Beyond Browsing: Examining the Digital Experience that Drive Students' Digital Literacy

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Abstract

As digital technology continues to transform educational environments, fostering digital literacy among students has become increasingly essential. This paper explores the digital practices that most effectively support students' development of digital literacy skills. This study specifically aims to identify the impact of understanding digital practices, Using Information, Finding Information, and Creating Information on students' digital literacy. This quantitative study used primary data collection through survey questionnaire. The sample was selected using the convenience sampling and the sample consist of three pioneering universities of Sri Lanka, namely, University of Sri Jayewardenepura, University of Colombo, and NSBM Green University. 120 undergraduate students responded to the questionnaire and data was analyzed by using the SPSS software.

Based on the findings, the experience of using information and finding information has a significant impact on the students' digital literacy. Also, the experience of understanding digital practices and creating information does not have a significant impact on the students' digital literacy.

These findings highlight the need for educational institutions to prioritize specific digital practices, particularly the skills of using and finding information, within their curriculum to enhance digital literacy. By focusing on these areas, universities can better equip students with the critical abilities needed to navigate and assess digital information effectively in both academic and professional contexts.

The study also suggests that while creating digital content is valuable, it may not directly influence digital literacy as strongly as information retrieval and utilization skills. This study contributes to a growing understanding of how targeted digital practices can shape student preparedness for an increasingly digital world.

Keywords: ***Digital literacy, Experiential Learning Theory, Learning by Doing Theory, Undergraduate Students***

1. INTRODUCTION

1.1 Background of the Study

In the rapidly advancing digital age, the ability to navigate, understand, and utilize digital technologies has become an essential skill for individuals and societies (Sulaiman & Ismail, 2020). This collection of skills and competencies refer as "Digital Literacy" and the it is not merely about using technology but encompasses a range of capabilities that enable individuals to interact effectively with the digital world, critically access and evaluate information and engage responsibly in the digital space. At its core, digital literacy involves both technical and cognitive aspects. On one hand, it requires a fundamental understanding of various digital tools, devices, and platforms, including computers, smartphones, tablets, software applications, and internet services. This technical proficiency enables individuals to communicate, collaborate, and access information efficiently.

According to Yazonet al., (2019) digital literacy involves critical thinking and the ability to evaluate information from digital sources critically. The internet is a vast repository of information, but it also hosts misleading content, misinformation, and fake news. Digital literacy empowers individuals to distinguish between credible sources and dubious ones, fostering a more informed and discerning approach to consuming information online. Moreover, digital literacy encompasses the skills to protect personal information and privacy in an increasingly interconnected world. Understanding online security measures, recognizing phishing attempts, and safeguarding one's digital identity are crucial components of being digitally literate. Digital literacy is not limited to a specific age group or professional domain; it is a vital skill for everyone. From students researching for assignments and professionals seeking information to senior citizens connecting with family and friends through social media, digital literacy plays an integral role in daily life. Furthermore, digital literacy plays a pivotal role in driving economic growth and societal development. In the modern workplace, proficiency in digital tools and digital communication is often a prerequisite for employment and career advancement. Enhancing digital literacy across all demographics can help bridge the digital divide, ensuring equal access to opportunities and resources in the digital era.

1.2 Background of the context

With the advent of the digital age, technology has significantly impacted university academic activities, leading to the emergence of a more digitally integrated and tech-driven learning environment. This shift has given rise to the concept of digital literacy, as universities recognize the importance of equipping students with the skills needed to navigate the digital world effectively (Schunk, 2022).

Digital literacy is most important to the university’s academic activities. Digital literacy enables students to access a vast amount of information and research materials through online databases, digital libraries, and academic journals, Digital

literacy is essential for engaging in online learning, whether through fully online courses or blended learning approaches. Students need to navigate learning management systems, access course materials, and participate in virtual discussions (Shopova, 2020). Universities rely on digital communication tools, such as email, video conferencing, and online collaboration platforms, to connect students, faculty, and researchers and Digital literacy enhances academic writing and presentation skills. Students use word processing software for writing essays, research papers, and dissertations, as well as multimedia presentation tools for sharing their work.

