TAKING A FRESH LOOK AT INTERNET SKILLS: THE IMPORTANCE OF GENDER, AGE, EDUCATION, INTERNET EXPERIENCE, AND NUMBER OF HOURS SPENT ONLINE IN RELATION TO MEDIUM- AND CONTENT-RELATED INTERNET ABILITIES IS BEING RECONSIDERED

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ABSTRACT

The purpose of this research is to examine how demographic factors including age, education level, time spent online, and internet expertise vary by medium and content. With the internet's growing role in people's everyday lives and the rate at which technology is advancing, it's important to learn what influences people's familiarity with and comfort using the internet. The results show that there are significant disparities across demographic variables such as gender, age, educational levels, internet experience, time spent online, and proficiency across different mediums and content types. The previous skill framework of operational, formal, information, and strategic abilities was expanded with the addition of communication Internet skills thanks to this research. They looked at the ways in which individuals cope with having insufficient skill levels by identifying different types of assistance. In addition, they studied whether Internet skills are genuinely important for achieving positive outcomes related to the use of the internet, as well as whether the use of support sources might attenuate the benefits of these abilities. Three distinct support patterns were identified because of the findings of a large-scale survey: independent voters, social support seekers, and formal aid seekers. The newly gained communication skills appear to be a significant addition as they have an influential effect on productive Internet usage. This makes them a valuable addition. Independent Internet users reaped the benefits of using the Internet to a greater extent than those who sought institutional assistance, and much more than those who sought social support. Online messaging skills can compensate for a lack of knowledge skills, allowing users to get positive results from their time spent online. This would allow users to gain a considerable amount of autonomy while using the Internet.

KEYWORDS: Internet literacy, Internet proficiency, Online competence, Online safety and privacy, Internet experience.

INTRODUCTION

The idea of the digital divide is based on a comparison of relative inequity. This belief holds that there are considerable advantages to using a computer and the Internet, and that not using them has unfavorable effects. In contrast, wealthy nations now have significant levels of home Internet penetration. As a result, it is believed that a division that is expected to focus on a great amount of more complicated factors and interactions has replaced the binary categorization of availability regarding tangible access. A more nuanced understanding of the digital divide has emerged, and there are several conceptualizations of how to conduct the research on it. Varying digital skill levels are one of the most crucial elements in these conceptions. Social changes need the development of new skills, particularly those that pertain to the Internet, one of the most vital forms of communication in modern life. The adoption of an Internet skills definition that considers medium- and content-related abilities is the distinctive contribution of this work, as will be further detailed in the next section. It will become evident that this difference is crucial and offers a fresh perspective on internet abilities (Bhuiyan, 2016).

Observational studies rather than surveys using questions that allow respondents to estimate their own abilities are used to evaluate Internet skills in addition to using a thorough definition. Use of survey questionnaires reduces the validity of epidemiological studies, which examine real performances. The term "distance online education" refers to a procedure in which there is a separation between the person delivering the teaching and the person receiving it, according to all educators working in this sector. Both distant learning and distance teaching are included. Distance education has become the most common form of instruction because of time constraints and other life constraints. for people receiving lessons and gaining information in their area of interest. Particularly for adults who could really continue their conventional education in classes eyes with their teachers, the new diversified technology gadgets have made it possible for individuals to exchange knowledge and make instructional and educational procedures feasible without time and distance limits. As a result, practically all institutions throughout the globe today offer remote education, either entirely or in part, in nearly all subject areas and skill-development programs. Many

thanks to remote learning, which allowed individuals to acquire specialized training they otherwise would not have had access to. The most common form of giving teaching nowadays is via the world's linked network called the World Wide Web. Various Universities use various strategies to give direction to faraway students (Biyani, 2013).

BACKGROUND

Internet literacy is one of many ideas that arose because of the widespread use of digital technology. They determined that the precise nature of these ideas is not well specified in most circumstances. Authors often fail to provide definitions for terms they use, presumably because they assume their readers would understand them. Yet, there is no general agreement on what should be considered a metric, which has slowed the progress of monitor and improve. One justification for using the word "Internet skills" is that it is synonymous with the term "digital skills," which is often used in digital divide studies. Competence with the Internet is a desirable qualification, along with familiarity with other technologies such as mobile phones and computers. Using a comprehensive literature review, researchers built four distinct Internet skills to promote more in-depth studies of measuring Internet proficiency and to bolster the successes of digital divide research. In their view, there is a difference between intermediate- and content-specific Internet competence. The operative Internet skills are the first category of medium-related abilities, and they are based on ideas like musical skills, specialist knowledge, technology literacy, and technical proficiency. These ideas together provide a foundational knowledge of how to effectively use the Internet. The second category of media-specific Internet abilities relates to the formal Internet abilities need to operate inside the Internet's underlying hypermedia framework. To make their way around this layout, they'll need to be familiar with hypermedia navigation and orientation techniques. There are two forms of content-related skills: the ability to find information online and the ability to use the internet strategically. Researchers have shown that outlining the steps people take to satisfy their information demands online helps them develop the expertise necessary to do so effectively. Strategic Internet proficiency is the ability to utilize the Internet as a tool for accomplishing certain objectives and, more generally, for social advancement. The traditional method of making a choice is the basis for the classification of strategic abilities (Bodhe, 2015).

