Jurnal Kajian Informasi & Perpustakaan Vol. 11, No. 2 (December 2023) 305-320
ISSN 2303-2677 (Print) ISSN 2540-9239 (Online)

Ellis's model of student information-seeking behavior on Google Scholar

Prijana[1*], Razif Abdussalam[2] , Raka Gading Pancasona[3], Kabir Alabi Sulaiman[4]
[1,2,3]Library and Information Science Study Program, Universitas Padjadjaran
Jl. Raya Bandung-Sumedang Km. 21, Jatinangor, Sumedang, Jawa Barat, 45363
[4]Department of Library and Information Science, Kwara State University
Kwara State University Rd, Malete 241103, Kwara, Nigeria
)* Corresponding Author, Email: prijana@unpad.ac.id

Received: May 2023 ; Accepted: December 2023; Published: December 2023

Abstract

Information seeking leads to interactions within a system. At the same time, interaction patterns can potentially lead to a behavioral tendency and form a unique behavioral pattern. This research aimed to find out how information search behavior was carried out by students of the Library and Information Science Study Program in conducting literature searches on the Google Scholar platform by applying the stages of the Ellis Model. The research method used quantitative with a survey method. The results showed that at the starting stage, the correlation coefficient was moderate; at the chaining stage, the correlation coefficient was moderate; at the browsing stage, the correlation coefficient was below moderate; at the monitoring stage, the correlation coefficient was below moderate; at the differentiating stage, the correlation coefficient was moderate; and at the extracting stage, the correlation coefficient was below moderate. This study concludes that students know the topic they want to search before using Google Scholar. Chaining, browsing, and monitoring are done alternately at almost the same time. Students have observed the correlation coefficient numbers at the chaining, browsing, and monitoring stages; students pay more attention to the chaining stage, namely obtaining keywords. At the differentiating stage, students have begun to filter incoming information and use their ability to distinguish the sources of information obtained, and at the extracting stage, students work through the selected sources to identify all relevant materials.

Keywords**:** Information-seeking behavior; Ellis model; Information search; Google Scholar

Model Ellis tentang perilaku pencarian informasi mahasiswa pada Google Scholar

Abstrak

Pencarian informasi menimbulkan interaksi dalam sebuah sistem. Sementara pola interaksi dapat berpotensi menimbulkan suatu kecenderungan perilaku dan membentuk pola perilaku yang unik. Tujuan penelitian untuk mengetahui bagaimana perilaku pencarian informasi yang dilakukan oleh Mahasiswa Program Studi Perpustakaan dan Sains Informasi dalam melakukan pencarian literatur di platform Google Sholar *dengan menerapkan tahapan Model Ellis. Metode penelitian menggunakan kuantitatif dengan metode survei. Hasil penelitian menunjukkan bahwa pada tahap* starting*, angka koefisien korelasi moderat; pada tahap* chaining*, angka koefisien korelasi moderat; pada tahap* browsing*, angka koefisien korelasi di bawah moderat; pada tahap monitoring, angka koefisien korelasi di bawah moderat; pada tahap* differentiating*, angka koefisien korelasi moderat; pada tahap* extracting*, dan angka koefisien korelasi di bawah moderat. Simpulan dari penelitian ini adalah mahasiswa telah mengetahui topik yang ingin dicari sebelum menggunakan* Google Scholar*,* chaining*,* browsing*, dan monitoring dilakukan secara silih berganti dengan waktu yang hampir bersamaan. Mahasiswa telah mencermati angka koefisien korelasi pada tahap chaining, browsing, dan monitoring dan mahasiswa menaruh perhatian lebih pada tahap* chaining *yaitu dengan memperoleh kata kunci. Pada tahap* differentiating*, mahasiswa telah mulai menyaring informasi yang masuk dan menggunakan kemampuannya untuk membedakan sumber-sumber informasi yang diperoleh, dan pada tahap* extracting*, mahasiswa bekerja melalui sumber yang dipilih untuk mengidentifikasi seluruh bahan yang relevan.*

*Kata Kunci**: Perilaku pencarian informasi mahasiswa; Model Ellis; Penelusuran informasi;* Google Scholar

doi: http://dx.doi.org/10.24198/jkip.v11i2.49574

Website: http://jurnal.unpad.ac.id/jkip

INTRODUCTION

Case and Given (2016) state that humans actually need, seek, and use information to try to understand the world. Information is an important element that is of high value to humans. However, not all information is factual and of good quality (Agustin, 2018). The meaning of information depends on the perspective of the recipient of the information. It relates to the essence of the information itself. Information can be interpreted as something that results from the processing of data organized in such a way based on certain rules that are useful for the recipient.

