REEXAMINING INTERNET COMPETENCIES: THE IMPORTANCE OF GENDER, AGE, EDUCATION, INTERNET EXPERIENCE, AND TIME SPENT ONLINE IN RELATION TO MEDIUM- AND CONTENT-SPECIFIC INTERNET SKILLS IS UNDER EVALUATION

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ABSTRACT

This study aims to examine the effects of various media and content types on demographic variables such as age, education level, internet proficiency, and total time spent online. Considering the ever-growing significance of the internet in people's everyday lives and the lightning-fast pace of technological advancement, it is vital to comprehend the elements that influence people's degree of familiarity and ease when utilizing the internet. The results show significant variation across demographic characteristics such as gender, age, education level, internet experience, time spent online, and competency across different media and content types. As a result of this research, the previous skill framework was expanded to incorporate communication Internet capabilities in addition to operational, formal, informational, and strategic abilities. They looked into people's coping mechanisms when they lack competence and came up with a number of ways to help. They also considered whether or not proficient internet use is truly necessary for successful online endeavors, and whether or not making use of online resources may mitigate the benefits of proficient internet use. Independent voters, those looking for social support, and those seeking government aid are the three categories that emerged from a large-scale survey. The newly learned communication abilities seem to be a huge improvement due to their effect on effective usage of the Internet. Due of this, they make a great pair. People who utilized the Internet on their own gained more from it than those who depended on institutions or on social support networks. If a person lacks knowledge skills, they may compensate utilizing online communications skills and still achieve favorable results from their time spent online. People would be able to take a lot more control over their online experience if this were to happen.

Keywords: *Web Literacy, Internet Proficiency, Digital Competence, Online Security.*

1. INTRODUCTION

To understand the digital gap, one must first compare levels of relative inequality. This line of thinking holds that there are several upsides to utilizing computers and the Internet, and many downsides to not using them. Conversely, in developed nations, the number of people who have Internet access at home has grown to pandemic proportions. So, it is believed that a schism based

on a multitude of more nuanced factors and interactions has replaced the binary categorization of accessibility in respect to physical access. The knowledge of the digital divide has become increasingly nuanced as a result of the evolution of many theoretical frameworks. The fact that people's levels of digital competence may vary greatly is key to these concepts. Adapting to social upheavals necessitates a different set of skills, particularly in the domain of the Internet, the very essence of modern communication. What makes this research unique, and what we'll talk about more later on, is that it uses a definition of Internet abilities that considers medium- and content-related talents. It will become evident how important this difference is, since it offers a fresh perspective on online talents. The measurement of internet competency is done via well-defined observational studies, rather than through self-evaluation questionnaires. With the use of survey questionnaires, the validity of epidemiological investigations is diminished, since these studies examine real performances. The term "distance online education" is universally used by educators in this sector to indicate a teaching approach in which the student and teacher are geographically separated (Erdogdu et al., 2022). It includes both conventional classroom learning and learning over the Internet. Online courses have quickly become the industry standard as a result of time constraints and other real-world issues. to anyone who want to have a deeper understanding of a certain topic. It is particularly useful for adults who could actually continue their traditional education in classrooms eyes with their instructors because new diverse technological devices have enabled people to share information and make instructional and educational processes possible regardless of time or distance. As a result, almost every university across the globe offers some kind of online course for nearly every field of study and skill set. Many individuals who otherwise would not have had access to specialized training are now able to do so because to online

education. When it comes to contemporary instructional delivery, the Internet has become the gold standard. The methods used to instruct overseas students in distance learning programs vary throughout institutions (Assante et al., 2019).

2. BACKGROUND OF THE STUDY

One of the many ideas that emerged from the widespread usage of digital technology is internet literacy. They arrived to the conclusion that the details of these ideas are often hazy. Writers sometimes fail to provide explanations for terms because they assume their readers can understand the jargon they employ. But nobody can agree on what counts as a metric, which has slowed down the creation of monitor and improve (Fraillon et al., 2018). The fact that "Internet skills" may be used in place of "digital skills," a term often used in studies on the digital divide, lends credence to its adoption. Being proficient in and at ease with a wide range of technological communication tools, such as computers, mobile phones, and the Internet, is a plus. Researchers used a comprehensive literature review to develop four distinct Internet skills; they should inspire future in-depth studies of evaluating Internet competence and bolster the successes of digital divide research. They see intermediate-level Internet competence and specialty-level knowledge as two separate things. Internet operational abilities, which include things like musical aptitude, specialist knowledge, computer literacy, and technical competency, are at the top of the list of medium-related talents. All things considered, these ideas provide the framework for effective usage of the Internet. In terms of media-specific Internet skills, the second group focuses on the more technical abilities needed to work inside the Internet's underlying hypermedia infrastructure. To go around this layout, they need to know what hypermedia navigation is and how to orient themselves. There

