

IMPROVING INTERNET SKILLS: THE ROLE OF GENDER, AGE, EDUCATION, INTERNET EXPERIENCE, AND TIME SPENT ONLINE IN RELATION TO ABILITY TO UNDERSTAND AND USE VARIOUS TYPES OF ONLINE CONTENT AND MEDIUMS

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ABSTRACT

This study aims to determine whether or not there is a correlation between demographic variables (such as age, education level, time spent online, and internet competence) and the medium and content preferences of audiences. Due to the increasing importance of the internet in people's daily lives and the rapid development of new technologies, it is crucial to understand the factors that affect people's level of comfort and familiarity while navigating the web. Differences emerge across demographic factors such as age, education, internet familiarity, time spent online, and skill with various forms of media and material. This study contributed to an expansion of the previously established skill framework by adding communication Internet capabilities to the operational, formal, informational, and strategic categories. They investigated several forms of aid that help people get by when they don't have the necessary abilities. Further, they investigated if Internet proficiency is indeed necessary for realising benefits from using the internet, and whether the usage of assistance resources could mitigate these advantages. The results of a large-scale poll classified respondents into three separate support groups: independent voters, social support seekers, and formal assistance seekers. The improved ability to communicate seems to be a valuable feature, since it has a major impact on effective use of the Internet. They're a great asset because of this. More so than those who sought institutional help and even more so than those who sought social support, independent Internet users received the advantages of utilizing the Internet. Effective use of online communication tools may help users get the most out of their time online despite their lack of in-depth subject-matter expertise. The result would be a significant increase in individual freedom for Internet users.

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

INTRODUCTION

The concept of the "digital divide" was developed based on a study of relative inequality. The idea that not utilizing a computer or the Internet is detrimental, given the many benefits of doing so. In contrast, most homes in affluent countries today have access to the Internet. Therefore, it is thought that the previously used binary category of accessibility in terms of material means has been replaced by a division that is anticipated to concentrate on a great many more complex elements and interconnections. There are now several frameworks for researching the digital divide, and we have a more sophisticated knowledge of the phenomenon overall. Varying digital skill levels are one of the most significant factors in these notions. The Internet is one of the most important means of communication in the current world, therefore keeping up with social developments requires learning new skills. As can be shown in the next section, the unique contribution of this study is the adoption of an Internet skills definition that takes into account medium- and content-related abilities. It will become obvious that this distinction is essential and gives a unique viewpoint on online talents (Suherdi, 2012).

In addition to a comprehensive definition, observational studies are utilised to measure Internet capabilities rather than surveys with questions that enable respondents to judge their own abilities. The reliability of epidemiological studies, which look at real-world results, is diminished when survey questionnaires are used. All educators working in this field agree that the term "distance online education" refers to a process in which there is a separation between the person offering the training and the person receiving it. Learning and instructing from afar are both covered. Time and other living restrictions have made distance education the default method of getting lectures and acquiring subject-specific knowledge. The new varied technology gadgets have allowed people to exchange knowledge and made instructional and educational procedures feasible without time and distance limits, especially for adults who could really continue their conventional education in classes eyes with their teachers. Therefore, virtually all schools across the world now provide some kind of online education in a wide range of disciplines and skill sets. Thank goodness for distance education, which made it possible for many people to get the specialised education they needed but couldn't get locally. In today's environment, online education provided via the interconnected environment Wide Web is the norm. Various Universities utilize various techniques to offer guidance to distance students (Fortson et al., 2007).