We understand the meaning of information as information value. The value of information is closely related to decisions and choices. If there is no choice or decision to be made, then information is not needed. Ariyanto et al., (2021) state that usually measuring the value of information can be seen from the comparison between benefits and costs. Benefits refer to the usefulness of the information obtained, and costs refer to the price incurred to obtain information. The cost in question is not only limited to money but can be in the form of an effort to obtain information. Therefore, information can be categorized as valuable if it has benefits that are greater than the costs incurred to obtain it. The benefits of information cannot be measured only from its material aspects; sometimes, the benefits of information refer to its effectiveness value.

The value and meaning of information will be different for each person. In some cases, a group of people can give the same value to information, but the size of that value will differ. The relevance and accuracy of the information influence this. Information becomes valuable if it is relevant to the recipient's search and will be of better value if it is accurate. Several factors, such as completeness, correctness, and security, can affect the accuracy of information.

The existence of information can increase the efficiency value of knowledge and may increase the productivity of society. However, consumptive behavior toward information is still at an early stage in knowledge development. This consumptive behavior cannot be considered a bad thing because, basically, the human tendency to use information indicates a need.

The human need for information can be said to be quite high, especially because information can spur the development of knowledge. Rahayu and Purwaningtyas (2023) explain that five things cause information needs, namely cognitive needs, affective needs, personal integration needs, social integration needs, and fantasy needs. So, if someone is motivated to get information, then he/she will search for information, both about social interactions and digital media, through information system intermediaries. Nasrulloh, Prijana, and Yanto (2021) claim that information needs arise when we realize that we do not have the knowledge or understanding to achieve a goal or answer a question. To overcome this, people will try to find information to fulfill their needs. There are six characteristics of information needs, namely relatively changing at a certain time, different for each person, influenced by the environment, difficult to measure with numbers, cannot be stated well, and tends to change when getting other information. These six need characteristics will underlie the formation of information-seeking

behavior. Nurfadillah and Ardiansah (2021) say that the higher the number of information needs, the higher the information search. Motivational aspects can influence a person to move to fulfill information needs. Motivation is built-in self-awareness in carrying out these needs.

A person will spur information-seeking behavior when he/she tries to meet the information needed. Purnama (2021) explains that searching for information is the search behavior that a person shows when interacting with an information search system. Septian, Narendra, and Hermawan (2021) define information-seeking behavior as a person's actions related to information sources, such as searching and reading articles, searching for information using the internet, and others.

A person's information-seeking behavior will differ from one another. Someone has their way of determining the information needed. Information-seeking behavior is a person's need to meet the answers sought in the situation or condition at hand. Septian et al., (2021) view the information search function as the behavior of ensuring factual information, solving problems, and adding insight. People's search for information will vary depending on individual conditions. Conditions that can affect a person's behavior in seeking information are as follows: first, demographic factors such as age, place of residence, gender, and occupation can affect a person's information-seeking behavior, for example, someone who has a job as a fisherman will look for information related to marine, fisheries, and tides.

Meanwhile, people who work as farmers will look for information such as fertilizers, rainfall, and crops that are suitable for planting in accordance with their work (Fatmawati, 2015); second, context characteristics. This characteristic can be interpreted as each person has different information needs, such as the information needs of doctors are different from the information needs of teachers; third, frequency characteristics, meaning that repeated use of new information or information can update old information. This can strengthen understanding of the information or significantly reduce its value; fourth, contingency characteristics. In this situation, an individual predicts an information need that comes unexpectedly. The individual will search and explore information that he/she will link to other information, which will create a new information need.