are two types of content-related abilities: knowing how to get material online and knowing where to find it. Research has shown that researchers may help individuals improve their online information-gathering skills by observing and recording their actions. A student who has strategic Internet competency is able to utilize the web to accomplish personal objectives and, more broadly, to contribute to society's advancement. The traditional method of decision-making is the foundation for the classification of strategic skills. With the development of email and the World Wide Web (WWW), education may now be provided electronically over great distances in an efficient and cost-effective manner, with a pretty high level of participation, considering the constraints of the technology that is now available. The development of the World Wide Web made possible what is often known as "online education," which is the practice of educating students remotely via the use of electronic means of communication and cooperation (Bagaeva & Voronova, 2019).

3. LITERATURE REVIEW

An innovative communication system that links knowledge and abilities with the researchers' proposed Internet Competence Model is the first new idea, according to the paper's introduction. These abilities have lately become more popular, reflecting the changing nature of today's workforce, and they are not limited to social networking sites (SNS). They are part of the ever-changing social media ecosystem. Gaining the most out of each of these chances will need you to hone certain skills while overcoming specific challenges. Consequently, the concept of literacy is expanded to include the capacity for successful communication. This is the method they use in their movement: providing a more in-depth explanation in addition to the tried-and-true base. It is

essential to note that users of different social media platforms are expected to constantly grow their network of friends and acquaintances before any assessment of language competency can be considered complete. Many social apps have become quite popular because of the Internet's ability to greatly increase the size of people's social networks. To effectively handle this level of complexity and actively participate Communication may seem like a simple concept, yet for many, it remains a strange one. The ability to establish a trustworthy online persona is the fourth competency in successful communication. Similar to how social networking software provides a template, this seems easy at first glance. However, it's not simple to make a website that is unique, authentic, and represents their desired online image. The sixth skill is learning how to establish credibility while interacting with individuals online. Online communication requires the ability to accurately reply to comments and draw inspiration from the personas and stories of others. For children and young people who are still finding their footing in the world, playing around with computer-aided design (CAD) software may be a wonderful form of physical and creative expression. The capacity to communicate effectively as part of an online team is the pinnacle of language mastery. "Define particular duties for each body's cells on his or her experience and communicate with the group members in a suitable method" is something that has to be shown. There is a correlation between reading and a person's growth and development. Someone else in the academic community has argued that reading broadens one's horizons and deepens one's understanding of the world and its people. Students should be required to read extensively as part of their academic program as reading is an essential skill for learning and effective reading comprehension is an important measure of academic achievement. They stressed the interconnected nature of reading and academic achievement. Consequently, the more books a pupil

reads, the better they will do in school. As previously stated, the author establishes a connection between reading success and overall academic advancement. Generally speaking, the research found that kids who reported being regular readers had better test scores (Balakrishnan et al., 2021).

4. RESEARCH QUESTION

- How does technical knowledge affect in medium- and content-related internet abilities in internet experience?

5. RESEARCH METHODOLOGY

Quantitative research refers to studies that examine numerical readings of variables using one or more statistical models. The social environment may be better understood via quantitative research. Quantitative approaches are often used by academics to study problems that impact particular individuals. Objective data presented in a graphical format is a byproduct of quantitative research. Numbers are crucial to quantitative research and must be collected and analyzed in a systematic way. Averages, predictions, correlations, and extrapolating findings to larger groups are all possible with their help.

5.1 Research design: In order to analyse quantitative data, SPSS version 25 was used. The direction and severity of the statistical association were determined using the odds ratio and the 95% confidence interval. researchers reported a statistically significant level at $p < 0.05$. To identify the primary features of the data, a descriptive analysis was used. Data acquired by surveys,

polls, and questionnaires, or by modifying existing statistical data using computing tools, is often assessed mathematically, numerically, or statistically using quantitative methods.