BACKGROUND OF THE STUDY

Literacy on the internet is only one of many new concepts that have surfaced as a direct result of the proliferation of digital technologies. They came to the conclusion that the specific nature of these concepts is not properly stated in the majority of the situations. Many authors omit to include explanations for the terminology they employ in their writing, perhaps because they believe their audience is already familiar with the concepts. However, there is no widespread consensus over the characteristics that should be included in the definition of a metric, which has hampered the development of monitor and improve. One of the main justifications for adopting the phrase "Internet skills" is that it is identical with the term "digital skills," which is often used in research about the digital divide. A familiarity with other technologies, such as mobile phones and laptops, is also a desired qualification in addition to proficiency with the internet, which is a required certification. Researchers conducted an exhaustive study of the relevant literature and developed four unique Internet skills in order to encourage more in-depth research on the topic of assessing Internet competence and to strengthen the achievements of digital divide research. Their point of view is that there is a distinction to be made between intermediate Internet competence and content-specific Internet competence. The first type of medium-related talents is operative Internet skills, and they are based on concepts such as musical skills, specialty knowledge, technological literacy, and technical ability. When taken together, these concepts provide a fundamental understanding of how to make efficient use of the Internet. The second category of media-specific Internet skills pertains to the formal Internet skills that are required to function inside the underlying hypermedia framework of the internet. It will be necessary for them to be acquainted with hypermedia navigation and orientation strategies in order for them to successfully navigate this layout. There are two types of content-related abilities: the capacity to discover information online and the ability to utilize the internet strategically. Both of these talents are relevant to using the internet. It has been shown by researchers that providing individuals with an outline of the procedures they take to meet their information requests online helps those people build the competence required to do so successfully. The capacity to use the Internet as a tool for the accomplishment of specific goals and, more broadly, for the improvement of social conditions is referred to as strategic Internet competence. The foundation for the categorization of strategic talents is the conventional approach to selecting an option.

Because to the evolution of the Internet, in particular email and the World Wide Web (WWW), it is now possible to offer education across enormous distances via electronic means in an efficient and cost-effective manner. This can be accomplished while maintaining a relatively high level of interaction, despite the limitations imposed by the technology that is now available. Therefore, the development of the World Information Superhighway made way for online education, which can be defined as the utilisation of technology means to facilitate contact and collaboration for the purpose of learning (Shauna, 2015). This advancement cleared the way for online education (Rouis, 2012).

PROBLEM STATEMENT

As internet use increases, so does the prevalence of cybersecurity threats. The attacker uses a variety of techniques to get private data from the victim. Types of unhealthy behaviours are being carried out by the attackers so that they would be able to gain the information of the victim."

The greater the number of individuals who use the internet, the greater the number of cybersecurity issues that will arise. The attacker may use a number of tactics in an effort to get private information about the victim. The attackers are resorting to various criminal activities to learn more about their as-yet-unidentified victim. This data is used by the criminals responsible for these assaults. Once the attacker has the information, they will likely act illegally with it. they've presented the technology to achieve this, and the main thrust of our work is to use the honeypot data to spot phishing emails. The goal of this project is to provide an environment where harmful cyberattacks like phishing are more difficult to pull off by using Big Data frameworks.

LITERATURE REVIEW

The first novel concept offered here, as indicated in the paper's introduction, is the addition of a means of communication matching knowledge and skills to the Internet Competence Model established by the researchers. It's no surprise that these skills are in high demand on SNS and other parts of the social media landscape, given the dynamic character of today's employment. Each of these options has its own unique obstacles and requires a unique set of abilities in order to be realised to their fullest potential. Thus, the concept of literacy is expanded to encompass the skills necessary for successful communication. That's the method they use to make progress; along with the standard template, they also provide a more detailed explanation. Any definition of language proficiency must first account for its use with the plethora of social applications that need a user to maintain and expand their circle of acquaintances. Because of the Internet's potential to dramatically expand the number of our social connections, it may be used to great effect in a variety of social contexts. In order to cope with this complexity and actively contribute, Even though the idea of communicating may appear simple, many people still have trouble with it.

The capacity to construct a credible online identity is the fourth communication skill. This also seems simple at first look due to the availability of a sample inside most SNS applications. But it's not easy to make a site that stands out, seems genuine, and conveys the image you want to project. Fifthly, the ability to build a believable online identity via practice and the incorporation of feedback from others. The ability to

respond correctly to comments and take inspiration from the identities and personalities of others is an important talent for online communicating. Computer assisted design is popular among the young and impressionable because it allows them to experiment with their bodies and minds in new ways. Ability to cooperate online, which is primarily based on interaction, is the ultimate language skills. The competence 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 essential (Hazelhurst et al., 2011).

A person's growth and development are aided by reading. Another expert thinks that reading gives the chance to gather experience that enriches one's awareness of oneself, other people, and the world at large by widening one's exposure to new ideas and concepts. There is no way around it: children need to read widely to improve their reading skills, which in turn will help them succeed in school. They hammered home the point that reading and success in school are inextricably linked. Therefore, a student's academic performance improves in proportion to the number of books he or she reads. The author also draws a connection between reading proficiency and overall academic development. Reading regularly has been linked to improved academic performance, as study results demonstrated.

