REASSESSING INTERNET SKILLS: THE SIGNIFICANCE OF GENDER, AGE, EDUCATION, INTERNET EXPERIENCE, AND HOURS SPENT ONLINE IN CONNECTION TO MEDIUM- AND CONTENT-SPECIFIC INTERNET COMPETENCIES IS UNDER REVIEW

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ABSTRACT

Age, education level, internet competence, and amount of time spent online are some of the demographic characteristics that will be studied to determine the effects of various media and content categories. Given the rapid advancements in technology and the increasing importance of the internet in people's daily lives, it is crucial to understand the factors that impact people's level of familiarity and comfort while using the internet. Gender, age, education level, internet experience, time spent online, and competency across various media and content kinds are some of the demographic characteristics that exhibit substantial variations in the findings. Because of this study, the prior skill framework—which included operational, formal, information, and strategic abilities—was augmented with the inclusion of communication Internet capabilities. They identified several forms of aid and studied how people deal with inadequate skill levels. They also looked at whether having good online skills is really crucial for getting good results from the internet and if using assistance resources may reduce the advantages of having good internet skills. According to the results of a large-scale poll, there are three different types of assistance: independent voters, those seeking social support, and those seeking official help. Because of their impact on efficient Internet use, the recently acquired communication skills seem to be a substantial improvement. Because of this, they are an excellent complement. People who used the Internet on their own benefited more from it than those who relied on institutions or on social support systems. If a person lacks knowledge skills, they may compensate using online communications skills and still receive good outcomes 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 knowledge, digital competency, security on the internet and confidentiality, Internet knowledge.*

1. INTRODUCTION

A comparison of relative inequality is the foundation of the concept of the digital divide. According to this school of thought, using computers and the Internet has many benefits and avoiding them has many drawbacks. On the other hand, home Internet penetration has reached epidemic

proportions in affluent countries. Consequently, the binary classification of accessibility in relation to physical access has supposedly been superseded by a divide that is anticipated to center on a plethora of more complex elements and interactions (Pustejovsky et ai., 2022). Multiple theoretical frameworks for studying the digital divide have evolved, leading to a more complex understanding of the phenomenon. One of the most important aspects of these ideas is the varied degree of digital competence. A new set of abilities is required to adapt to societal shifts, and this is especially true in the realm of the Internet, the lifeblood of contemporary communication. What sets this study apart, as will be discussed in more depth below, is its use of a definition of Internet skills that takes medium- and content-related talents into account. This distinction provides a new angle on online skills, and its importance will become clear. Internet proficiency is measured using observational studies with a detailed definition, as opposed to surveys with questions that enable respondents to self-evaluate their abilities. Epidemiological studies, which look at actual performances, lose some of their validity when survey questionnaires are used. All teachers in this field agree that "distance online education" describes a method where the instructor and the student are physically located in different locations. It encompasses both online education and traditional classroom instruction. Online courses have quickly become the industry standard as a result of time constraints and other real-world issues. for those who want to go further into a certain field of study. For youngsters who were formerly unable to continue their formal education outside of a classroom setting, the proliferation of diverse technological devices has made it possible to share information and facilitate instructional and educational processes across great distances and times. Consequently, almost every school in the world now provides some kind of distance learning for almost every major and skill set. Thanks to online education, many people who would not have had the chance

to get specialized training were able to do so. The World Wide Web has become the de facto standard for modern educational delivery. Distance learning programs at different universities utilize different approaches to guiding international students (Assante et al., 2019).

2. BACKGROUND OF THE STUDY

The broad use of digital technology gave rise to several concepts, one of which is internet literacy. They came to the conclusion that, in most cases, the specifics of these concepts are not clear. Term definitions are often omitted by writers, who likely believe their readers are capable of grasping the jargon they use. However, the development of monitor and improvement has been hindered due to the lack of consensus on what constitutes a measure. The fact that "Internet skills" is interchangeable with "digital skills," a phrase often employed in research on the digital divide, provides some support for its usage (Lythreatis et al., 2022). Knowledge with and comfort using many forms of electronic communication, including the Internet, mobile phones, and computers, is an asset. In order to encourage more thorough investigations of assessing Internet competence and to strengthen the achievements of digital divide research, researchers used a thorough literature study to construct four separate Internet abilities. Internet proficiency at the intermediate level and expertise in a particular area are two distinct things, in their perspective. Operating proficiency on the Internet ranks highest among medium-related abilities; this competency is based on ideas like musical prowess, specialist knowledge, technology literacy, and technical competency. Taken as a whole, these concepts provide the groundwork for proficient Internet use. The second set of media-specific Internet skills is concerned with the more formal set of skills required to function within the hypermedia architecture that underpins the Internet. They should be well-versed in hypermedia