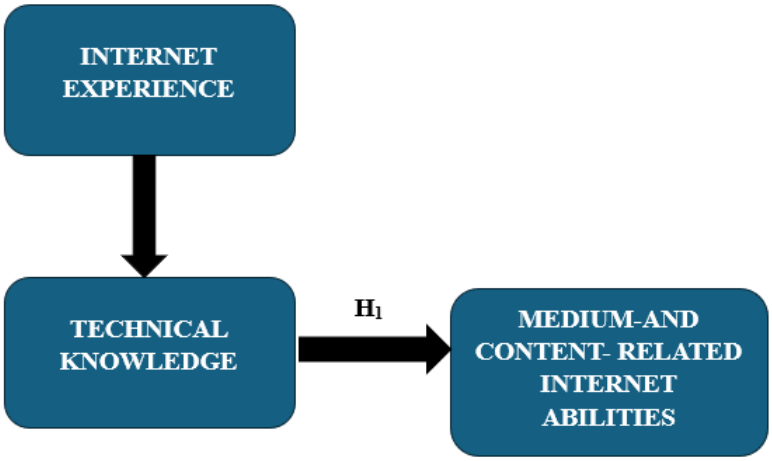
5.2 Sampling: After pilot research with 34 Chinese Researcher, 1002 Rao-soft pupils were included in the final Investors. Male and female Researcher were picked at random and then given a total of 1226 surveys to fill out. A total of 1015 questionnaires were used for the calculation after 1040 were received and 25 were rejected due to incompleteness.

5.3 Data and Measurement: A questionnaire survey functioned as the primary data collection instrument for the investigation. The survey had two sections: (A) General demographic information and (B) Responses on online and non-online channel factors on a 5-point Likert scale. Secondary data was collected from several sources, mostly focusing on internet databases.

5.4 Statistical Software: The statistical analysis was conducted using SPSS 25 and MS-Excel.

5.5 Statistical Tools: To grasp the fundamental character of the data, descriptive analysis was used. The researcher is required to analyse the data using ANOVA.

6. CONCEPTUAL FRAMEWORK



7. RESULT

❖ Factor Analysis

One typical use of Factor Analysis (FA) is to verify the existence of latent components in observable data. When there are no easily observable visual or diagnostic markers, it is common practice to utilise regression coefficients to produce ratings. In FA, models are essential for success. Finding mistakes, intrusions, and obvious connections are the aims of modelling. One way to assess datasets produced by multiple regression studies is with the use of the Kaiser-Meyer-Olkin (KMO) Test. They verify that the model and sample variables are representative. According

to the numbers, there is data duplication. When the proportions are less, the data is easier to understand. For KMO, the output is a number between zero and one. If the KMO value is between 0.8 and 1, then the sample size should be enough. These are the permissible boundaries, according to Kaiser: The following are the acceptance criteria set by Kaiser:

A pitiful 0.050 to 0.059, below average 0.60 to 0.69

Middle grades often fall within the range of 0.70-0.79.

With a quality point score ranging from 0.80 to 0.89.

They marvel at the range of 0.90 to 1.00.

Table1: KMO and Bartlett's Test

Testing for KMO and Bartlett's

Sampling Adequacy Measured by Kaiser-Meyer-Olkin .883

The results of Bartlett's test of sphericity are as follows: approx. chi-square

df=190

sig.=.000

This establishes the validity of assertions made only for the purpose of sampling. To ensure the relevance of the correlation matrices, researchers used Bartlett's Test of Sphericity. Kaiser-Meyer-Olkin states that a result of 0.883 indicates that the sample is adequate. The p-value is 0.00, as per Bartlett's sphericity test. A favorable result from Bartlett's sphericity test indicates that the correlation matrix is not an identity matrix.

Table: KMO and Bartlett's

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.883
Bartlett's Test of Sphericity	Approx. Chi-Square	3252.968
	df	190
	Sig.	.000

The overall significance of the correlation matrices was further confirmed by using Bartlett's Test of Sphericity. A value of 0.883 is the Kaiser-Meyer-Olkin sampling adequacy. By using Bartlett's sphericity test, researchers found a p-value of 0.00. A significant test result from Bartlett's sphericity test demonstrated that the correlation matrix is not a correlation matrix.

❖ Independent variable

Internet Experience

How much time a person spends online and their amount of familiarity with the medium are two indicators of their internet competency. More time spent online (at work or otherwise) leads to greater familiarity with the internet's features and capabilities, according to scientific research. as a result, they do exceptionally well on digital platforms. Having a better level of technical skill is generally linked to using computers and the internet more recently and spending more time on them. It stands to reason that those with more experience surfing the web would be better able to accomplish it than those with less time under their belts. As individuals spend more time online, it

starts to influence their life (like the surveys they participate in) and eventually becomes an essential part of their everyday lives. In principle, then, whenever one sought any type of knowledge, the use of a computer to search for relevant material would become second nature (Brits et al., 2019).

