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Master Of Education Students' Online Information Searching Strategies

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Abstract

In the development of digital technologies, the information-seeking delivering processes are directed online and quickly expanded. Online play an important role to deliver the teaching and learning processes. Getting the information and processing the learned information is a difficult mental process that needs to confirm, assess, unify and synthesize the information gained from various sources. When the quantity of information and variety of information existing on the internet are considered, since the problems such as reliability, consistency, worth and appropriateness are still question marks for each and every one. The present study tried to assess the master of education students' level of access and utilization of online information-searching strategies.

keywords: information searching, online strategies, searching strategies.

Introduction

Online has become one of the leading sources of information for postgraduate students learning. Since everyone can disseminate content online, though, the online is full of unrelated, biased, or even fabricated information. So, students' capability to use online information in a critical-reflective method is of vital importance. In the framework of digitalization, civilization's overall media behavior has altered basically. Digital technologies are opening up new opportunities for accessing and distributing information (Mason et al., 2010; Kruse, 2017; Tribukait et al., 2017). Online technologies have become one of the leading sources of information for higher education students' learning (Brooks, 2016; Newman and Beetham, 2017). Prior research indicates that the way students process and generally handle online information can be strongly influenced not only by personal characteristics but also by the quality of the accessed websites and their content (Tribukait et al., 2017; Braasch et al., 2018). Possible relationships between qualitative website characteristics, students' web search behavior and their judging of online information,

however, have hardly been studied to date. In particular, there are hardly any studies that examine the connection between different quality criteria of websites and students' evaluation of website quality. In addition, most of the existing studies are based on students' self-reports and/or were conducted in a simulated test environment, so that their generalizability regarding students' actual web search behavior in the real online environment remains questionable.

Digital Information Searching Strategies

Cognitive strategies are significant for easy and rapid access of individuals to accurate and reliable information, and conducting various cognitive processes such as analysis, evaluation and decision-making during the process of access to information. Especially, it is important for the students to decide on the adequacy, reliability and relative quality of the acquired information, as well as the search and access of information on the Internet that they use as a primary source of information for their homework, projects and presentations. Du and Evans (2011) investigated how academic users search for information for their real-life research tasks with 11 PhD students. Interaction with multiple search systems, exploration of popular search engines, use of basic search function, construction of multiple search queries, multi-tasking reformulation, parallel reformulation, and recurrent reformulation were the searching strategies discovered as a result of the study.

Wu and Tsai (2007), in a study they conducted to interpret the information searched on the Web and information searching strategies, collected data from 1220 students via the Web-based Information Search and Interpretation Strategies Scale developed by themselves and concluded that students' information search-interpretation strategies significantly differed based on gender and grade level. Based on the data collected from 472 students in a study conducted to analyze web-based information search behavior of students by Kurulgan and Argan (2007), gender, department and internet proficiency level had a significant effect on the information search behavior of the students. Tsai and Tsai (2003) analyzed 73 college freshmen students' information searching strategies in Web-based science learning activities of randomly selected eight subjects and examined the influence of students' Internet self-efficacy on these strategies. It was reported that students with high Internet self-efficacy had better information searching strategies and learned better than those with low Internet self-efficacy in a Web-based learning task. Since online searching strategies are complex cognitive skills, they are influenced by diverse factors as well as self-efficacy (Tsai, 2008). It could be argued that one of these factors is the information pollution on the Internet.

Online information searching strategies has five functions:

1. Identifying important question;
2. Locating information;
3. Critically evaluating the usefulness of information;
4. Synthesizing information to answer questions;

5. Communicating answers to others.

Of these five functions, the ability to locate information is perhaps the most critical as much of what we do on the Internet stems from our ability to adequately search for specific information.