1.3 Statement of the Problem

"Even though universities are paying more attention to improving students' digital literacy, students' digital literacy is low. Does students' digital literacy increase through experience?"

Digital literacy is very important for university academic activities. Ideally, digital literacy is very useful and used in the daily work of universities. According to the European Commission, many universities integrated technology into their teaching methods and curriculum to enhance learning experiences. This included the use of digital tools, online resources, and learning management systems. According to the Educause report the COVID-19 pandemic further accelerated the adoption of digital tools and e-learning platforms in universities. Many institutions transitioned to online education, making digital literacy even more critical for both students and educators. Since universities and lecturers pay more attention to digital literacy. we think that the digital literacy of university academic students is also at a good level.

However, the reality is that the digital literacy of university students is low. Even though universities and lecturers pay more attention to digital literacy, the number of digital resources used by students for their academic activities is very low. A research paper published in Computers and Education found that while many university students were proficient in using social media and web browsing, their critical thinking skills regarding information evaluation, especially in the context of online sources, were lacking. A study published in the Journal of Information Technology Education found that while most university students were competent in using basic computer applications and tools, they lacked advanced digital skills such as data analysis, and cybersecurity awareness. However digital literacy is very important to students. According to Nuryadi and Widiatmaka, (2023), the 21st-century demands represent the development of digital technology, including Data literacy, and the capacity to comprehend, analyze, and use data and information in the digital world. It is a compulsory competency among students in the 21st century. According to Shopova T, for university students, it is necessary to have knowledge and skills in the field of digital technology to be able to use information effectively in its different forms (e-publications, online video, audio recordings, digital libraries, databases, etc.). Furthermore, students need to be able to work critically with the information resources that they find for their learning activity and have the competencies

to handle independently resolving scientific issues in projects and studies.

The lack of digital literacy among students can have several significant consequences that affect their educational, personal, and professional lives. Students who lack digital literacy skills may struggle to find credible sources and reliable information, hindering their ability to conduct research and make informed decisions, Students who lack these skills may find it difficult to complete assignments, collaborate with peers, and use digital tools effectively. This could lead to lower grades and hinder their overall academic performance and Students without these skills may miss out on valuable opportunities for self-development.

This study aims to check whether students' digital literacy increases through experience. This can create a quality education in Sri Lanka. This research topic has been done in other countries. In Sri Lanka, the researchers also have not tested the connection of experiences in raising student digital literacy. However, they tested the factors affecting digital literacy in the business field and healthcare industry. So, in my research, I hope to determine the connection of experiences in raising students' digital literacy.

1.4 Research Questions

The study has focused on answering following questions to achieving the research purpose:

Does understanding digital practices significantly impact on Digital Literacy of undergraduates?

Does using information significantly impact on Digital Literacy of undergraduates?

Does Finding Information significantly impact on Digital Literacy of undergraduates?

Does Creating Information significantly impact on Digital Literacy of undergraduates?

1.5 Research Objectives

Accordingly the study has achieved the following objectives.

To examine the significant impact of Understanding digital practices on undergraduate students' Digital Literacy.

To examine the significant impact of using information on undergraduate students' Digital Literacy.

To examine the significant impact of Finding Information on undergraduate students' Digital Literacy.

To identify the significant impact of Creating Information on undergraduate students' Digital Literacy.

2. LITERATURE REVIEW

2.1 21st-century Teaching and Learning

Physical Education classes are just as crucial to students' growth as other school subjects, but they must be well-organized and planned, using them for both teaching and learning (Tiamvong, 2023). Institutions of higher learning are fully responsible for assisting students in becoming successful in the age of digital information. Microsoft's Vice-President, of Worldwide Education,

Anthony Salcito said that to prepare the students for the 21st-century workforce, they are required to equip themselves with the necessary skills, particularly in critical and creative thinking, collaboration, communication, and computational thinking. Learning in the 21st century, a teacher needs to change their role to be a creator to facilitate students' learning, so that they can learn by doing and their learning would be created from their minds and brains (Schunk, 2022).