An example is when a student is seeking information to write a paper assignment in a preservation course. During the information search process, it suddenly crosses his/her mind to search for other information related to the course, so the student is encouraged to look for other information related to the course. Fifth, the characteristics of importance, meaning that the more important the information needed, the individual will try to find the information needed; sixth, the characteristics of complexity, meaning that the information sought is difficult to find by the individual seeking the information. The complexity of the search can be easy, meaning that it can be found quickly; however, if it turns out to be difficult to find, it is classified as complicated, so it still takes time to find it again.

Faturrahman (2016) states that there are several types of information-seeking behavior models based on the causes of observation, observation factors, and observation results. There are five models

of information-seeking behavior, consisting of the Wilson model, which is based on a person's need for information; the Krikelas model, which is based on a person's condition for information; the Johnson model, which is based on a person's demographic conditions, the Leckie model which is based on individual positions and tasks, and the Ellis model which is based on observations from research activities. Ellis's model consists of stages used to determine general information-seeking behavior. The stages of Ellis's model consist of starting, chaining, browsing, monitoring, differentiating, and extracting. Here, the researcher takes the Ellis model specifically, not as a whole.

Septian et al., (2021) explain the stages of search behavior as follows: First, starting is the first step in searching for information. At the starting stage, a person will identify the references he finds as a reference in searching for other information. In the starting process, information seekers need to conceptualize and prepare an overview of the information needed. Starting, one can start by asking people who are experts in the field of information needed or searching for information via the internet with the help of digital media.

Secondly, chaining is the process of linking a literature search back to the original reference. Chaining is also interpreted as the activity of looking at citations from various sources that have been found. The chaining stage is an advanced process from the beginning. By looking further at the relationship between references that have been found, we will be able to see information from a different perspective. The chaining process can be said to be a process of looking back at quotes that have been found.

Third, browsing is the activity of searching for information in locations or places that are likely to provide the information needed. The browsing stage is categorized as a structured action or activity as the information search process has begun to be specified. Browsing is carried out by scanning published research abstracts.

Fourth, differentiating is the activity of filtering information that has been obtained through previous activities. At the differentiating stage, information is selected based on stronger sources as reference material to be used. Thus, the differentiating stage can be interpreted as an activity to filter the quality of information so as to obtain relevant and valid information according to the needs of information seekers.

Fifth, monitoring is an activity to monitor developments related to the topic of interest. There are three ways to carry out monitoring; the first is information contact. This activity is carried out through establishing relationships, such as selecting sources of information in advance with the help of people who are experts in their fields. The second is journal monitoring, which is the activity of seeing and reading journal developments. The last is monitoring material published in book form. A common activity in this method is catalog monitoring. Furthermore, extracting is the activity of digging deeper into information from the selected sources. At this stage, information seekers explore information from these sources by focusing on the information they want to obtain.

Students of the Library and Information Science Study Program use Ellis's model as a theoretical basis for

seeking information. Ellis's model was previously described and explained qualitatively. In this study, Ellis's model is described and explained quantitatively with nominal and interval data. Especially for interval data, it is carried out by raising the ordinal scale to intervals or what is known as the successive interval method. The Ellis model, this time, has a quantitative database and is causal in nature.

In the research process, researchers took previous research as a reference in writing this scientific article. The previous studies referred to are as follows: First, Nihayati and Laksmi (2020) research on job information search behavior by fresh graduate scholars using the Wilson Model Analysis, which states that demographic factors, interpersonal skills, and the environment influence information search behavior. Three factors of the five variables stated in the Wilson Model are mutually sustainable.

Second, research by Septian et al. (2021) on the information search patterns of students of the UKSW Library and Information Science Study Programme using the Ellis model mentions that the search patterns carried out by students of the UKSW Library and Information Science Study Programme are in accordance with the Ellis model. Third, research by Fauziah, Prijana and Rohman (2019) on the relationship between information search behavior and the use of Edmodo Learning Media. This study uses a quantitative research approach with a correlational method. The object of research is class X students of SMKN 1 Bandung. The following research results show that search behavior with the encouragement of information needs using Edmodo media has significant results. However, the level of relationship formed has a correlation coefficient value below medium.