Need and Importance of the Study

The evaluation of information sources is crucial for successfully handling online information and learning from Internet-based inquiry (Wiley et al., 2009; Mason et al., 2010), and using online information in a critical-reflective manner is a necessary skill. Critically analyzing and evaluating digitally represented information is necessary to cope with the oversupply of unstructured information and to analyze make judgments about the information found online (Gilster, 1997; Hague and Payton, 2010; Ferrari, 2013; Kruse, 2017). Students use them primarily for private entertainment or social exchange, and are not capable of applying their digital skills in higher education and critically transferring information-related skills to the learning context (Gikas and Grant, 2013; Persike and Friedrich, 2016; Blossfeld et al., 2018). Students often base their judgment of websites on irrelevant criteria such as the order of search results and authority of a search engine, the website design, or previous experience with the websites and the information provided there, while they neglect the background of a website or the credibility of the author (McGrew et al., 2017). For instance, Wikipedia and Google were the most frequently used despite students rating them as rather unreliable and students' overall use of all web search tools was rather unsophisticated (Judd and Kennedy, 2011; Maurer et al., 2020). The expectation that today's students generally have a digital affinity is therefore not tenable (Kennedy et al., 2008; Bullen et al., 2011). To be able to deal successfully with online information, it is urgently necessary that today's students first learn to critically question, examine and evaluate it (Mason et al., 2010; Blossfeld et al., 2018). Hence considering the significance of online information searching strategies the present study has been chosen.

Statement of the Problem

With the advent of mobile technologies, many university students began to engage in online information searching activities as the first step in research and doing homework. However, university students are often ignorant of where to look and what to do when running a search query online (Catalano, 2017), and have various problems in planning the search process, specifying the search keywords, and evaluating the search results (Frerejean et al. 2018). The information literacy levels of the university students are expected to improve, as they gain accurate, reliable, and in-depth knowledge through a focus on information searching activities in learning environments (Coklar, Yaman, & Yurdakul, 2017). In this context, enabling university students in their efforts to support their claims and develop explanations based on concrete data, the argumentation process could, arguably, facilitate the implementation of online information searching strategies and the development of these

skills (Nagel et al., 2020). During the argumentation process, specific claims regarding a scientific or socio-scientific issue are formulated, theoretical and applied evidence are gathered from a range of sources to support the claims thus formulated, the evidence thus gathered are evaluated and synthesized, to come up with a solid foundation to support the claim (Reisoglu et al., 2020). The overall process involving the claims, justification, and the arguments thus formulated is called argumentation (Gecer, 2014). In an argumentation process, the students can be presented with scientific and socio-scientific issues in various forms. Tables covering statements or cases with reference to a specific scientific topic, a phenomenon involving some interrelated occurrences and the statements containing descriptions of the phenomenon, previously prepared experiment reports, two competing theory caricatures, stories, or ideas are but a few examples of such forms (Reisoglu et al., 2020). Through this process, students are expected to explain why they chose the idea they backed, submitting supporting evidence along the way. In this context, the argumentation process is claimed to help enhance a number of cognitive and metacognitive skills such as decision-making, problem solving, critical thinking, alternative view development, and abstract reasoning (Reisoglu et al., 2020). Considering the review of related literatures, the researcher has chosen the topic which is stated as follows: "**Master of Education Students' Online Information Searching Strategies".**

Objectives of the Study

Research objectives are the outcomes that aims to achieve by conducting research. In this present study, the following objectives have framed for verification of the research work.

1. To find out the online information searching strategies of master of education Students.
2. To find out whether there are significant differences in the online information searching strategies of master of education students with respect to the variables given below.
    - ❖ Gender
    - ❖ Type of Institution
    - ❖ Place of living
    - ❖ Educational qualification of Parents
    - ❖ Occupation of Parents
    - ❖ Annual income of the Parents
    - ❖ Type of family

Hypotheses of the study

The following research hypotheses have been formulated.

1 The online information searching strategies of master of education students is high.

2 There no significant difference in the online information searching strategies of male and female master of education students.

3 There is no significant differences in the online information searching strategies of master of education students studying at government/private institutions.
4 There is no significant differences in the online information searching strategies of master of education students from rural and urban locality
5 Parent's education doesn't influence the online information searching strategies of master of education students
6 Parent's occupation doesn't influence the online information searching strategies of master of education students
7 There is no significant relationship between online information searching strategies of master of education students from Joint family and nuclear family

Method of Study

The present investigation was undertaken by using normative survey method. The survey method gathers data from a large number of cases at a particular time.

Sample

The investigator has selected a Random sampling technique to select the sample namely the master of education students. The researcher has selected 300 masters of education students from the educational Institutions in Coimbatore and Salem District.

Analysis and Interpretations

Table - 1

Mean score of online information searching strategies of master of education students

No of students	Mean	S.D.
300	112.19	6.81

A close perusal of the table indicates that the mean score of online information searching strategies of Master of education Students is 112.195 standard deviation is 6.818 respectively. The mean scores show the high Online information searching strategies of Master of education Students. Hence, the stated hypothesis "the Online information searching strategies of Master of education Students is high" is accepted.