The rapid development of information technology, especially in the field of education, is what distinguishes 21st-century learning changes(Sulaiman & Ismail, 2020). For teachers and students to properly use internet-based digital media, they both need to possess ICT literacy skills, often known as digital literacy. The ability to find, consume, work on, and produce digital content wisely and intelligently is referred to as digital literacy (Basantes-Andrade et al., 2020). For students to be successful in the future, literacy culture is seen as a critical ability in the twenty-first century. The present active student population, Generation Z, is very interested in digitization and has excellent digital abilities. To engage and meet the requirements of these students teachers need to incorporate digitalization into the way they teach(Sánchez-Caballé et al., n.d.). To access, use, and evaluate students' learning outcomes, teachers must also be skilled in using digital technology and communication tools. When using information technology for learning, they play a key role in supporting students to become responsible, critical, creative, and communicative. Schools have a crucial role in incorporating 21st-century skills into their teaching methods, including communication, teamwork, critical thinking, problem-solving, creativity, and innovation.

The Covid-19 pandemic has greatly affected the development of digital literacy skills in the 21st century. The spread of COVID-19 has prompted the closure of educational facilities all across the world. These universities' rapid development of online learning environments as a result of the closing aimed to ensure that instruction would not be disrupted. The facilities' capacity to respond was put to the test by the COVID-19 epidemic. with an issue involving remote and online assistance. Since the majority are uneducated, it is important to look into the motivations for offering online lessons to students, which go beyond the time of shackles. Before the pandemic, the vast majority of kids had never engaged in distance learning. The virtual world has saved humanity after the COVID-19 pandemic decimated peoples' normal lifestyles around the planet. Schools, like many other organizations, have already shifted their emphasis to interactive networks for online learning. Over the past few years, various forms of e-learning and blended learning have emerged in schools. Although the technology has been around for a while, virtual classrooms have only recently gained popularity.

2.2 Teaching and Learning Difficulties during the COVID-19

With the increase of COVID-19, schools were quickly closed by the implemented legislation. This circumstance was

successful in making educational history. It was necessary to upgrade its method of delivery and concentrate more on new technology (Alvarez, n.d.). The transition from traditional to virtual education has its difficulties, teachers were ill-equipped to handle the new demands. They lacked the tools and the information necessary to participate in the process (Daniel, 2020).

Both students and teachers have been compelled to adapt to a new technological process in education as a result of the abrupt change. The IT infrastructure for online education was found to be lacking or insufficient(Pérez-Jorge et al., 2020). Regarding the digital infrastructure, teachers fall into a lot of difficulties. The teachers' experience with online teaching was limited, and they encountered a knowledge gap and a setting that was unsuitable for it(Baran & Correia, 2014). There should be access to technological infrastructure that supports teachers. The ability to connect to the internet and have the necessary tools would help in integrating technology into teaching(Adarkwah, 2021). Since the field of education lacks a strong IT infrastructure, efforts have been made to create technology that supports online educational ideas. Although there has been opposition to technology in education, because of the crisis, authorities now view technology in education differently(Kerres, 2020). Although there are many ways to distribute learning content in a typical learning environment, distant learning lacks the structure to foster this process. The challenge with online education is not just the technology, but also the educational principles that underpin it(Bartley & Gole, 2014).

Teachers have reported that the preparation for online lessons takes longer than the preparation for traditional lesson planning. It was established that the preparation and layout of instructional materials affected a teacher's efficacy (Pérez-Jorge et al., 2020). Online teaching is claimed to be more laborious than traditional methods of instruction since it requires more time to prepare lessons, deliver them, and then assess students using digital tools (Fish et al., 2009). Teachers made use of their time by updating and uploading learning materials as needed in addition to conducting online learning. Since a variety of communication techniques have been used in online education, more time was spent on communication than in a traditional learning setting (Cavanaugh, 2015). As needed feedback is anticipated when teaching online. This takes a lot of time because each student's work needs to be downloaded, reviewed for areas that need improvement, commented on, and uploaded. It takes longer to write comments for every kid than it does to speak to them. In online education, the teacher's availability is anticipated 24 hours a day (Bair & Bair, 2011).