Reading is the most important skill for pupils to develop while learning English as a second language. offered three examples of the value of reading for EFL students. Second, EFL students are deprived of inputs from their daily interactions since English is not the dominant language in the society where they are learning it. To make up for the little input area, reading is the best option. Second, reading significantly enhances one's versatility, development, learning, and professional and personal success and opportunities. As a third benefit, reading broadens a student's exposure to many effective sentence structures, which in turn increases their ability to apply language learning across a wide range of contexts. Reading also aids EFL students' vocabulary development by exposing them to the most often occurring and crucial concepts in context, which they may then learn and memorize. Student writing improves as a consequence, as does students' awareness of the importance of correct language, punctuation, and spelling. Reading is also essential for instruction in all areas of second language learning. Former definitions of literacy placed emphasis on the ability to read and understand a variety of texts. Read "the process of obtaining linguistic knowledge through print," as one definition puts it. The expression "gathering information" suggests that the act of reading is a linear progression from the recognition of individual words to the production of whole phrases and sentences. Considering this additional information, current definitions of reading emphasize the reader's active engagement in comprehending the text. As opposed to being a mindless mechanical chore, it is now understood to have a specific purpose and a logical progression that is dependent on the reader's prior knowledge. They suggest that reading is a cognitive activity in which readers actively interact with texts to learn, remember, and draw connections between ideas. Reading is described as "the method by which one obtains meaning from the

text." In a word, it's a type of psycholinguistic guessing, in which readers take tiny bites out of the text to build hypotheses, verify those assumptions, and alter their reading appropriately (Schoepp, 2015).

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 technique is defined as the entire strategy employed by a researcher during the duration of a project. Therefore, a quantitative research approach involves counting and interpreting data to draw conclusions. To answer queries like "who," "how much," "what," "where," "when," "how many," and "how," statistical data and methodologies are employed. As an example of how this concept might be developed further, researchers may state that they will use quantitative research methodologies in order to provide a statistical description of a problem or phenomena. Secondly, quantitative research is characterised by the use of statistical procedures to the collection and analysis of numerical data. Nonetheless, there is an opposing viewpoint. To test hypotheses and draw conclusions, quantitative research necessitates the collection of measurable data. Researchers also emphasize the following phases as essential to quantitative research: recognizing a need, developing a working hypothesis or research question, surveying the existing literature, and analysing the results statistically.

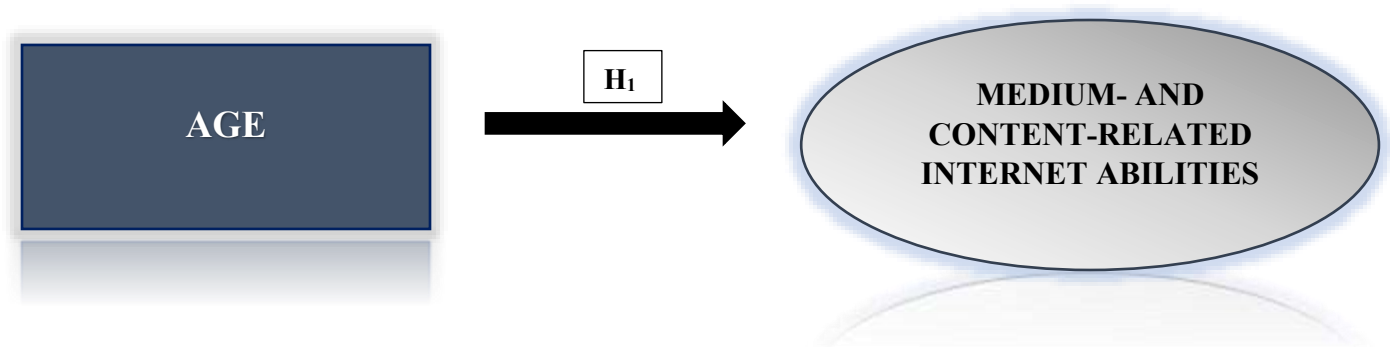
SPSS 25.0, Statistical Analysis Programme

Sampling: A total of 20 Chinese consumers participated in the pilot research, and a total of 912 participated in the final survey, both of which used the same questionnaire. Customers were picked using a random sample strategy, and from them, a total of questionnaires were sent out. No unfinished surveys were included in the analysis, but the researcher did not use them either.