The development of the Internet, and in particular email and the World Wide Web (WWW), has allowed for the efficient and cost-effective delivery of education across great distances by electronic means, with a rather high level of interactivity, within the constraints of the available technology. Thus, the rise of the World Information Superhighway paved the way for online education, which may be described as the use of technological means of facilitating interaction and cooperation for the sake of learning (Shauna, 2015).

PROBLEM STATEMENT

“Use of internet grows so the cybersecurity problems also arise. Different activities are done by attacker to gain sensitive information of the victim. Types of unhealthy behaviours are being carried out by the attackers so that they will be able to get the information of the victim.”

As more people use the internet, more challenges related to cybersecurity will inevitably surface. The attacker will engage in a variety of actions to get sensitive information about the victim. The perpetrators of the assault are engaging in a variety of nefarious endeavors to get the information they need on their target, who is currently unknown. The perpetrators of these attacks use this information to carry out their criminal actions. After the acquisition of the information, the attacker engages in unlawful behaviour. To do this, we have proposed the system, and the primary goal of this project is to identify phishing emails using the data obtained in the honeypot. In the context of this project, we are tasked with the creation of an infrastructure that, by virtue of its construction on top of Big Data frameworks, will work towards mitigating cybersecurity issues such as phishing.

LITERATURE REVIEW

The first original idea presented here, as stated in the paper's introduction, is the inclusion of a means of communication matching knowledge and abilities to the Internet Competence Model proposed by the researchers. Given the evolving nature of the modern workforce, these abilities have become popular in social networking sites and other aspects of the social media landscape social networking sites (SNS) are examples of this. Each of these possibilities comes with its own set of challenges and needs a certain set of skills to be used to their full potential. As a result, the notion of literacy is broadened to include the ability to communicate effectively. That's the procedure they use movement, by providing a more nuanced description beside the tried-and-true framework. One of the initial elements that must be included by any definition of language skills is for use with any number of social apps that need a user to consistently increased network of friends and associates. Several social applications benefit greatly from the Internet's ability to greatly increase the quantity of our social connections. To handle this level of complexity and participate actively While it may seem obvious, many users still struggle with the concept of communication (Deursen, 2015).

Creating a solid online persona is the fourth communicative ability to have. Since SNS software provides a template, this also seems easy at first glance. Yet, it is not simple to create a website that attracts attention, is authentic to who they are, and represents their desired online identity. Constructing a credible persona online via repetition and

input from others is the fifth language skills. Important online messaging skills include the ability to appropriately react to comments and draw inspiration from the identities and personalities of others. The young and the impressionable like dabbling with computer aided design as a means of exploring and developing their own distinct physical and psychological selves. Ability to collaborate online, which is mostly reliant on interaction, is the ultimate language skills. Ability to "define particular duties for each body's cells on his or her experience and communicate with the group members in a suitable method" is required (Cho, 2013).

Reading has an important role in a person's development and growth. Another scholar argues that reading provides the opportunity to gain experience that deepens one's understanding of oneself, other people, and the world at large by broadening one's exposure to new ideas and concepts. Since reading is central to every aspect of education, and because students' reading abilities are so crucial to their academic achievement, reading extensively is a must. They stressed the interconnectedness and dependence of reading and academic achievement. Hence, the more books a pupil reads, the better off they will be academically. Success in reading is also linked to overall academic growth, as the author explains. Results from the research showed that exam scores across the board were higher among regular readers (DiMaggio, 2011).

