjects taught in school. The result is supported by the theory that this study is anchored to which is the Signal Detection Theory of Thomas Wickens (2002). The theory discusses that the perception of people on an information builds a signal where it becomes a parameter for them to validate the information. The result of this study gave us information that even the simplest discriminating information, such as recognizing whether or not a sound has been heard, and entails judgments.

Level of Fact Checking among Senior High School Students in terms of Frequency of Information Verification

Table 2.3 shows the level of fact-checking among senior high schools in Davao City in terms of frequency of information verification. This indicator has five statements with mean and description.

Table 2.3 Level of Fact-Checking among Senior High School Learners in Davao City in terms of Information Verification

Information Verification	Mean	Description
The students have...		
1. referred news to other online news sources	3.65	High
2. based understanding of an event from various sources	3.06	Moderate
3. crossed reference the gathered information with other sources when doing research on a topic	2.81	Moderate

4. checked other sources for validity before sharing information online	4.09	High
5. always checked the source of the information	4.23	High
Overall Mean	3.60	High

Among all the statements on the indicator frequency of information verification, the statement that got the highest mean score is the statement “the students have always checked the source of the information before believing” with a mean score of 4.23 which means that senior high school learners of Davao City have a fairly above average of frequency of information verification as they frequently check the source of the information they are digesting before believing in it. Checking the source is one of the ways to determine the veracity of the information. Contrary to the result of this study is the study of Brown (2017) wherein in his study 86 percent of Americans who consume news on social media do not always fact-check the information they consume. This implies that senior high school learners in Davao City differ from other groups of people as they engage in fact-checking before, they take information on a fairly above-average. Furthermore, based on another study, 500 Americans were polled, and it was shown that half of the population does not routinely check facts and just believes the information they are presented with. However, even though there are people who have parameters, which is why they no longer fact-check information, there is still approximately 38 percent of the population who is misinformed, with the remainder of the percentage being shared by people who are correctly informed and those who are ambiguously informed (Li & Wagner, 2020).

The last statement on this indicator with the lowest mean score is the statement “the students have crossed reference the gathered information with other sources when researching a topic” with a mean score of 2.81 which means that senior high school learners in Davao City fairly do cross-referencing or conduct lateral reading on the information being gathered with other relevant sources in doing research in the internet. This substantiates the study of Raad, et al (2018) wherein Their research demonstrates that people cross-reference references or sources only when they are required or feel obligated to do so. Furthermore, the study also found that students did not attempt to find the sources of statements, research the people and/or groups making the claims, or verify the veracity of assertions using fact-checking websites, online searches, or Wikipedia as recommended by the author (Wineburg & McGrew, 2017).

The result of the study implies that the level of cross-referencing of senior high school learners of Davao City is similar to the cited literature in the previous chapter where people feel no necessity to cross-reference information due to its additional work or task requirement. Internet dependence of learners contributed to fact-checking of senior high school learners in Davao City. This means that frequency of access to the internet, personal perception of internet dependence, and impact of internet dependence on senior high school learners in Davao City affects how often they perceive fact-checking as an activity that is needed to combat fake news, how vulnerable they are to fake news, and the frequency they fact check information online. This supports the study of Hollyer, et al, (2019) wherein according to their findings, billions of people can have access to knowledge with a few easy keystrokes and expanded internet access as a result of their research.

Relationship Between Internet Dependence and fact-checking among Senior High School Learners in Davao City

The third objective was an analysis of the relationship between the level of internet dependence and fact-checking among senior high school learners in Davao city. Computing for the Pearson r correlation between the total scores for each learner’s responses is presented, as shown in Table 3.

Table 3. Relationship of Internet Dependence and Fact Checking of Senior High School Learners

Fact Checking of Senior High School Learners				
Internet Dependence	r	P	Decision on H ₀	Interpretation
	.32	<.001	Reject	There is a significant moderate positive correlation.

. **Correlation is significant at the 0.05 level

The results indicated that the relationship between the level of internet dependence and fact-checking of senior high school learners showed a positive correlation and significant result. In the table, the correlation or r value is 0.32, denoting a moderate positive correlation between the level of internet dependence and fact-checking among senior high school learners. It implies that the increase of internet dependence of learners also tends to increase the fact-checking of learners. Since the p-value of 0.00 is less than 0.05, the alpha level of significance, then the relationship is significant. So, there is a significant relationship between the level of internet dependence and fact-checking among senior high school learners in Davao City.