When teachers are motivated and equipped with the necessary knowledge and abilities, the quality of their instruction improves. As teachers employ innovative delivery strategies, students can improve their learning (Mohamad et al., 2015). Teachers and children had to face these challenges because they did not have digital literacy skills. Before COVID-19, only a very few people had digital literacy skills in Sri Lanka. Those who had digital literacy only had social media and basic searching skills.

Due to covid-19, digital literacy has become a very important aspect for people. Especially in the educational field, teachers and children felt the need for digital literacy skills.

2.3 Digital Literacy

According to Belshaw, n.d., The term literacy can be defined as mastering basic and useful skills that have the power to profoundly improve and modify a person's capacity for thought. Because new technological skills and knowledge are needed in technologically oriented workplaces, the need for learning by individuals, society, and educational authorities has become exceedingly complex in the 21st century with the arrival of new technologies and Web applications. Digital literacy has emerged as one of the key competencies in this age of technological innovation (Cisotto & Pupolin, 2018).

A much larger phrase was required to define this usage to encompass the expanding use of digital technologies. The most appropriate phrase to characterize this technological evolution was "digital literacy" because with the development of Web technologies and increased access to digital technology and the Internet, digital media was becoming the focal point of the "Next Generation." The term "digital literacy" was originally used by Glister in 1997, who described it as the capacity to comprehend and make use of information delivered via computers in a variety of formats and from a variety of sources (*Digital_Literacy*, n.d.). "Digital literacy" is a type of literacy that entails learning and using certain knowledge, skills, attitudes, and personal traits as well as having the capacity to organize, carry out, and assess practical scenarios (Martin & Grudziecki, 2006). According to (Batcha et al., 2014) Digital literacy is the ability to find, organize, understand, evaluate, and analyze information using digital technology. (Govindarajan, 2020), defined digital literacy as the ability to find, evaluate, utilize, share, and create content utilizing information technology and the Internet in his work titled ‘Digital Literacy establishing the Boundaries and Identifying the Partners.’ It is the assured and thoughtful application of knowledge and technological resources to advance academic, individual, and professional development. the term digital literacy is defined as an individual’s ability to find and evaluate information, use this information effectively, create new content using this information, and share and communicate this newly created information using appropriate digital technologies (Reddy et al., 2020).

2.4 Experiential Learning Theory

In response to John Dewey's appeal for a theory of experience to guide educational innovation, ELT was developed to offer a theoretical underpinning for the practice of experiential learning (Kolb & Kolb, 2017). ELT is a compilation of the writings of those illustrious thinkers whose theories of human learning and development placed a high priority on experience. William James, John Dewey, Kurt Lein, Jean Piaget, Lev Vygotsky, Carl Jung, Mary Parker Follett, Carl Rogers, and Paulo Freire are referred to as the "foundational scholars of experiential learning" in this area of study.

Educators in higher education have utilized ELT learning style data in a variety of ways to improve teaching effectiveness and maximize student learning(Kolb & Kolb, 2017). Students started using inquiry, self-disclosure, conversation, and reflection to learn things about themselves as learners through self-directed learning.

2.5 Learning by Doing Theory

"Learning by Doing," which emphasizes the value of experiencing, hands-on learning in the educational process, is one of John Dewey's most well-known philosophies. According to Dewey's idea, learning is an active process that involves both thinking and doing rather than merely being a passive assimilation of information. He held the opinion that learning occurs most effectively when pupils are involved in worthwhile activities and have the opportunity to use what they have learned in practical settings. This strategy fosters analytical thinking, problem-solving abilities, and a greater comprehension of the material. Learning via doing, on the other hand, motivates pupils to experiment, explore, and learn from first-hand experiences. Learning becomes more interesting and efficient when students engage in hands-on activities that allow them to relate concepts to actual circumstances. Since many educators and organizations now understand the need to incorporate experiential learning into their teaching techniques, Dewey's theories have had a significant influence on current education. To learn effectively, students must link their actions to their experiences and use reflective thinking to make sense of what they experience (Willingham, n.d.). These theories are linked to an individual's digital literacy and competence

2.6 Understanding Digital Practices

Understanding how to practice and utilize digital technologies effectively is an essential component of digital literacy (Pilav-Velić et al., 2021a). The ability to use digital technologies and interact with digital content is referred to as understanding digital practices. It includes a range of facets of how people use technology and the internet.