Gender and Online Information Searching Strategies

To find out the significance of difference between male and female master of education students in their mean scores of online information searching strategies, 't' test was used.

Table – 2 Significance of difference between the mean scores of Male and Female in Online information searching strategies

Sub sample	N	Mean	S.D	t-value	Level of Significance
Male	143	106.34	4.07	1.21	NS*
Female	157	105.85	2.74		

***NS means not significant at 0.05 level**

It is observed from the Table 2 the mean scores of male and female were 106.34 and 5105.85 respectively. The mean scores of Male is greater than female. The 't' value calculated indicates that the differences in the mean scores are not significant, as the calculated 't' value of 1.215 is lesser than the table 't' value 1.96 at 0.05 level for df 298. Hence, the null hypothesis is accepted and it is concluded that there is no significant difference between the mean scores of male and female in their online information searching strategies.

Type of Institution and Online Information Searching Strategies

To find out the significance of difference between self-finance and private master of education students in their mean scores of online information searching strategies.

Table – 3 Significance of difference between the mean scores of Government and Private Master of education Students in Online information searching strategies

Sub sample	N	Mean	S.D	t-value	Level of Significance
Government	250	106.07	3.47	0.2	NS*
Private	50	106.15	3.34		

***NS Means not significant at 0.05 level**

It is observed from the table 3 that the mean scores of government and private institution students are 106.07 and 106.15 respectively with a standard deviation of 3.47 and 3.34 respectively. There is a negligible difference in the mean value of the private institution students over the government institution students. The 't' value calculated indicates that the differences in the scores are not significant, as the calculated 't' value of 0.2 is lesser than the table value 1.96 at 0.05 level for df 298. Hence, the null hypothesis is accepted and it is concluded that there is no significant difference between the government and private institution students in their online information searching strategies.

Locality of The Institution and Online Information Searching Strategies

To find out the significance of difference between the rural and urban Master of education Students in their mean scores of Online information searching strategies, 't' test was used.

Table – 4 Significance of difference between the means of Rural and Urban Master of education Students

Sub sample	N	Mean	S.D	t-value	Level of Significance
Rural	180	106.48	3.72	2.56	S*
Urban	120	106.49	2.89		

*S denotes significant at 0.05 level

It is observed from the table 4 the mean scores of rural and urban institution students are found to be 106.482 and 106.491 respectively. The t-value is found to be 2.56 and it is greater than the table value 1.96 at 0.05 level for df 298. Since it is statistically significant, it is concluded that there is difference in online information searching strategies of urban and rural master of education students. Hence, the null hypothesis rejected. The urban master of education students has high online information searching strategies when compared with rural master of education students. Thus it was concluded that the urban and rural trainees differ significantly in their online information searching strategies.

Parent's Education and Online Information Searching Strategies

To find out the significance of difference between mean scores of online information searching strategies of master of education students of educated and non-educated parents, 't' test was used.

Table – 5 Significance of difference between the mean scores of master of education students educated and un-educated parents and online information searching strategies

Sub sample	N	Mean	S.D	t-value	Level of Significance
Educated	156	105.66	3.11	0.44	NS*
Un-Educated	144	106.84	3.58		

*NS denotes not significant at 0.05 level

It is observed from the table 5 the mean scores of the master of education students uneducated parents and educated parents are 106.84 and 105.66 respectively. The master of education students uneducated parents mean scores are higher than that of the educated parents. The t-value is found to be 0.44 and it is less than the table value 1.96 at 0.05 level for df 298. So it is not statistically significant. It is concluded that there is no difference in online information searching strategies of educated and un-educated parents. The null

hypothesis is accepted and the research hypothesis is rejected. To sum up master of education students of educated and uneducated parents do not differ significantly in their Online information searching strategies.

Parent's Occupation and Online Information Searching Strategies

To find out the significant difference between the mean scores of online information searching strategies of master of education students of employed and unemployed parents.

Table – 6 Significance mean difference between master of education students employed and unemployed parents in respect of online information searching strategies

Sub sample	N	Mean	S.D	t-value	Level of Significance
Employed patents	248	105.89	3.50	0.58	NS*
Unemployed patents	52	106.12	3.49		

*NS denotes not significant at 0.05 level

It is observed from the table 6 the mean scores of master of education students employed parents and unemployed parents in respect of online information searching strategies are found to be 105.89 and 106.12 respectively. The mean value of the unemployed parents in respect of online information searching strategies are found to be higher than that of the employed parents. The t-value is found to be 0.58 and it is lower than the table value 1.96 at 0.05, df = 298. Hence it is not significant, hence, the null hypothesis is accepted. So the Master of education Students of employed and unemployed parents do not differ significantly in their Online information searching strategies.