Based on previous research, the author must write down the similarities and differences between previous research and this research, both in the form of methods and indicators. However, here, this research brings an element of novelty where the focus is the information-seeking behavior of students. The element of novelty in this research is in the media used in the research. The researcher used Google Scholar as a medium to search for information. Husain (2019) states that Google Scholar itself is a Google-based search engine that provides information from journals. It is different from Google in general. The information available on Google Scholar can be accounted for because the source of information is journals and articles written by academics. Google Scholar is general, meaning that it is not tied to a particular journal, so we can get information related to something from various sources or journals. In addition, Google Scholar also provides a citation feature that makes it easy for users to quote experts' statements.

Based on the description above, the purpose of this study is to determine the information search behavior carried out by students of the Library and Information Science Study Program in conducting literature searches on the Google Scholar platform by applying the Ellis model stages through analyzing starting, chaining, browsing, monitoring, differentiating, and extracting.

RESEARCH METHODS

The research method used is the quantitative survey method. Prijana and Yanto (2020) state that the characteristic of

the survey method is selecting several units from the population, and the research instrument used is a questionnaire, selecting several means using a sample to describe the characteristics of the population. Data collection was carried out by distributing questionnaires to respondents, namely students of Universitas Padjadjaran and Information Science Study Program. The data construction used nominal data and Likert scale ordinal data. Nominal data was constructed in the form of contingency questions. Ordinal data was constructed in the form of matrix questions. After the data were obtained and analyzed, the researcher conducted hypothesis testing, interpreted the data, and provided academic explanations. Data collection in the survey research process is a very important activity to obtain the information needed in accordance with the research objectives (Pranatawijaya, Widiatry, Priskila, & Putra, 2019).

Here, the researcher used an online questionnaire in the form of Google Forms. The mechanism for distributing questionnaires was carried out through WhatsApp media by distributing questionnaires to class groups and directly contacting students who were selected as sample units. The questionnaire was distributed to students of the Library and Information Science Study Programme at Padjadjaran University. The questionnaire distribution was by building concepts related to the stages of information-seeking behavior in the Ellis model, namely starting, chaining, browsing, monitoring, and extracting. The question matrix given in the questionnaire showed how the search behavior in searching for information in the form of literature in digital media was carried out by students of the Library and Information Science Study Program at Universitas Padjadjaran. The media used in the research was Google Scholar. After the data was collected, the researcher did not conduct data entry again but simply made a coding book, and the machine automatically processed the data into a coding sheet with Microsoft Excel.

In research, a portion of the population is selected or called sampling. Prijana and Yanto (2020) quote Babbie's opinion by saying that sampling is the process of selecting observations. The selection process in question is to select sampling units to obtain sample units from a population. Sampling is done by chance or using sampling opportunities. The sampling method used in this study was the simple random sampling method. According to Prijana and Yanto (2020), the simple random sampling method is a basic method commonly used in social research. The first step is to create a sampling frame by collecting data on each unit as a whole and then processed using a randomizer. The simple random sampling method is used with the consideration that the population has homogeneous characteristics, so there is no need for further uniformity. The sample size is obtained by determining the sampling error.

According to Prijana and Yanto (2020), sampling error can be used to find the sample size and obtain parameter estimates by determining the binomial proportion (p & q). With a sampling error, research can obtain a sample size. In this study, the researcher set a sampling error of 4.80 with an estimated binomial proportion of 90/10 so as to obtain a sample size (n) of at least 150. The binomial proportion was achieved based

on the characteristics of the population determined by the researcher, namely the gender of students of the Library and Information Science Study Program.