This supports the study of Hollyer, et al, (2019) wherein according to their findings, billions of people can have access to knowledge with a few easy keystrokes and expanded internet access as a result of their research. It also encourages the dissemination of inaccurate information, which can have severe implications for both individuals and society at large. Therefore, checking the credibility of information sources is vital and people find it to be related whenever they access the internet. In tandem with the proliferation of misinformation, deception, and fake news available to people all over the world as the internet becomes more freely available, Fact-checking is considered to be a necessary ability to counteract the spread of false information on the internet. Furthermore, it also substantiates the study of Worden and Barthel, (2020) wherein although in a different context and population, they found out that the greater the amount of hours that Americans spend online, the greater the likelihood that they may be exposed to fake news or misinformation, in which case they will be unable to distinguish whether material is telling the truth. As a result, they are more likely to verify information through fact-checking and find it relative to being dependent on the internet.

Indicators of Internet Dependence that Significantly Influence Fact-Checking of Senior High School Learners in Davao City

The fourth objective was an analysis of which indicators of internet dependence significantly influence the fact-checking of senior high school learners in Davao City. The Multiple Linear Regression using Stepwise Method was used at a 0.05 level of significance.

Table 4 Regression Analysis on the Significant Contribution of the Indicators of Internet Dependence on Fact-Checking of Senior High School Learners in Davao City

Fact-Checking							
Internet Dependence	Unstandardized Coefficient		Standardized Coefficient			Decision	Interpretation
	B	SE	Beta	t	Sig.		
Constant	2.60	.26		9.06	<.001		
Frequency of Time Spent Online	-.02	.07	-.02	-.26	.792	Fail to Reject	Not Significant
Perception on Internet Dependency	.20	.06	.28	3.01	.003	Reject	Significant

Impact on Internet Dependence	.09	.06	.13	1.52	<.001	Reject	Significant
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The results show, that internet dependence of senior high school learners as regard to the perception of internet dependency (B, 0.20; $p < 0.05$) and Impact of internet dependence (B, 0.09; $p < 0.05$) significantly predict the influence of fact-checking of senior high school learners in Davao City. The result further shows that for every unit increase in the internet dependence of learners regarding the perception of internet dependence and impact of internet dependence would significantly increase by 0.20 and 0.09 units respectively as represented in the regression model: $B = 2.60 + 0.20$ (perception on internet dependence) + 0.09 (impact on internet dependence) at a 0.05 level of significance. Hence, the hypothesis that internet dependence is not significantly related to fact-checking of senior high school learners in Davao City has been rejected. On the other hand, the frequency of time spent online (B, -0.02; $p < 0.05$) does not significantly predict the influence of fact-checking on senior high school learners in Davao City. The data based on the result suggest that the perception of internet dependence and the impact of internet dependence significantly influence the fact-checking of senior high schools in Davao City. Students are aware that they are too dependent on the internet and experiencing the impact of being dependent on the internet will lead them to validate the facts through fact-checking knowing that there is several fake news, unverified, and misinformation spreads on the internet through fact-checking. This is in line with the study of Pennycook and Rand (2019) where they found out that the distinction between belief in real and false news is crucial for researching the elements that may influence what people think. There are two fundamentally different ways of conceiving belief in true and false news. In many cases, the focus is on the concept of truth “discernment,” or the degree to which misinformation is believed “relative” to the validity of the information being presented. It is typically calculated as the difference between belief in true news and belief in false news (akin to ‘sensitivity’ or in signal detection theory). Discernment captures the ‘overall’ accuracy of one’s beliefs – and thus provides insight into failures to distinguish between true and false content.

CONCLUSIONS

The overall mean of the level of internet dependence of senior high school learners in Davao City concerning the frequency of time spent online, perception of internet dependence, and impact of internet dependence are high. This means that learners have a high dependency on the internet in terms of how frequently they use or access it, how they see the internet as a source or repository of information that aids them on their homework, school projects, works, or even as a source of leisure and how the internet impacts the way they perceive things, behave and socialize with other people. Fairly above-average dependency on the internet makes the learners exposed more to the information that circulates in it, whether valid, verified, factual, or not.

The overall mean of the level of fact-checking of senior high school learners in Davao City with regards to personal perception of fact-checking, vulnerability to fake news, and frequency of fact-checking are high. This means that learners have fairly above average or high perceptions of how they think of fact-checking as an important tool to filter fake news, how it is a needed skill, how challenging it is, and how it helps validate information. Moreover, learners highly believe that they have limited parameters in determining news or information to be factual and easily believe information coming from websites or influential people. The result also implies that students despite being prone or vulnerable to fake news, validate the information by cross-referencing it to other sources as well as checking the credibility of the writer. There is a significant relationship between the level of internet dependence and fact-checking among senior high school learners in Davao City. There is a general trend toward more people checking facts as a result of the growing dependence on the internet, both in terms of the perception of that dependence and the effects of that dependence. Learners do make frequent use of the internet because it is much easier to access than

physically turning pages of books in the library. However, the prevalence of false information on the internet presents a risk to those who rely on the internet as their primary source of information. Verifying the accuracy of information helps mitigate the risk posed by fake news. If students are going to grow more reliant on the internet, there should be a corresponding increase in the amount of emphasis placed on fact-checking. To reduce the potential threat of fake news from too much exposure or high dependence on the internet, fact-checking can be performed as a means to filter information.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations are put forward to those concerned:

For the Department of Education, it is recommended that fact-checking skills should be part of the competency skills in the curriculum to further protect the learners from fake news online and to develop learners' critical thinking skills utilizing information that is valid, legitimate, and verified. Fact-checking can be embedded in every lesson that requires extensive readings and searches on the internet. The department should ensure that teachers are equipped with the right knowledge and mechanisms on how to do fact-checking so that they can perform or better instruct their students. Having said that, the department may decide to run a poll to find out whether or not the teachers are aware of how-to fact-check information, and then decide what course of action to take depending on the findings of the survey. The department may develop a partnership with an outside organization to fact-check its fact-checkers to guarantee the objectivity of the information that is being checked for accuracy. The existence of fact-checkers within the department makes it possible for the department to distribute information objectively.

Moreover, Social Studies teachers should see to it that fact-checking is always part of the guidelines in giving tasks to students more importantly if the task requires students to access the internet. Before including it in a guideline, it is recommended to validate whether the learners know how to fact-check and if not, teach learners how to perform fact-checking and assess whether the learners already have the skill to do it before requiring them to do some reading or research online.

Furthermore, students should be aware that the more they spend on the internet, they have to keep checking the facts that they are digesting and fact-check all information regardless of its nature and origin. This added skill will protect them from fake information that proliferates on the internet and will warn them not to become a medium for disinformation.

Lastly, researchers and future researchers may use this study as a reference material and guide for future research. They may also conduct another study to determine other factors or indicators that affect the relationship between internet dependence and fact-checking.

REFERENCES

1. Aggarwal B, Xiong Q, Schroeder-Butterfill E., (2020) Impact of the use of the internet on quality of life in older adults: review of literature. *Prim Health Care Res Dev.* 2020 Dec 2;21:e55. doi: 10.1017/S1463423620000584. PMID: 33263273; PMCID: PMC7737194.
2. Akin-Adaramola, O. S. (2014). Ashesi University College the Internet Usage among *Secondary School Students: A Case Study on Labone Secondary School*. Ashesi University College. Retrieved on September 6, 2021 from <http://journal.sapub.org/library>.
3. Amazeen, M. (2015). *Sometimes political fact-checking works. Sometimes it doesn't. Here's what can make the difference.: Political fact-checking does stop politicians from stretching the truth — but it doesn't always change voters' beliefs*. Washington: WP Company LLC d/b/a The Washington Post. Retrieved from <https://www.proquest.com/blogs-podcasts-websites/sometimes-political-fact-checking-works-doesnt/docview/1686051865/se-2?accountid=31259>