The Annual Income of Parents and Online Information Searching Strategies

Table – 7 Parents of Annual Income and Online information searching strategies of Master of education Students

Sub sample	N	Mean	S.D	t-value	Level of Significance
Below 25000	261	106.02	3.4	1.01	NS*
25000 to 50000	36	106.41	3.2		
25000 to 50000	36	106.41	3.2	4.29	S**
Above 51000	3	107.66	1.5		
Below 25000	261	106.02	3.4	5.26	S**

Above 51000	3	107.66	1.5		

*NS denotes not significant at 0.05 level **S denotes significant at 0.01 level

The t-value is found to be 1.01 in between the annual income below 25000 and 25000 to 50000 and it is lower than the table value 1.96 at 0.05 level df = 295. So it is not significant. it is concluded that there is difference in online information searching strategies of master of education students shows parents annual income is below 25000 and 25000 to 50000. The null hypothesis is accepted. The t-value is found to be 4.29 and it is more than the table value 2.576 at 0.01 level df 37. So it is significant. It is concluded that the difference in online information searching strategies of annual income above 50000 and 25000 to 51000 is significant. Thus null hypothesis is rejected. For annual income of above 50000 and below 25000 the t-value is found to 5.26 and it is more than the table value 2.576 at 0.01 level for df 262. So it is significant. Thus, the null hypothesis is rejected.

Students of Joint and Nuclear Family and Online Information Searching Strategies

Table – 8 Significant difference between the mean scores of the type of family (joint and nuclear family master of education students) in respect of online information searching strategies of master of education students

Sub sample	N	Mean	S.D	t-value	Level of Significance
Joint family	48	105.16	2.82	2.95	S**
Nuclear family	252	106.26	3.53		

**S denotes significant at 0.01 level

It is observed from the table 8 the mean scores of the master of education students who belong to joint and nuclear family are found to be 105.166 and 106.261 respectively. The t-value is found to be 2.95 and it is more than the table value 2.576 at 0.01 level for df = 298. So it is significant and hence it is concluded that there is difference in online information searching strategies of joint and nuclear family. Hence, the null hypothesis is rejected. The nuclear family students have high online information searching strategies when compared with joint family students. To concluded master of education students from joint family and nuclear family differ significantly in their online information searching strategies.

Findings

The mean value has led to the condition that the master of education students have high level of online information searching strategies.

The mean value has clearly indicated that the male and female master of education Students have high level of online information searching strategies.

There is no significant difference between government and private master of education students. students in respect of online information searching strategies.

There is significant difference between rural and urban master of education students in respect of online information searching strategies.

There is no significant differences between the master of education students of educated and uneducated parents in respect of online information searching strategies.

There is no significant differences between the master of education students. students of educated and uneducated parents in respect of online information searching strategies.

There is no significant difference between the Master of education Students of employed and unemployed parents in respect of online information searching strategies.

There is no difference in the online information searching strategies of master of education students whose parent's annual income is below Rs. 25,000 to 50,000.

There is significant difference in the online information searching strategies of master of education students whose parent's annual income is Rs. 25,000 to 50,000 and above Rs. 51,000.

There is significant difference in the online information searching strategies of master of education students whose parent's annual income is below Rs. 25,000and above Rs. 51,000.

There is a significant difference between joint family and nuclear family master of education students in respect of online information searching strategies.

Conclusion

Indian education is under the dark shadow of problems, issues and set back, parents and facilities have failed to enable the master of education students to balance online information searching strategies and institution environments of master of education students are purely examination oriented and the facilities at college are more concerned with curriculum completion rather than inculcation of harmonious development in the personality of the student. In society, there is a lack of ideal, political and social leadership for the younger generation to emulate. Now a day's success in society is measured not by one's whole Institution Environments in life but by one's bank balance and material prosperity. Hence, it a great dilemma for the younger generation as to what course of life they should follow. These reasons to be a big question mark for their future in life. The youth of to-day are not having good mental balance and health. It they have to posse's good online information searching strategies it is in the hands of the facilities. Today, the development and spread of information and communication technologies has contributed to the diversification of information access. The study reveals that master of education students have high level of online information searching strategies which will elevate the online information searching strategies of prospective citizens who can uplift are nation as developed country.

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