navigation and orienting strategies to navigate this layout. Knowing where to go for information online and how to utilize it wisely are two kinds of content-related abilities. Science has shown that by documenting people's online information-gathering processes, the researcher may assist them become more proficient in this area. Having strategic Internet competence means the student can use the web to achieve the goals and, in a broader sense, to help society progress. The traditional method of decision-making is the foundation for the classification of strategic skills. Thanks to the evolution of the Internet specifically email and WWW—education may now be efficiently and affordably delivered electronically across enormous distances, with a relatively high degree of engagement, given the limitations of the technology that is now available. Online education, which may be defined as the use of technology tools to facilitate contact and collaboration for the benefit of learning, became possible with the emergence of the World Information Superhighway (Bagaeva & Voronova, 2019).

3. LITERATURE REVIEW

According to the paper's introduction, the researchers' first novel proposal is to include a communication mechanism that correlates knowledge and skills with their suggested Internet Competence Model. Social networking sites (SNS) are only one part of the ever-changing social media ecosystem where these skills have recently grown in popularity, reflecting the changing nature of today's workforce. To fully take advantage of each of these opportunities, you'll need to develop certain abilities and face unique obstacles. Consequently, the concept of literacy is expanded to include the capacity for successful communication (Hurwitz & Schmitt, 2020). By

offering a more detailed explanation alongside the tried-and-true foundation, that is the technique they use in movement. Any description of language proficiency must first account for the fact that users of various social media applications are required to maintain an ever-expanding circle of friends and acquaintances. Due to the Internet's capacity to exponentially expand the social networks, a number of social applications have reaped substantial benefits. In order to manage this degree of complexity and take an active role The idea of communication is still foreign to many people, even though it should be easy. The fourth skill in effective communication is the capacity to construct a credible online identity. This too seems simple at first look, as SNS software provide a template. But making a website that stands out, is genuine, and reflects their ideal online persona isn't easy. Building a trustworthy online identity via practice and feedback from others is the fifth language skill. Being able to respond correctly to remarks and find inspiration in the identities and personalities of others are important abilities for online communicating. Kids and those still establishing their sense of identity often find joy in experimenting with CAD software as a way to express themselves creatively and physically. Language proficiency at its highest level is the ability to work in a team online, a skill that depends heavily on communication. Knowledge of how to "define particular duties for each body's cells on his or her experience and communicate with the group members in a suitable method" must be shown. An individual's development and maturation are impacted by reading. According to another academic, reading exposes one to new ideas and concepts, which in turn helps one understand themselves, others, and the world around them better. Because reading is fundamental to learning and because reading comprehension is a key indicator of academic success, reading widely should be a student's primary reading assignment. They emphasized how reading and academic success are interdependent and linked.

Therefore, a student's academic performance improves in direct proportion to the number of books they read. As previously stated, the author establishes a connection between reading success and overall academic advancement. The study's findings demonstrated that, generally speaking, test results were higher for students who reported being frequent readers (Balakrishnan et al., 2021).

4. RESEARCH QUESTION

- How does efficiency operate 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.