The analysis method used statistics, namely the Pearson Product Moment analysis. The Pearson Product Moment analysis requires minimum interval-scale data, while data taken from questionnaires is ordinal data. Therefore, the researcher took steps to raise the ordinal scale to the interval using the successive interval method with SPSS software version 27. The ordinal numbers, when raised to interval, were done automatically by the machine. However, the numbers were still corrected, and the numbers with errors would be deleted. The numbers that were considered errors were the numbers that appeared beyond the provisions of the ordinal scale. Prijana and Yanto (2020) present a method for raising ordinal scales to intervals, which follows the work steps developed by Hays. After the researcher obtained interval data, the next step was to analyze the data using Pearson Product Moment correlation analysis for hypothesis testing purposes. In terms of hypothesis testing, the researcher still achieves the correlation coefficient value but conducted a significance test on the hypothesis. The theory is that if the calculated test of significance is greater than the figure number, the hypothesis is declared significant; if the calculated test of significance is smaller than the figure number, the hypothesis is declared insignificant. If the hypothesis is declared significant, the hypothesis (H1) is accepted; If the hypothesis is declared insignificant, the hypothesis (H1) is rejected. The calculation results were obtained digitally with SPSS software version 27. The results of the figure numbers were obtained by managing the value of α and df (degrees of freedom). In SPSS software version 27, significance is determined by looking at the significance number automatically. However, the working steps used the applicable provisions that were carried out manually, meaning standard procedures were carried out statistically.

RESULTS AND DISCUSSION

Google Scholar has a pattern of relationships between students in searching for information using the Ellis model. The following data analysis uses the Pearson Product Moment correlation analysis regarding the causal relationship between the Ellis model and students' information searches using Google Scholar. Initially, in the Pearson Product Moment correlation analysis, the researcher built the hypothesis used to test students' information-seeking behavior as follows.

H0: Seeking information through experts or other people has an insignificant relationship with information traceability through journal indexes or books.

H1: Searching for information through experts or other people has a significant relationship with searching for information through journal indexes or Books.

Correlations

		extracting information through experts or other people before search an information	information search through journal or book indexes
extracting information through experts or other people before search an information	Pearson Correlation	1	.242**
	Sig. (2-tailed)		.003
	N	150	150
information search through journal or book indexes	Pearson Correlation	.242**	1
	Sig. (2-tailed)	.003	
	N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Figure 1. Relationship between searching for information through experts or other people and searching for information through journal indexes or books.
Source: Researcher, 2023

Figure 1 shows that the correlation coefficient (ρ) is .242, and if α is .01 or with 99% confidence, information search through experts or other people has a significant relationship with information search through journal or book indexes. If the calculated result is greater than the figure result, it is declared significant, meaning that the hypothesis (H1) is accepted. It is known that the value of the correlation coefficient is below the moderate number, but the correlation is significant. Therefore, it can be said that students who search for information through experts or other people have a relationship with searching for information through journals or book indexes on Google Scholar.

There are two categories of students searching for information, namely senior and junior students. Junior students have an age range of 15-19 years 40.6%, and senior students have an age range of 20-24 years 59.33%, meaning that senior students have greater proportions in searching for information on Google Scholar. Before searching for information on Google Scholar, 99.3% stated that they knew what topics to search for, and only 0.67% did not know, meaning that students already knew what topics to search for before using Google Scholar. When going to search for information, it is known that 71.33% have made notes of the list of information needed, and 28.67% still need to make preparations. So before searching for information through journals or book indexes using Google Scholar, students make notes listing the information they will need. The initial step in the Ellis model explains the activities that users want to do when starting to search for information.

In the chaining stage. The researcher built hypotheses used to test the information search behavior of students using Google Scholar, so the following steps were taken:

H0: Comparing information with other references has a non-significant relationship with analyzing the support for the veracity of the information.

H1: Comparing information with other references has a significant relationship with re-analyzing the veracity of the information.

Correlations

		compare information between other reference materials	re-analyze the truth of the information obtained
compare information between other reference materials	Pearson Correlation	1	.550**
	Sig. (2-tailed)		<,001
	N	150	150
re-analyze the truth of the information obtained	Pearson Correlation	.550**	1
	Sig. (2-tailed)	<,001	
	N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Figure 2. Relationship between comparing information with other references and re-analyse the veracity of the information
Source: Researcher, 2023

In figure 2, the correlation coefficient (ρ) is .550, and if α .01 or 99% confidence, the act of comparing the information with other references has a significant relationship with re-analyzing the truth of the information. In theory, if the calculated result is greater than the figure result, it is declared significant, meaning that the hypothesis (H1) is accepted. It is known that the correlation coefficient value is in a moderate position, meaning that it is quite convincing and has significance with high confidence. In the chaining step, students pay considerable attention when searching for information on Google Scholar. Therefore, it can be said that the act of comparing information with other references has a relationship with re-analysing the truth of information.