In order to get an accurate read on people's thoughts and feelings, surveys and questionnaires often use a rating system based on the Likert scale. Respondents are

typically offered a choice between five possible answers, such as "strongly agree," "agree," "did not respond," "disagree," and "strongly disagree," in response to a question or statement. The values for each response category must be specified if the study use numeric coding, such as 5 for "strongly agree," 4 for "agree," and so on. Researchers may learn about consumers' preferences for both online and brick-and-mortar shopping by using the above-described Likert scale. Several "control" questions on the respondent's demographics and familiarity with online vs. offline shopping came early in the survey.

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:

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.

Independent Variable:

Age:

When a person is a teenager, they are just starting out on the path of finding their sexuality. It is not unheard of for people in their position to have sexual concerns as a primary focus of their attention. On the other hand, the way that sex is measured in today's media can leave young people bewildered. There is a mountain of data suggesting that adolescents are getting the message to "sex without responsibility." This might lead to the individual participating in unsafe sexual behaviour, which could ultimately result in an unplanned pregnancy for them. The scholastic performance of adolescents who sit in front of the television for an excessive length of time sometimes suffers as a direct result of this behaviour. According to the findings of certain studies, academically successful children and adolescents watch far less television than their classmates do. According to the findings of another piece of study, the influence that different types of media have on the capacity of pupils to learn is not consistent. The modern media are everywhere and have a significant amount of sway. You will never be able to break away from its hold on you. In addition to that, there is no need to do so! Keep in mind that the media is only a tool, and that just like any other instrument, it is up to you to find out how to make efficient use of the tool that is the media.

Table 2: Age

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	309	29.0	29.0	29.0
	25-35	285	37.0	37.0	66.0
	35-45	191	19.0	19.0	85.0

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

“H₀₂: There is no significant relationship between Medium and Content Related Internet Abilities and Age.”

“H₂: There is a significant relationship between Medium and Content Related Internet Abilities and Age.”

Table 3: ANOVA test H¹

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	301.375	230	5784.062	104.586	.000
Within Groups	103.375	469	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 “H2: There is a significant relationship between Medium and Content Related Internet Abilities and Age.” is accepted and the null hypothesis is rejected.

CONCLUSION

This study set out to answer three questions about the effects of easily available technology on students' motivation for reading and learning: (1) how it may impair conventional reading abilities; (2) how it might help students better comprehend and deliver material; and (3) how it might increase students' capacity for doing both. Numerous studies have suggested that students who utilize TTS or another sort of technology in the classroom are able to develop their phonemic awareness without participating in decoding activities. The findings in this study were consistent with the previous one. The students' development was similar to that of both a "treatment as usual" control group and a typically developing group of children of the same age. His students and his parents all agreed that his results showed improvement in understanding. The second objective was to evaluate whether or not they had better text comprehension and communication skills; this result was less conclusive. The effectiveness of the used assessments was inadequate in that regard. However, when comparing assistive technology with more traditional methods of educating children with reading and writing challenges, it is not obvious whether or not the former really improves written language competency. Numerous studies have shown the importance of intrinsic motivation in the classroom, particularly for students who are having difficulties in the areas of reading and writing. Thirdly, kids' enthusiasm in reading and academic engagement improved greatly with the use of assistive technology. Parents said that their children had increased academic self-esteem. Several students said that they learned more by listening to a text than they did from reading it on their own, and that this kind of "reading a text" was well-received by both their classmates and teachers. Last but not least, how does this study fill the gap between mobility aids and linguistic barriers in writing? When utilised properly, assistive technology has the potential to aid readers of all abilities. The benefits of using technological assistance have been studied mostly in relation to their effect on decoding and reading abilities. This study contributes to the body of knowledge since it takes into account the two most important reasons for reading and writing. To incorporate the information and participate reasonably in the dialogue.

LIMITATION

Even though there was a common website and all the teachers had been briefed about the examinations and therapies, it was still difficult to collect all the data, not least during the follow-up. For example, many teachers haven't been saving the data generated by particular programs. It was difficult to collect more accurate data on the control group since the trial group was receiving interventions while the control group was receiving business as usual. Despite detailing the activities that they had their students engage in throughout the sessions, the majority of control group teachers failed to note the length of the sessions. The absence of a consistent teacher during the intervention period may have hurt the performance of the control group. Data collecting difficulties have been reported in previous studies, especially during follow-up. However, TAU may have been effective since even the kids in the control group showed the same level of reading improvement as the kids in the standard group. As a result, it became challenging to assess text comprehension and, more narrowly, text communication. One reason is that more research is needed before assistive technology instruments can be constructed; measuring these talents is a new field of study. This has also been emphasised in other literature for its significance.

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