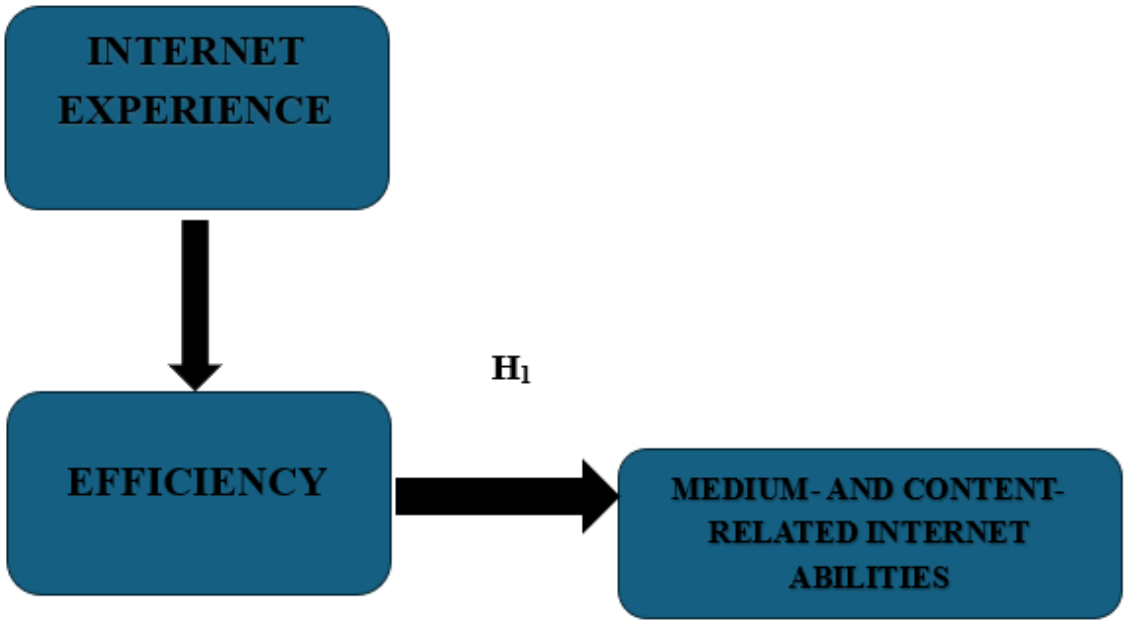
5.2 Sampling: After pilot research with 34 Chinese Researcher, 1002 Rao-soft pupils were included in the final Investors. Male and female Researcher were picked at random and then given a total of 1226 surveys to fill out. A total of 1015 questionnaires were used for the calculation after 1040 were received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

Table 1: KMO and Bartlett's Test for Sampling Adequacy Assessed using the Kaiser-Meyer-Olkin method. Eight hundred eighty-three

The outcomes of Bartlett's test of sphericity are as follows: Approximately chi-square, degrees of freedom = 190, significance = 0.000

This confirms the legitimacy of claims made just for sampling purposes. Researchers used Bartlett's Test of Sphericity to ascertain the significance of the correlation matrices. The Kaiser-Meyer-Olkin measure implies that a value of 0.883 demonstrates sample adequacy. The p-value is 0.00, according to Bartlett's sphericity test. A positive outcome 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 importance of the correlation matrices was also validated by Bartlett's Test of Sphericity. The Kaiser-Meyer-Olkin sampling adequacy is 0.883. Utilizing Bartlett's sphericity test, researchers obtained a p-value of 0.00. A notable result from Bartlett's sphericity test indicated that the correlation matrix is not valid.

❖ 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. Research has shown that individuals who spend a greater amount of time online (whether at work or elsewhere) get a deeper understanding of the internet and all its features and possibilities. Thus, are very good with computers and the internet (Goudeau et al., 2021). People who are more technically proficient tend to be more recent users and have spent more time on computers and the internet. People who have been online for longer should have more experience searching for information, thus it seems to reason that they would be better

equipped to do so. Internet use influences people's life (by the kind of surveys they participate in, for example) and, in time, becomes an essential part of their everyday existence. Therefore, searching for information on a computer would become habitual, if not an automatic response, whenever one sought for any kind of knowledge in theory (Bauer, 2018).

- **Factor**

Efficiency

efficiency is the quality of being able to do a task with little waste of both energy and time, demonstrating expertise in performance. successfully completing a task while using the least amount of time and energy required: Production became more efficient as a result of the assembly line. the proportion that represents the relationship between the amount of energy that a machine, engine, etc. produces and the amount of energy that is input into it (Brits & Cabolis, 2019).