In the study of English as a foreign language, reading is the single most crucial ability for students to acquire. provided three examples of why reading is extremely important for EFL students. Secondly, since English is not the predominant language of the culture where they are studying it, EFL students do not have access to inputs from their everyday interactions. Reading is the most effective way to get around the limited input space. Second, reading greatly improves one's adaptability, personal growth, academic performance, professional accomplishments, and career prospects. And third, reading improves a student's proficiency in other areas of language study by exposing them to several effective sentence forms. Reading also helps EFL students expand their vocabularies by providing them with opportunities to acquire and study the most used and important terms in context. As a result, students are better able to put their thoughts into writing and better understand the need of using proper grammar, punctuation, and spelling. Reading also serves as the cornerstone of teaching for all facets of second language acquisition. Literacy was formerly described as the capability to read and comprehend a wide range of materials. For example, reading is "the process of obtaining linguistic knowledge through print," according to researchers. The term "gathering information" gives the impression that reading is a sequential process in which one deciphers a text by first identifying individual words and then putting them together to make phrases and sentences. Considering this newfound knowledge, modern definitions of reading emphasize the reader's active participation in deciphering the text. It's no longer seen as a mindless mechanical task, but as one with a clear goal and a sound logic that depends on the reader's established context. Reading is "the method by which one obtains meaning from the text," as defined they argues that reading is a cognitive activity in which readers actively engage with texts to learn,

remember, and make connections between ideas. In a nutshell, it's a kind of psycholinguistic guesswork, in which readers take little bites out of the text to form hypotheses, test those assumptions, and adjust their reading accordingly (Buente, 2018).

RESEARCH OBJECTIVE

1. To determine whether online education can withstand natural catastrophes and the spread of the Corona virus.
2. To describe the advice and guidelines for making the most of online education in times of crisis.
3. To contribute to a deeper understanding of how internet skills are shaped by various factors.
4. To identify potential areas for improvement in digital literacy education and training programs.

RESEARCH METHODOLOGY

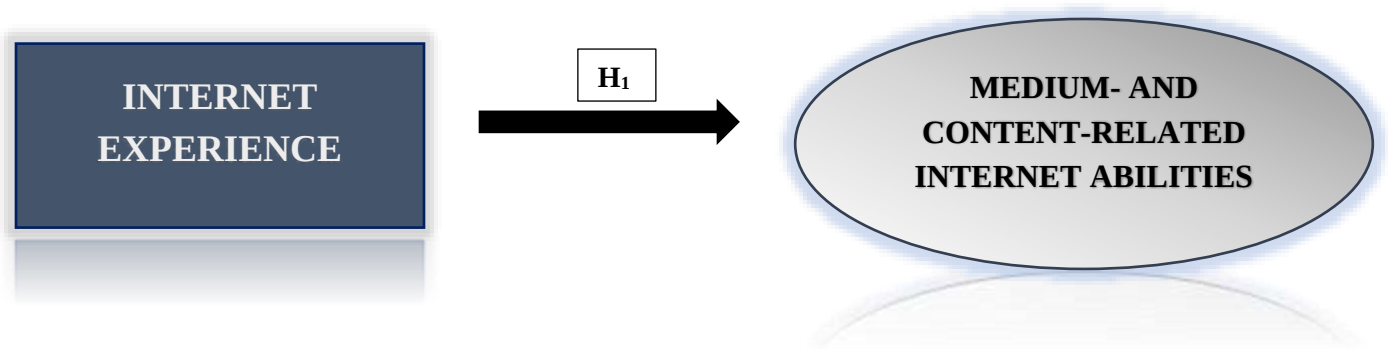
Research methodology is defined as the overall approach used by a researcher over the course of a study. Hence, to make conclusions, a quantitative research method entails counting and evaluating data. To answer questions like "who," "how much," "what," "where," "when," "how many," and "how," statistical data and methods are used. One way that researchers may expound on this idea is to claim that quantitative research methods will be used to characterize a problem or phenomenon using statistical or statistical tools. The second defining feature of quantitative research is the use of statistical methods in the gathering and analysis of numerical data. But there's another perspective. Quantitative studies require collecting data that can be measured and analyzed statistically to confirm or reject competing theories. Researchers also highlight that the steps involved in doing quantitative research are as follows: identifying a problem, formulating a working hypothesis or research question, reviewing the relevant literature, and conducting a statistical analysis of the data collected.

Statistical Software: SPSS Version 25.0

Sampling: A pilot study was conducted with the questionnaire using a group of 20 customers from China and final study was conducted with the questionnaire on sample of 912 customers. A total of questionnaires was distributed among customers selected in a systematic random sampling. All the completed questionnaires were considered for the study and any incomplete questionnaire will be rejected by the researcher.