4. Anderson, J., & Rainie, L. (2020). The Future of Truth and Misinformation Online. Pew Research Center: Internet, Science & Tech. Retrieved March 29, 2022, from <https://www.pewresearch.org/internet/2017/10/19/the-future-of-truth-and-misinformation-online/>
5. Ani, O. E. (2010). Internet access and use: A study of undergraduate students in three Nigerian Universities. *The Electronic Library*, 28(4), 555-567. Retrieved on September 6, 2021 from www.researchgate.net/publication/220677187_internet_access_and_use.
6. Argaez, E. (2021). *Usage and Population Statistics*. Retrieved on August 31, 2021 from <https://www.internetworldstats.com/>
7. Babaei, M., Chakraborty, A., Kulshrestha, J., Redmiles, E. M., Cha, M., & Gummadi, K. P. (2019). *Analyzing biases in the perception of truth in news stories and their implications for fact-checking. Analyzing Biases in Perception of Truth in News Stories and Their Implications for Fact Checking / Proceedings of the Conference on Fairness, Accountability, and Transparency*. Retrieved on September 8, 2021, from <https://dl.acm.org/doi/10.1145/3287560.3287581>.
8. Bradshaw, S., Howard, P., Neudert, L.-M., & Kollanyi, B. (2019). *Sourcing and automation of political news and information over social media in the United States*. Taylor & Francis. Retrieved on September 8, 2021 from <https://www.tandfonline.com/doi/full/10.1080/10584609.2019.1663322>.
9. Brown, E. (2017, May 10). *9 out of 10 Americans don't fact-check information they read on social media*. ZDNet. <https://www.zdnet.com/article/nine-out-of-ten-americans-dont-fact-check-information-they-read-on-social-media/>.
10. Carter, H. (2013). *For 53% reliable information, click here*. Forbes. Retrieved March 29, 2022, from https://www.forbes.com/2003/01/31/cx_da_0131topnews.html?sh=5ec058b031f3
11. Christakis, D. A. (2011). *Problematic internet usage in US college students: a pilot study*. PubMed. Retrieved on August 31, 2021 from <https://pubmed.ncbi.nlm.nih.gov/21696582/>
12. Chua, Y., Curato, N., & Ong, J. (2021). *Information Dystopia and Philippine Democracy*. Internews. Retrieved on August 31, 2021 from <https://internews.org/wp-content/uploads/legacy/2021->
13. Conti, T., Bagsit, T. J., Claveria, R. T., Escalona, J. P., & Ramos, R. (2019). *The Impact of Internet Dependency Among Senior High School Students in Batangas State University. International Journal of Advanced Research and Publications*. Retrieved on September 6, 2021, from ijarp.org/published-research-papers/june2019/The-Impact-Of-Internet-Dependency-Among-Senior-High-School-Students-In-Batangas-State-University.pdf.
14. Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). New York: John Wiley & Sons.
15. Dentzel, Z. (2014). *How the Internet has changed Everyday Life*. OpenMind. <https://www.bbvaopenmind.com/en/articles/internet-changed-everyday-life/>
16. Dockrill, P. (2016). Students Who Play Online Games Actually Get Better Academic Results. ScienceAlert. Retrieved 14 March 2022, from <https://www.sciencealert.com/students-who-play-online-games-actually-get-better-academic-results>.
17. Hambrick, D. Z. (2018). Cognitive ability and vulnerability to fake news. *Scientific American*. Retrieved March 29, 2022, from <https://www.scientificamerican.com/article/cognitive-ability-and-vulnerability-to-fake-news/>
18. Hollyer, J. R., Rosendorff, B. P., & Vreeland, J. R. (2019, April 5). *Analysis / Fake news is bad news for democracy*. The Washington Post. Retrieved March 22, 2022, from <https://www.washingtonpost.com/politics/2019/04/05/fake-news-is-bad-news-democracy/>
19. Hull, M. (2021). *Internet Addiction Statistics. The Recovery Village Drug and Alcohol Rehab*. Retrieved on August 31, 2021 from <https://www.therecoveryvillage.com/process-addiction/internet-addiction/internet-addiction-statistics/>
20. Kemp, S. (2021). Digital 2021: *the latest insights into the 'state of digital.'* *We Are Social*. Retrieved on August 31, 2021 from <https://wearesocial.com/blog/2021/01/digital-2021-the-latest-insights-into-the-state-of-digital>
21. Koessmeier, C., & Büttner, O. B. (2021). Why are we distracted by social media? distraction situations and strategies, reasons for distraction, and individual differences. *Frontiers*. Retrieved March 29, 2022, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.711416/full>

22. Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610. doi:10.1177/001316447003000308
23. Li, J., & Wagner, M. W. (2020). When are readers likely to believe a fact-check? Brookings. Retrieved March 29, 2022, from <https://www.brookings.edu/techstream/when-are-readers-likely-to-believe-a-fact-check/>
24. Lim, C. (2018). *Checking how fact-checkers check* – Chloe Lim, 2018. Sage Journals. Retrieved March 21, 2022, from <https://journals.sagepub.com/doi/abs/10.1177/2053168018786848>
25. Lorenzo, A.R. (2017). Comparative study on the performance of Bachelor of Secondary Education (BSE) students in educational technology using blended learning strategy and traditional face-to-face instruction. *Turkish Online Journal of Educational Technology*, 16(3), 36-46. <https://eric.ed.gov/?id=EJ1152658>
26. Luna, K. (2018). *Dealing with digital distraction*. American Psychological Association. Retrieved March 29, 2022, from <https://www.apa.org/news/press/releases/2018/08/digital-distraction>
27. Malipot, M. (2021). *DepEd to discuss fake news, and fact-checking in an online learning episode*. Manila Bulletin. Retrieved on August 31, 2021, from <https://mb.com.ph/2021/05/07/deped-to-discuss-fake-news-fact-checking-in-an-online-learning-episode/>
28. Müezzín, E. (2015). Comparison of online game addiction in high school ... – ed. *The Turkish Online Journal of Educational Technology*. Retrieved March 11, 2022, from <https://files.eric.ed.gov/fulltext/EJ1124396.pdf>
29. Mwangi, H. W., Magambo, E. D., & Njora, R. (2016). The influence of internet use on socialization among the youth: A case of undergraduate students at University of Nairobi-Main Campus. *International Journal of Computing and Engineering*. Retrieved March 29, 2022, from <https://carijournals.org/journals/index.php/IJCE/article/view/3#:~:text=Results%3A%20The%20study%20findings%20indicated,when%20compared%20to%20non%20users.>
30. Park, S., Park, J. Y., Kang, J.-han, & Cha, M. (2021). The presence of unexpected biases in online fact-checking: HKS Misinformation Review. *Misinformation Review*. Retrieved on September 8, 2021 from <https://misinforeview.hks.harvard.edu/article/the-presence-of-unexpected-biases-in-online-fact-checking/>.
31. Pennycook, G., & Rand, D. G. (2018). Lazy, not biased: *Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning*. *Cognition*. Retrieved on September 8, 2021 from <https://www.sciencedirect.com/science/article/abs/pii/S001002771830163X>.
32. Pennycook, G., & Rand, D. G. (2021). The psychology of fake news. *Trends in Cognitive Sciences*. Retrieved on September 8, 2021 from <https://www.sciencedirect.com/science/article/pii/S1364661321000516>.
33. Pennycook, G., & Rand, D. G. (2021). The psychology of fake news. *Trends in Cognitive Sciences*. Retrieved on September 8, 2021 from <https://www.sciencedirect.com/science/article/pii/S1364661321000516#bb0070>.
34. Plustilli, D., (2020). *Excessive internet usage adversely affects the concentration of students*. The Daily Collegian. Retrieved March 20, 2022, from https://www.collegian.psu.edu/the_savvy_student/excessive-internet-usage-adversely-affects-concentration-in-students/article_3a2bdbae-b0a0-11ea-a9f5-e38a7c9b56f6.html
35. Raad, J., Bertaux, A., & Cruz, C. (2018). *A survey on how to cross-reference web information sources*. *HAL Open Science*. Retrieved March 21, 2022, from <https://hal.archives-ouvertes.fr/hal-01199440/document>
36. Rokeach, S., & DeFleur, M. (1976). *MEDIA DEPENDENCY THEORY- Mass Communications Context*. SPRING 2001 THEORY WORKBOOK. Retrieved on August 23, 2021 from <https://www.uky.edu/~7Edrlane/capstone/mass/dependency.htm>
37. Smith, A. (2020). Why Americans use social media. Pew Research Center: Internet, Science & Tech. Retrieved September 23, 2021, from <https://www.pewresearch.org/internet/2011/11/15/why-americans-use-social-media/>.
38. Statista (2021). *Number of Internet users in the Philippines 2017–2026*. Statista.

- <https://www.statista.com/statistics/221179/internet-users-philippines/>
39. Tonioni, F., Mazza, M., Autullo, G., Cappelluti, R., Catalano, V., Marano, G., iumana, V., Moschetti, C., Alimonti, F., Luciani, M., & Lai, C. (2014). Is internet addiction a psychopathological condition distinct from pathological gambling? *Addictive Behaviors*. Retrieved September 23, 2021, from <https://www.sciencedirect.com/science/article/abs/pii/S0306460314000549?via%3Dihub>.
 40. Wang, L., & Zhu, S. (2011). Online Game Addiction Among University Students. *Diva-portal.org*. Retrieved April 24, 2022, from <https://www.diva-portal.org/smash/get/diva2:602320/FULLTEXT01.pdf>
 41. Wickens, Thomas. (2001). *Elementary Signal Detection Theory*. Elementary Signal Detection Theory. 10.1093/acprof:oso/9780195092509.001.0001
 42. Wineburg, S., & McGrew, S. (2017). *Lateral reading: Reading less and learning more when evaluating digital information (Stanford History Education Group Working Paper No. 2017-A1)*. Retrieved August 31, 2021, from <https://ssrn.com/abstract=3048994>.
 43. Worden, K., & Barthel, M. (2020, December 13). *Many Americans are unsure whether sources of news do their own reporting*. Pew Research Center. Retrieved March 22, 2022, from <https://www.pewresearch.org/fact-tank/2020/12/08/many-americans-are-unsure-whether-sources-of-news-do-their-own-reporting/>
 44. Yusuf, A., & Rachmawati, D. (2020). *The correlation of internet addiction towards adolescents' social interaction*. De Gruyter. Retrieved March 20, 2022, from <https://www.degruyter.com/document/doi/10.1515/ijamh-2020-0110/html?lang=en>