According to Tour (2017) understanding digital practices is crucial for enhancing digital literacy. By delving into the nuances of everyday digital literacy practices, researchers and teacher-researchers can fine-tune literacy for learning. This knowledge is essential for reshaping literacy learning. Insights from research on digital literacy practices can have significant implications for learning contexts, classroom practices, and teacher professional development. Understanding digital practices is fundamental for advancing digital literacy and effectively integrating technology into educational settings. According to Pilav-Velić et al. (2021b) there is a positive relationship between digital literacy and digital practice. Research has shown that individuals develop digital skills through practice, which involves trial and error. This means that understanding digital practices can have a significant impact on improving digital literacy. According to Yazon et al. (2019), Students are quite literate when it comes to understanding the types of online users they might anticipate. What happens to the

information people post online can be satisfactorily explained. Their ability to select the appropriate instrument to locate, utilize, or produce information is ordinary. Additionally, they have a limited awareness of how to promote themselves online, locate someone online, and use websites and online tools to obtain and record information online. Additionally, they acknowledged that they are extremely knowledgeable about determining who owns the ideas and material they acquire online and what online information they are legally permitted to reuse.

2.7 Using Information

The ability to successfully analyze, understand, and apply information to resolve issues, make choices, and accomplish specified objectives is referred to as information usage abilities. These abilities entail more than just finding information; they also entail comprehending, appraising, and effectively applying the learned material(Schunk, 2012).

According to Spires et al., (2017), the impact of using information on digital literacy can be significant in various aspects. By enhancing digital literacy skills, individuals can effectively locate, consume, create, and communicate digital content. This proficiency enables individuals to critically evaluate information from diverse sources presented through digital mediums, contributing to informed decision-making and knowledge acquisition. According to Yazon et al. (2019), an evaluation of their information-using digital literacy by a faculty member. academic staff members are extremely adept at exploiting the information found online. This shows a lack of competency in using various media and determining the reliability and validity of their web source. Due to improper citation techniques, they can be utilizing other people's work while also committing plagiarism. They seldom ever keep track of the crucial information they discover online. They don't have much experience sharing and organizing information utilizing social bookmarking. Additionally, they might have shared files with others in an unauthorized manner.

2.8 Finding Information

Information Seeking, we now have access to a lot of knowledge because of the internet. We nearly have too much information to choose from, which is the issue. It might be challenging to distinguish between accurate information, false information, opinions, and bias. Students need to know how to do reliable searches and then analyze the material they find.

According to Yazon et al., (2019),the ability of academics to obtain material online appears to be fairly good. Although they are quite knowledgeable about the types of material that may be found online, they are incompetent when it comes to using online libraries and complex search features. They are quite accustomed to using search terms and social media sites as information sources when looking for information online. According to (Kanjilal, n.d.) the ability to find information effectively is a crucial component of digital literacy. In the context of digital literacy, finding information skills impacts the overall

competency of individuals in navigating the vast digital landscape, evaluating the credibility of sources, and utilizing information for various purposes. This skill is essential for individuals to keep up-to-date in the knowledge society and to engage in lifelong learning processes. Additionally, the integration of information literacy courses, which include finding information skills, can contribute to the development of digital information literacy skills in learners. According to (Julien, 2017) , the impact of information finding skills on digital literacy is significant. Information finding skills are a crucial component of digital literacy as they encompass the ability to access, evaluate, and use digital information efficiently and ethically. Individuals with strong information finding skills are better equipped to navigate digital environments, make informed decisions, and effectively utilize technology.

2.9 Creating Information

The ability to create fresh knowledge, content, or information is referred to as creating information. These abilities include originality, critical thinking, and the ability to synthesize knowledge in novel ways to produce insights, ideas, or artifacts. (battelleforkids.org).