- **Factor**

Technical Knowledge

Acquired, expanded, and polished over time, technical knowledge is a systematized and quality-assured understanding of technological systems and processes. It comprises both teachable and unlearnable explicit knowledge and implicit information relevant to technical practice. The presence of technical rules characterizes technical knowledge; these rules explain the links between causes and effects and give practical information about how to do something. Technical knowledge may now be taught and learned thanks to these principles, which have a clearly defined field of application and can be verified and taught (Civilcharran & Maharaj, 2019).

- **Dependent Variable**

Medium and Content Related Internet Abilities

Since there is a plethora of material and services available online that undergraduates might use for their schoolwork, this research takes a different approach by concentrating on students' proficiency with digital tools for web browsing. For the researcher to collect quantitative data and make conclusions, a strategy along these lines is required. To find out what individuals really need

to succeed in the digital world, a team of academics set out to collect data. The author advocated for the development of "web skills," the primary goal of which should be the efficient retrieval of information. Expertise in both the nuts and bolts of the Internet (like computers) and the concepts that drive it (such practical data collecting) was defined as "world wide web knowledge" by the researchers. The capacity to simultaneously get, assess, analyze, and produce material for use on the internet was termed as "internet fluency" by them. One term that the investigators came up with is "computer-email web (CEW) fluency," which means being able to communicate and gather data effectively via the Internet. In their final proposal, the study's authors divided Internet competence into six distinct domains. Five groups were identified: operations, academics, knowledge, communication, content generation, and management. In addition, they recommended making a distinction between demonstrable abilities, such as knowing how to use the internet, and communicative skills, such as knowing the basics of what can be found on the internet (Borgonovi & Greif, 2020).

❖ Relationship between Technical Knowledge and Medium and Content Related Internet Abilities

In addition to the previously established operational, formal, informational, and strategic skill frameworks, this research expanded it to include communication Internet abilities. People's strategies for coping with low skill levels via locating resources for assistance are being studied. It also explores whether support sources mitigate these impacts and whether Internet skills are most important for achieving positive results on the Internet. Three distinct support patterns emerged from a large-scale survey: those who prefer to work alone, those who want social support,

and those who need institutional assistance. Because of their separate impact on useful Internet usage, the newly acquired communication skills show to be a valuable addition. The group of self-reliant Internet users gained far more from using the Internet than those who sought official assistance or social support. Having strong communication skills on the Internet may help you become more independent while using the Internet. These abilities can compensate for information skills and help you achieve great things on the Internet (Bhutoria, 2022).

- ***H_{01}: There is no significant relationship between Technical Knowledge and Medium and Content Related Internet Abilities***

- ***H_1: There is a significant relationship between Technical Knowledge and Medium and Content Related Internet Abilities***

Table 2: H_1 ANOVA Test

ANOVA					
Sum					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	39588.620	402	5655.517	623.214	.000
Within Groups	492.770	612	5.356		
Total	40081.390	1014			

The results are significant in this study. The p-value of 0.000 (below the 0.05 alpha threshold) indicates that the F value of 623.214 is almost significant. Thus, it follows that ***H_1 : "There is a significant relationship between technical knowledge and Medium and Content Related Internet Abilities"*** is accepted and the null hypothesis is rejected.

8. CONCLUSION

The goals of this research were to(1) determine whether easily available technology hinders students' traditional reading abilities,(2) determine whether it improves their capacity to comprehend and present material, and(3) determine whether it enhances both reading and learning motivation. Using TTS or other types of technology in the classroom may help kids develop phonemic awareness even when they aren't doing decoding activities, according to many research. Findings from this study are in line with those from the previous one. The students' levels of development were similar to those of a control group that received "treatment as usual" and a group of typically developing children of the same age. Everyone from his parents to his teachers thought his results showed a significant improvement in understanding. The second objective was to assess their text comprehension and communication skills; the results were not as conclusive. That is where the effectiveness of the assessments used was inadequate. Whether assistive technology, in comparison to more traditional methods of teaching reading and writing to children, really improves their written language competency is an open question. Several studies have shown the importance of intrinsic motivation in the classroom, especially for students who are having difficulty reading and writing. Thirdly, students' engagement with reading and class involvement improved greatly with the use of easily available technology. The parents felt that their children's intellectual confidence had increased. Others discovered that their teachers and classmates preferred this way of "reading a text" more, even if other students discovered that listening to a text improved their learning more than reading it alone. When implemented properly, assistive technology has the potential to benefit readers with a wide range of abilities. The majority of studies examining the benefits of technology tools have focused on their effects on reading and

decoding abilities. Since this study takes into account the two main purposes of literacy, it contributes to the existing body of knowledge. Taking in the information and making a reasonable contribution to the conversation (Burns et al., 2019).

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