A rating system based on the Likert scale is often used in surveys and questionnaires to gauge respondents' ideas and viewpoints. Participants often have the option of selecting a response from a set of five options, including "strongly agree," "agree," "did not respond," "disagree," and "strongly disagree," to a given question or statement. If the research uses numeric coding, such as 5 for "strongly agree," 4 for "agree," and so on, then the values for each category of answer must be established. By asking on a Likert scale from 1-20, as shown above, researchers may learn about shoppers' preferences for both online and traditional retail. The survey began with a series of "control" questions on the respondent's demographics and their level of familiarity with online vs. offline buying.

CONCEPTUAL FRAMEWORK



RESULTS

Rao-soft software was used to estimate the sample size of 963. A total of 1007 questionnaires were distributed to the respondents. Out of this number 986 sets of the questionnaire were returned, and 912 questionnaires were analysed using the Statistical Package for social science (SPSS version 25.0) software.

Factor Analysis

Factor Analysis is often used to validate the latent component structure of observable data (FA). As visible or diagnostic markers cannot be directly measured, regression coefficients are commonly used to provide scores. FA success needs models. Modeling targets observable connections, intrusion detection, and error. Multiple regression data

sets may be assessed using the Kaiser-Meyer-Olkin (KMO) Test. The sample and model variables are assessed for representativeness. The statistic indicates data overlap. Lower proportions indicate data that is easier to interpret. KMO returns 0–1. The sample size is enough if the KMO values are between 0.8 and 1. Kaiser's cutoffs for acceptability are as follows:

Kaiser's cutoffs for acceptability are as follows:

A dismal 0.050 to 0.059.

0.60 - 0.69 below-average

Typical range for a middle grade: 0.70–0.79.

Having a quality point value between 0.80 and 0.89.

The range from 0.90 to 1.00 is stunning.

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.959
Bartlett's Test of Sphericity	**Approx. Chi-Square**	6524.517
	df	190
	Sig.	.000

This demonstrates the validity of assertions for sampling purposes. To further verify the relevance of a correlation matrices, Bartlett's Test of Sphericity was performed. Kaiser-Meyer-Olkin Sampling Adequacy Value is 0.959. The p-value for Bartlett's sphericity test was determined to be 0.00. Bartlett's test of sphericity showed that the correlation matrix isn't an identity matrix, with a significant test result.

Test for hypothesis

Dependent Variable

Medium and Content Related Internet Abilities:

The current research takes a capabilities perspective, concentrating on the digital skills that are necessary to navigate the World Wide Web, since the World wide web is the platform that undergrads use to acquire various resources and services for the sake of their studies. A strategy along these lines was required to collect quantifiable findings and arrive at conclusions. Several academics set out to determine the competencies necessary for making good use of the internet. The author suggested developing "web skills," with a primary emphasis on efficient information retrieval. The phrase "world wide web knowledge" was used by the researchers, and it refers to the acquaintance with terminology associated to the World wide web, such as the computer, as well as the acquaintance with the procedures for carrying out activities using the Internet, such as pragmatic data acquisition. They described "internet fluency" as a multimodal notion that included acquiring, assessing, interpreting, and generating material for use online within the same environment. Investigators came up with the term "computer-email web (CEW) fluency," which alludes to the use of the Internet for the reasons of data gathering and interaction. In the end, the researchers offered a conceptual framework that divided Internet abilities into six distinct categories. These categories were as follows: (a) Operations, (b) Academic, (c) Knowledge, (d) Communicating, and (e) Content Generation, and (f) Managerial. They also advised making a difference in terms of skills between form of communication abilities, such as knowing how to use the web as a tool, and the evidenced skills, which include knowing the basics of what can be found internet (content-related skills) (Otter, 2013).

Independent Variable

Internet Experience:

When assessing someone's proficiency on the internet, the quantity of time spent online, and prior experience are two elements that must be taken into consideration. Researchers have shown that individuals who spend more time on the internet, whether it's at workplace or any other place, gain greater information about the World wide web and its capabilities. so have superior internet abilities. In general, when it comes to internet and computer usage, a larger level of technical skill is related with a longer period of experience as well as more current use. It is reasonable to anticipate that

those who have been using the Internet for a lengthier duration would be better capable of finding knowledge online since they will have a greater pool of experience from which to draw. Online consumers get more experience over time, and as a result, the World wide web comes to play a more significant role in their lives in regards of how they respondents were asked to complete, and it is even possible for the World wide web to become an essential part of their everyday life. When looking for any kind of knowledge in principle, researching for it on the computer would therefore develop into a routine, if not even an involuntary reaction. (Pan, 2014).