According to Yazonet al., (2019), students are quite skilled at producing information. It suggests that individuals have trouble leaving comments on blogs, forums, or websites, as well as keeping up with proper netiquette and social norms for online discussions. According to Huvila, 2011, the development of information creation skills has a significant impact on digital literacy. By improving skills related to creating, organizing, and sharing information, individuals can enhance their ability to navigate and utilize digital resources effectively. information creation and organization as central aspects of being information literate can contribute to enhancing digital literacy skills.

3. METHODOLOGY

In this study research approach is deductive. Because I started the research based on the experimental learning theory and learning by doing theory. After that, I developed my hypothesis and tested it. The research philosophy is Positivism. The research choice is a mono method. Because I only used a quantitative approach to collect data. I used a survey questionnaire to collect data. I used a cross-sectional study to collect data and analyze the data. Because we do have not enough time to do a Longitudinal study.

In this study Population is all the private and government university students in Sri Lanka. The study sample is 120 Undergraduate students from the University of Sri Jayawardhanapura, the University of Colombo and NSBM Green University. I Select my sample by using convenience sampling and snowballing sampling techniques. this study has been done by using primary data. The analysis was done by using the SPSS analysis tool.

3.1 Conceptual Diagram

Variables	Frequency	Percentage (%)
Gender		
Male	52	43.3
Female	68	56.7
Age		
18 -20	9	7.5
21 -23	75	62.5
24 -26	34	28.3
27 -29	2	1.7
Type of the University		
Private University	80	66.7
Government University	40	33.3
Academic Year		
1st Year	15	12.5
2nd Year	18	15
3rd Year	23	19.2
4th Year	64	53.3

Figure 1: Conceptual Diagram

3.2 Hypothesis

H1: Understanding digital practices has a significant impact on Undergraduate Students' Digital Literacy.

H2: Using Information has a significant impact on Undergraduate Students' Digital Literacy.

H3: Finding Information has a significant impact on Undergraduate Students' Digital Literacy.

H4: Creating Information has a significant impact on Undergraduate Students' Digital Literacy.

4. RESULTS AND DISCUSSION

Background of the data

Table 1: The summary of the demographic variables.

In this study, there are 57% of female participation and 43% of male participation. Out of these participations 63% of participations in between the age of 21-23, 28% of participations in between the age of 24-26, 7% of participations in between the age of 18-20, and 2% of participations in between the age of 27-29. For this study, I collected data from private universities and government universities. Of all the participants, 67% of participations in private universities, and 33% of participations in Government Universities. Of all the participations, 53% of participations in the 4th year, 19% of participations in the 3rd year, 15% of participations in the 2nd year, and 13% of participations in the 1st year.

Reliability Testing

Variable	Cronbach's Alpha
Understanding digital practices	0.908
Using Information	0.849
Finding Information	0.895
Creating Information	0.915
Students' Digital Literacy	0.917

Table 2: The summary of Cronbach's Alpha Values.

The Independent variable of understanding digital practices has 0.908 Cronbach's Alpha, the independent variable of using information has 0.849 Cronbach's Alpha, the independent variable of finding information has 0.895 Cronbach's Alpha, the independent variable of creating information has 0.915 Cronbach's Alpha and the dependent variable of student digital literacy has 0.917 Cronbach's Alpha. As per the table, Cronbach's Alpha value is more than 0.7. So, the questions are reliable and

consistent. There I am proceeding with further analysis.

4.3 Background of variables

When considering the understanding digital practices questionnaire Most of the respondents are given "Agree" as the answer. That means the Respondents are competent in understanding digital practices. They are literate in knowing about how to Choose the right tool to find, use, or create information. They have a good idea about how to Use online tools and websites to find and record information online. They are quite literate in what online information they can legally re-use. Moreover, they admitted that they have Knowledge of categories of users they can expect to find online.

In the independent variable of using an information questionnaire, Most of the respondents are given "Agree" as the answer. That means the respondents are competent in Using Information. They are using information in different media. They have good Knowledge to Assess whether an online resource or person is credible and trustworthy. Most of the respondents used other people's work without committing plagiarism. They know how to cite a reference to an online resource using the correct format. Respondents Keep a record of the relevant details of information they find online. They have a background in Using social bookmarking to organize and share information. Moreover, respondents have committed to legal procedures for sharing files with others.