Students arrange information related to the topic being searched by starting from what they understand first, which has a proportion of 92%, and only 8% still need to do it. It is known that 99.30% determine keywords to facilitate information searches on Google Scholar, and only 67% pay less attention, meaning that at the chaining stage, students take action to compile information related to the topic to be searched and most often determine keywords in searching for information on Google Scholar. Chaining in the Ellis Model explains that users already have certain ways to search for information, search for similar topics, and search for relevant topics tailored to their needs.

In conducting searches. In the Pearson Product Moment correlation analysis, the researcher built a hypothesis used to test students' information search behavior on Google Scholar as follows:

H0: Viewing primary and secondary literature has a non-significant relationship with finding relevant information using the advanced search feature in Google Scholar.

H1: Viewing primary and secondary literature has a significant relationship with finding relevant information using the advanced search feature in Google Scholar.

Correlations

		examine primary and secondary literature	search for relevant information utilizing the advance search feature in Google Scholar
examine primary and secondary literature	Pearson Correlation	1	.168*
	Sig. (2-tailed)		.040
	N	150	150
search for relevant information utilizing the advance search feature in Google Scholar	Pearson Correlation	.168*	1
	Sig. (2-tailed)	.040	
	N	150	150

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 3. Relationship of viewing primary and secondary literature with finding relevant information using advanced search features on Google Scholar.
Source: Researcher, 2023

In figure 3, the correlation coefficient (ρ) is .168, and if α is .05 or with 95% confidence, the activity of viewing primary and secondary literature has a significant relationship with finding relevant information using the advanced search feature. If the calculated result is greater than the figure result, it is declared significant, meaning that the hypothesis (H1) is accepted. It is known that the correlation coefficient value is far below the moderate number; this will cause the trust value to decrease further. Here, the causality relationship is declared significant at α, which is greater than the α of the chaining stage, meaning it shows a weakening sign. However, academically, it can be said that the activity of viewing primary and secondary literature has a relationship with searching for relevant information using advanced search on Google Scholar.

Students conducted information searches with a boolean search (AND, OR, and NOT) by 44.67% to limit the information displayed outside the required topic, and 55.33% have yet to make preparations, meaning that information searches with a boolean search are only sometimes used. Active students are female 90%, and 10% are male, meaning that female students dominate. Meanwhile, senior students who performed the search step are 74%, and junior students are 26%. On monitoring. In the Pearson Product Moment correlation analysis, the researcher built a hypothesis that is used to test the information search behavior of students using Google Scholar as follows:

H0: Getting the latest information has an insignificant relationship with checking the selected information.

H1: Getting the latest information has a significant relationship with checking the selected information.

Correlations

		Perform comparisons to see the value of information	define the categories of information needed
Perform comparisons to see the value of information	Pearson Correlation	1	.199*
	Sig. (2-tailed)		.015
	N	150	150
define the categories of information needed	Pearson Correlation	.199*	1
	Sig. (2-tailed)	.015	
	N	150	150

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 4. Relationship between keeping up with information and Checking the selected information.
Source: Researcher, 2023

Figure 4 shows that the correlation coefficient (ρ) is .199, and if α is .05 or with 95% confidence, the activity of following the development of information has a significant relationship with checking the selected information. If the result of the significance test is greater than the figure number, it is declared significant, meaning that the hypothesis (H1) is accepted. It is known that the correlation coefficient value is far below the moderate number, meaning it is relatively small. The relatively small correlation coefficient value affects trust being weakened, even though the causal relationship is declared significant. Therefore, it can be said that the activity of following the development of information has a relationship with checking the selected information.

A total of 96.67% of students have observed information found, namely reliable and new information, and only 0,67% do not implement it, meaning that students believe that information from Google Scholar is new and reliable information. Students always follow the development of information and check information on Google Scholar. On distinction. In the Pearson Product Moment correlation analysis, the researcher built a hypothesis used to test the information search behavior of students using Google Scholar as follows:

H0: Comparing the value of information has a non-significant relationship with determining the category of information required.

H1: Comparing the value of information has a significant relationship with determining the category of information required.