- **Dependent Variable**

Medium and Content Related Internet Abilities

Since undergraduates rely on the online to access a wealth of information and services for their coursework, the present study adopts a capacities approach by focusing on students' ability to utilize digital tools to browse the web. The researcher is needed a plan along these lines in order to gather quantitative data and draw conclusions. A group of researchers in academia set out to identify the skillsets people need to be successful online. Building "web skills," with effective

information retrieval being the main focus, was the author's recommendation. Researchers used the term "world wide web knowledge" to describe familiarity with both the technical aspects of the Internet (such as computers) and the principles underlying its operation (such as pragmatic data acquisition). They defined "internet fluency" as the ability to acquire, evaluate, analyze, and create content for use on the internet all within the same context. The phrase "computer-email web (CEW) fluency," coined by the investigators, refers to the proficiency with the Internet as a tool for communication and data collection. The study's authors concluded by proposing a theoretical framework that classifies Internet proficiency into six areas. Operations, Academic, Knowledge, Communicating, Content Generation, and Management were the five categories. Also, they suggested differentiating between communication skills, like being able to utilize the online, and evidenced skills, like being familiar with the fundamentals of what can be discovered on the internet (Hanna, 2020).

❖ Relationship between Efficiency and Medium and Content Related Internet Abilities

various approaches to bridging the digital gap seem to center on various aspects of people's so-called "Internet skills," which is the subject of this study. Three large-scale performance assessments are given to find out how factors including gender, age, education level, time spent online, and time spent on medium- and content-related Internet skills interact with one another. It would suggest that medium-related abilities decline with age. On the other hand, older generations do better than younger ones when it comes to content-related abilities, which is a good contribution. Their lack of efficiency in medium-related abilities is a major hindrance, and the

outcome is disappointingly bad. The researcher were surprised to see that this significant finding has been so under-discussed in studies on the digital divide. When it comes to medium- and content-related Internet abilities, educational level seems to matter. This finding runs counter to previous studies that have shown that individuals acquire digital skills better via hands-on experience than classroom instruction. Proficiency in using the internet only enhances proficiency in using the media. It seems to suggest that there is no correlation between the quantity of time spent online each week and the number of years spent online and advances in skills linked to content. Skills pertaining to mediums are the only ones affected by the latter (Brits & Cabolis, 2019).

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

- ***H_1: There is a significant relationship between Efficiency 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	414	5655.517	623.214	.000
Within Groups	492.770	600	5.356		
Total	40081.390	1014			

- The findings are substantial in this investigation. The p-value of 0.000 (below the 0.05 alpha level) suggests that the F value of 623.214 is almost significant. Thus, it follows that ***H_1: "There is a significant relationship between Efficiency and Medium and Content Related Internet Abilities"*** the alternative hypothesis is accepted, whereas the unproven theory is dismissed.

8. CONCLUSION

This study aimed to address three questions regarding the potential impact of readily accessible technology on students' reading and learning motivation: (1) how it could hinder traditional reading abilities; (2) how it could improve students' ability to understand and present material; and (3) how it could enhance their capacity for both. Several studies have shown that students may improve their phonemic awareness even when they don't engage in decoding exercises when they use TTS or other forms of technology in the classroom. Consistent with the last research, this one also found... A control group receiving "treatment as usual" and a group of normally growing youngsters of the same age both showed comparable levels of development in comparison to the pupils. His parents and pupils were in agreement that his scores demonstrated a significant increase in comprehension. The second goal was to see whether they could communicate and understand texts better; the results were less clear. In that respect, the efficacy of the evaluations that were employed fell short. It is not immediately clear if assistive technology really increases written language competence when contrasted with more conventional approaches to teaching children who have difficulty reading and writing. For kids struggling with reading and writing, in particular, several studies have shown the significance of intrinsic drive in the classroom. Thirdly, with the

help of accessible technology, students' interest in reading and participation in class increased substantially. Their children's intellectual self-esteem had grown, according to the parents. While some students found that listening to a text helped them learn more than reading it alone, others found that their professors and classmates liked this method of "reading a text" more. Finally, what role does this research play in bridging the gap between visual aids for mobility and language difficulties in written communication? Assistive technology, when used correctly, may help readers with a variety of abilities. Most research on the usefulness of technological aids has focused on how they improve decoding and reading skills. This research adds to what is already known since it considers the two primary functions of literacy. To take in the data and contribute sensibly to the discussion (Scherer & Siddiq, 2019).

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