Relationship Between Medium and Content Related Internet Abilities and Internet Experience:

It is possible to explore the null and alternative hypotheses pertaining to the concept that Internet Experience is connected to Medium and content relevant Internet Abilities. The alternate hypothesis for this assumption would be that there is a connection between Online Life and Format and evidenced World wide web Abilities. This would be the alternate explanation for this argument. This indicates that people are more likely to have greater skills in utilizing various Online media and access material in a substantial way as their degree of Internet Experience improves. This is because individuals have more opportunities to practice using the internet.

To put this theory to the test, research might be carried out in which participants' levels of Web experience as well as their intermediate- and evidenced online abilities are evaluated. To evaluate whether there is a significant link between the two variables, one might do an analysis of the data using statistical methods such as regression or correlation analysis. Having said that, it is necessary to consider several possible restrictions imposed by this theory. Age, education level, and socioeconomic standing are just a few examples of the kinds of criteria that may not have been taken into consideration in the research. Other aspects of internet use, such as medium and evidenced abilities, may also have been affected. In addition, the amount of Web experience may only be measured based on the participant's own self-reporting, meaning it might not fully represent the participant's real level of Internet experience. In conclusion, it's possible that the research didn't consider the entire scope of intermediate- and information internet capabilities, which might restrict the study's potential to generalize its findings (Park, 2015).

Based on the above discussion, the research formulated the following hypothesis, which will analyse the relationship between Medium and Content Related Internet Abilities and Internet Experience.

“H01: There is no significant relationship between Medium and Content Related Internet Abilities and Internet Experience.”

“H1: There is a significant relationship between Medium and Content Related Internet Abilities and Internet Experience.”

Table 2: ANOVA test H1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	301.375	218	5784.062	105.587	.000
Within Groups	103.375	481	26.848		
Total	404.750	699			

In this study, the result is significant. The value of F is 105.587, which reaches significance with a p-value of .000 (which is less than the .05 alpha level).

This means the “H1: There is a significant relationship between Medium and Content Related Internet Abilities and Internet Experience.” is accepted and the null hypothesis is rejected.

CONCLUSION

The goals of this research were to determine (1) implications of accessible technology on traditional reading skills, (2) how it improves students' capacity to take in and convey text in a broader perspective, and (3) how it affects students' encouragement for coursework and reading. Numerous studies have indicated that students who use TTS or another kind of technology in the classroom are able to improve their phonemic awareness without engaging in decoding exercises. Similar results were obtained in this

investigation. Students showed growth comparable to that of a control group getting "treatment as usual" and to that of a normal group of kids of the same age. Both the pupils and his parents acknowledged the findings showing a progress in comprehension. The second goal was to see whether they improved at digesting and conveying texts, and the findings were not as clear. The evaluations used for this purpose fell short of completely measuring their intended targets. Students' test scores and their own and their parents' assessments of their performance revealed, however, that they had improved their speed with technology and their ability to listen to and understand a text. It is unclear, however, whether or whether the capacity of children with reading and writing disabilities to assimilate and communicate material using assistive technology truly develops written language competence when compared to more conventional ways. Several studies have stressed the significance of intrinsic motivation in the classroom, especially for children who struggle with reading and writing. Thirdly, assistive technology was essential in increasing students' interest in reading and their engagement with academics more generally. Parents acknowledged that their children felt more confident in their ability to handle academics. Several students said that listening to a text helped them better understand its meaning, and that this method of "reading a text" was generally well-received by both their peers and their instructors. Finally, what does this research contribute toward closing the current void in the field of mobility aids and written language difficulties? When used appropriately, assistive technology may help people of all abilities improve their reading abilities. Most of the research done on the advantages of employing technological aids has been on its impact on decoding and reading skills. This research adds to the literature by including the primary goals of writing and reading: comprehension and expression. To integrate the material and have an equal voice in the conversation.

LIMITATION

Even though all the educators had received training in the exams and treatments and that there was a shared website, it was still challenging to gather all the data, not least during the follow-up. Many educators, for instance, neglected to save the information produced by certain tools. As the trial group was undergoing interventions while the control group received business as usual, it was challenging to get more reliable data on the latter. Nevertheless, the majority of the instructors in the control group failed to record the duration of the sessions despite describing the activities that their pupils participated in. One explanation is that the control group's lack of a dedicated instructor throughout the intervention period contributed to their lower achievement. Previous research has noted similar challenges in data collection, particularly during follow-up. Yet, TAU may have been successful since even the control group's kids improved their reading skills as much as the standard group. Therefore, it became

difficult to evaluate text comprehension and, more specifically, text communication, which was a drawback. For one thing, evaluating these skills is still a relatively new area of study, and more study is required before assistive technology instruments can be built. The importance of this has been emphasized in previous writings as well.

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