Correlations

		keep abreast of information that has been searched for find out any updates.	double-checking the information that has been selected
keep abreast of information that has been searched for find out any updates.	Pearson Correlation	1	.581**
	Sig. (2-tailed)		<,001
	N	150	150
double-checking the information that has been selected	Pearson Correlation	.581**	1
	Sig. (2-tailed)	<,001	
	N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Figure 5. Relationship between information value comparison measures and determining the categories of information needed
Source: Researcher, 2023

Figure 5 shows that the correlation coefficient (ρ) is .581, and if α is .01 or with 99% confidence, the act of comparing the value of information has a significant relationship with determining the category of information needed. If the result of the test of significance is greater than the result of the figure number, it is declared significant, meaning that the hypothesis (H1) is accepted. It is known that the value of the correlation coefficient is in a moderate position, meaning that the distinguishing stage gets more attention from students. Therefore, it can be said that the act of comparing the value of information has a relationship with determining the category of information needed.

As many as 100% of students have found literature from Google Scholar and choose information with the topics needed, meaning that students believe that the literature on Google Scholar can be trusted. At the differentiating stage, the topics needed by students are adjusted to the literature on Google Scholar. The Ellis model explains the differentiating stage as follows: In differentiating, users begin to filter incoming information and use their ability to distinguish the sources of information obtained. Explanation. In the Pearson Product Moment correlation analysis, the researcher built a hypothesis used to test the information search behavior of students who used Google Scholar as follows:

H0: Evaluation of relevant literature has a non-significant relationship with finding information about the author of an article or book.

H1: Evaluation of relevant literature has a significant relationship with finding information about the author of an article or book.

Correlations

		evaluate whether the literature found is relevant or not	look for more information on the author of the book/article
evaluate whether the literature found is relevant or not	Pearson Correlation	1	.174*
	Sig. (2-tailed)		.033
	N	150	150
look for more information on the author of the book/article	Pearson Correlation	.174*	1
	Sig. (2-tailed)	.033	
	N	150	150

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 6. Relationship between relevant literature evaluation and information seeking the author of the article or book

Source: Researcher, 2023

In figure 6, the correlation coefficient (ρ) is .174, and if α is .05 or with 95% confidence, the act of evaluating relevant literature has a significant relationship with finding information about the author of the article or book. If the calculated result of the significance test is greater than the result of the figure number, it is declared significant, meaning that the hypothesis (H1) is accepted. It is known that the value of the correlation coefficient is far below the moderate number, meaning that it affects the value of trust or trust weakened, although the causal relationship is significant. Therefore, it can be said that the act of evaluating relevant literature has a relationship with searching for information about the author of an article or book.

It shows that 96.67% of students continuously searched for other literature after finding relevant literature, and only 3.33% did not continue searching for other literature. This means that students tend to continue searching for other literature even though they have found literature that is considered relevant. The Ellis model explains that users work through selected sources to identify all relevant material.

CONCLUSIONS

Students of the Library and Information Science study program have prepared what topics to look for before they start searching for information through Google Scholar. Students make a list or some kind of list of the information they want to search. Such a step in the Ellis Model is called starting. Then, they carry out the chaining, browsing, and monitoring steps almost at the same time and perform them alternately. When carrying out the chaining step, students pay more attention and try to get keywords. For students, keywords are essential in searching for information on Google Scholar. Students look for topics that are relevant and tailored to their needs. Students also carry out the browsing step, although more intense is needed. Students also carry out monitoring steps, although they need to receive more attention as current and up-to-date information is essential. When entering the differentiating stage, students filter incoming information and use their

ability to distinguish the sources of information obtained. Furthermore, when entering the extracting step, sources of information begin to be selected and identified against relevant information. Here, the researcher does not carry out testing at the verifying stage because it is considered sufficient to do so at the previous stage. However, further research needs to be carried out to test the verification stage by carefully checking again whether the source of the information is valid and trustworthy.