In the independent variable of Finding information questionnaire, most of the respondents are given "Agree" as the answer. That means the respondents are competent in finding information. They know what information they can find on the web and online Library. They are using advanced search options to limit and refine their search. Most of the respondents are familiar with using keywords to search for information online and using social networks as a source of information. They can filter large numbers of search results quickly.

When considering answers to the Creating Information questionnaire respondents are quite competent in creating information. It indicates that they find difficulty in adding comments to blogs, forums, or web pages, observing netiquette and appropriate social conventions for online communications. They do not write online for different audiences and different media for people to read on-screen. They know to communicate with others online and use media-capture devices. The respondents rarely work with others online to create a shared document or presentation.

When considering answers to the dependent variable of Students' Digital Literacy Questionnaire Most of the respondents gave "Agree" as the answer. That means the respondents are competent in Digital Literacy. Most of the respondents are aware of various types of digital devices. The respondents have an understanding of digital literacy. Most of them are willing to learn more about digital technologies, they think that it is important for them to improve their digital fluency and most of the

respondents think that their learning can be enhanced by using digital tools and resources.

Coefficient Analysis

Variable	Significance
Understanding Digital Practices	0.712
Using Information	0.001
Finding Information	0.001
Creating Information	0.802

Table 3: The summary of the Coefficient table.

The independent variable of Understanding digital practices does not have a significant impact on the dependent variable of Students' Digital Literacy ($P = 0.712$, $P > 0.05$). Yazon et al. (2019), have found that understanding digital practices has a significant impact on teachers' Digital literacy. So, my findings and the study conducted in 2019 findings are different. It may be that the two were different because the sample and country were different. The study conducted in 2019, they have taken teachers as a sample. But in my study, I get students as my sample. Also, this study was done in the Philippines but my study is based on the Sri Lankan context. Furthermore, the study conducted in the Philippines did the research in 2019, which means before the COVID-19 pandemic. The COVID-19 pandemic affects the improvement of people's digital literacy. So, findings may change due to these reasons. (Tour, 2017), has found that understanding digital practices have a significant impact on students' Digital literacy. So, my findings and the study conducted in the 2017 findings are different because the country was different. And also this study conducted in 2017, which means before the COVID-19 pandemic. The COVID-19 pandemic affects the improvement of people's digital literacy. Pilav-Velić et al., 2021b , have found that understanding digital practices has a significant impact on teachers' Digital literacy. So, my findings and the study conducted in 2019 findings are different. It may be that the two were different because the sample size and country were different.

The independent variable of Using Information has a significant impact on the dependent variable of Students' Digital Literacy ($P = 0.001$, $P < 0.05$). Yazon et al., (2019), have found that the use of information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2019 findings are the same. It may be that the two findings were the same because both the study's data were gathered from universities and both the countries where Sri Lanka and the Philippines have quite similar cultural backgrounds. Aramide, (2022) has found that the use of information has a significant impact on Digital literacy. So, my findings and the study conducted in 2022 findings are different. It may be that the two were different because the sample size and country were different. The study conducted in 2022, they have taken 193 individuals as a sample. However, in my study, I got 120 individuals as my sample. Also, this study was done in Nigeria but my study is based on the Sri Lankan context. Furthermore, in the study conducted in 2022, they have taken school students as a sample. But in my

study, I get university students as my sample. Spires et al., 2017, have found that the use of information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2017 findings are the same. It may be that the two findings were the same because the samples are the same.