REFERENCES

Agustin, H. (2018). Sistem informasi manajemen menurut perspektif Islam. *Journal of Tabarru': Islamic Banking and Finance*, *1*(1), 63–70. https://doi.org/10.25299/jtb.2018.vol1(1).2045

Ariyanto, A., Wongso, F., Wijoyo, H., Indrawan, I., Musnaini, Akbar, M. F., ... Devi, W. S. G. R. (2021). *Strategi pemasaran UMKM di masa pandemi*. Sumatera Barat: ICM Publisher.

Case, D. O., & Given, L. M. (2016). *Looking for information: A survey of research on information seeking, needs, and behavior*. United Kingdom: Emerald Group Publishing.

Fatmawati, E. (2015). Kebutuhan informasi pemustaka dalam teori dan praktek. *Info Persada: Media Informasi Perpustakaan Universitas Sanata Dharma*, *13*(1), 2–13. Retrieved from https://e-journal.usd.ac.id/index.php/Info_Persadha/article/view/119/106

Faturrahman, M. (2016). Model-model perilaku pencarian informasi. *JIPI: Jurnal Ilmu Perpustakaan Dan Informasi*, *1*(1), 74–91. Retrieved from http://jurnal.uinsu.ac.id/index.php/jipi/article/view/101/66

Fauziah, D., Prijana, & Rohman, A. S. (2019). Hubungan perilaku pencarian informasi dengan pemanfaatan media pembelajaran Edmodo. *Jurnal Kajian Informasi & Perpustakaan*, *7*(2), 161–174. https://doi.org/10.24198/jkip.v7i2.20123

Husain, T. (2019). Analisis layanan Google Scholar sebagai bahan referensi terhadap kepuasan mahasiswa. *Ultima InfoSys: Jurnal Ilmu Sistem Informasi*, *10*(1), 69–75. https://doi.org/10.31937/si.v10i1.1086

Nasrulloh, E., Prijana, & Yanto, A. (2021). Hubungan perilaku pencarian informasi dengan pengalaman sebagai anggota pramuka. *Anuva: Jurnal Kajian Budaya, Perpustakaan, Dan Informasi*, *5*(2), 165–187. https://doi.org/10.14710/anuva.5.2.165-187

Nihayati, & L. (2020). Perilaku pencarian informasi pekerjaan oleh sarjana fresh graduate dengan analisis Model Wilson. *Berkala Ilmu Perpustakaan Dan Informasi*, *16*(1), 55–67. https://doi.org/10.22146/bip.v16i1.171

Nurfadillah, M., & A. (2021). Perilaku pencarian informasi mahasiswa dalam memenuhi kebutuhan informasi sebelum dan saat pandemi COVID-19. *Fihris: Jurnal Ilmu Perpustakaan Dan Informasi*, *16*(1), 21–39. https://doi.org/10.14421/fhrs.2021.162.21-39

Pranatawijaya, V. H., Widiatry, Priskila, R., & Putra, P. B. A. A. (2019). Penerapan skala Likert dan skala

Dikotomi pada kuesioner online. *Jurnal Sains Dan Informatika*, *5*(2), 128–137. Retrieved from https://jsi.politala.ac.id/index.php/JSI/article/view/185

Prijana, & Yanto, A. (2020). *Metode penelitian perpustakaan dan sains informasi*. Bandung: Simbiosa Rekatama Media.

Purnama, R. (2021). Model perilaku pencarian informasi: Analisis teori perilaku pencarian informasi menurut David Ellis. *Pustaka Karya: Jurnal Ilmiah Ilmu Perpustakaan Dan Informasi*, *9*(1), 10–23. https://doi.org/10.18592/pk.v9i1.5158

Rahayu, S., & Purwaningtyas, F. (2023). Pola perilaku penelusuran informasi Mahasiswa Prodi Ilmu Perpustakaan UIN Sumatera Utara di era digital native. *Comit: Communication, Information and Technology Journal*, *1*(2), 1–9. Retrieved from https://journal-laaroiba.com/ojs/index.php/comit/article/view/40/12

Septian, D., Narendra, A. P., & Hermawan, A. (2021). Pola pencarian informasi Mahasiswa Program Studi Perpustakaan dan Sains Informasi UKSW menggunakan teori Ellis. *Jurnal Kajian Informasi & Perpustakaan*, *9*(2), 233–250. https://doi.org/10.24198/jkip.v9i2.33526