The independent variable of Finding Information has a significant impact on the dependent variable of Students' Digital Literacy ($P = 0.001$, $P < 0.05$). Yazon et al., (2019), have found that the finding information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2019 findings are the same. It may be that the two findings were the same because both the study's data were gathered from universities and both the countries Sri Lanka and the Philippines have quite similar cultural backgrounds. Aramide, (2022) has found that the finding information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2022 findings are the same. It may be that the two findings were the same because both the study's data were gathered from students. Aramide's study was conducted in 2022, my study was conducted in 2023. That means both the studies conducted in recent years. So, findings may same due to these reasons. Kanjilal, n.d. , has found that the finding information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2011 findings are the same. It may be that the two findings were the same because the sample is the same and this research was done in India so, both countries are Asian countries. Julien, 2017, has found that the finding information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2017 findings are the same.

the independent variable of Creating Information does not have a significant impact on the dependent variable of Students' Digital Literacy ($P = 0.802$, $P > 0.05$). Yazon et al., (2019) have found that the creation of information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2019 findings are different. It may be that the two were different because the sample and country were different. The study conducted in 2019, they have taken teachers as a sample. But in my study, I get students as my sample. Also, this study was done in the Philippines but my study is based on the Sri Lankan context. Furthermore, the study was conducted in the Philippines done the research in 2019, which means before the COVID-19 pandemic. The COVID-19 pandemic most affected the improvement of people's digital literacy. So, findings may change due to these reasons. Aramide, (2022) has found that Creating information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2022 findings are the same. It may be that the two findings were the same because both the study's data were gathered from students. Aramide's study was conducted in 2022, and my study was conducted in 2023. That means both the studies conducted in recent years. So, findings may same due to these reasons. Huvila, 2011 , has found that the creation of information has a significant impact on students' Digital literacy. So, my findings and the study conducted in 2011 findings are different. It may be that the two were

different because this research was conducted in 2011 it means before the pandemic. Mt research was conducted after the pandemic. And also, these two research conducted in two different countries and sample also different.

Model Summary

R	0.712
R Square	0.507
Adjusted R Square	0.490

Table 4: The Model Summary Table

The adjusted R Square value of this study is 0.490. that means 49% of changes in the dependent variable will be covered by independent variables. Aramide, (2022) had a 0.33 adjusted R Square value. That means 33% of changes in the dependent variable will be covered by independent variables. In my study adjusted R Square is greater than the adjusted R Square in the Aramide study. because Aramide, (2022) used seven independent variables in their study. but in my study, I use only four independent variables. Usually, this value should be higher than 70%. But in my study, it is 49% only. Also, the study conducted in 2022 adjusted R Square is 33%. These results are correct. Because digital literacy is a very broad area. So, we cannot cover this broad concept by only four independent variables.

5. CONCLUSION

This study aims to identify the Significant impact between independent variables of understanding digital practices, Using Information, Finding Information, and Creating Information on the dependent variable of students' digital literacy. Based on the ANOVA findings of this study, the model that I prepared by using an independent variable as a whole, is a significant model. I measure the strength of the relationship between two variables by using correlation. According to the findings independent variables of understanding digital practices, Using Information, and Finding Information have a strong positive relationship with the student's digital literacy, and Creating information has a weak positive relationship. According to the finding of the coefficient, the independent variables of Understanding digital practices and Creating information do have not a significant impact on the dependent variable of Students' Digital Literacy. Also, independent variables of Using Information and finding information have a significant impact on the dependent variable of Students' Digital Literacy. Based on the findings, the experience of using information and finding information has a significant impact on the students' digital literacy. Also, the experience of understanding digital practices and creating information does not have a significant impact on the students' digital literacy. That means the experience of understanding digital practices and the experience of creating information does not affect the student's digital literacy. However, the independent variables of experience of using information and experience of finding information positively affect the students' digital literacy. According to the findings, most of the respondents are willing to learn more about digital technologies, they think that it is important for them to improve their digital fluency and most of the respondents

think that their learning can be enhanced by using digital tools and resources. So, universities can Offer educational and training programs, teach critical thinking skills to help people evaluate online information critically, organize workshops and community events, and provide access to online resources to enhance students' digital literacy.

5.1 Limitations and Future Research Directions

There are several limitations in this study. due to the time limitation, data were collected from a relatively small sample size, this study covered only three Universities in Sri Lanka, and collecting quantitative data by way of a self-reported online survey in itself may be perceived as being biased. Further research could cover more universities in Sri Lanka and further research could be based upon a larger sample size and using an alternative method to data collection.

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