Information Literacy based on Self-efficacy Model in Information Needs amongst Undergraduate Students

Ike Iswary Lawanda, Farikhatus Ulfa

Library Science Studies Department, Faculty of Humanities, Universitas Indonesia, Indonesia

Abstract: This paper is about information literacy amongst faculty of humanities undergraduate students in the issue of life skill solving their informational problems. It is to measure information literacy in their beliefs as skill and strategy mean to solve informational needs. It can be done by using information literacy self-efficacy model. Descriptive design method using the survey method is used for data collection and analyzing general categories in 91 students in their last year assignment through convenience sampling technique. The result finds that information literacy self-efficacy in students has a mean of high in the total score of 71.06%. There are seven categories of self-efficacy amongst students: Information needs, information assessment and understanding, synthesis, usage, communicating, evaluating process and results, deciding information resources access and location, strategies of searching. The conclusion about information literacy self-efficacy in solving the problem is categorized high in skills and beliefs. It is significant to university library contribution providing infrastructure for information access and pieces of training and promotions and its services by lecturers to students. Further agenda is materials in information literacy instruction emphasizes information searching strategies that meet the needs such as keywords, Boolean operators, sign instruction and searching strategies as it is a life skill.

1 INTRODUCTION

Information is continuously produced by utilizing and in line with the development of information and communication technology and every day used of internet. It is to show an example of the implementation of sustainable goals, in the goal of education. Information literacy skills improve the quality of life of higher education students and access to inclusive education (United Nation, 2009). Here, the university library and reference librarians, in particular, have provided the tools to impoverish the quality life of students. Everyone is faced with a situation where they have to be able to correctly sort and obtain necessary information from the many piles of information already existing. The issues of authoritativeness, reliability, and currency determine the right information to be used by individuals in the academic or working setting and daily life. Therefore, individuals need information literacy skills to obtain the right information.

Information literacy is essential in the university library as an institution that provides reference service for the academic community. Information literacy is necessary and supportive to the success of the library users in selecting trustable information source that they need for research materials. Information literacy is also inseparable from an individual's ability to rewrite the selected information in accordance with the needs of writing a scientific work. Information literacy and critical thinking both affect the academic performance and the writing ability (Dwiutami and Wardi, 2015) of the undergraduate students (Rifauddin, 2017). An academician's writing ability is one of the benchmarks of a university's quality, which can be seen from the academician's scientific publications (Zinn, 2013; Naibaho and Mariyah, 2017).

The information literacy program held by the Library of Universitas Indonesia consist of several activities that equip academicians for university learning. Roadshow of information literacy and digital literacy program training is a sample of UI's information literacy program. Besides, before the term starts, the students also learn about LI through the new student orientation. The Library Science Study Program in the Faculty of Humanities also opens a class on information literacy that is open for

students from other departments. However, literacy itself is not sufficient for an individual. They must also develop confidence in the skills that they learn (Bandura, 1977 in Kurbanoglu, 2003). They must be confident and competent in using specific techniques and skills effectively. In other words, success is not only measured on the acquisition of skills needed for the performance but also on the confidence to use the skills effectively (Kurbanoglu, 2003).

A person's ability or competence is based on the belief in their own ability to use the competence (Dwiutami and Wardi, 2015). A person's belief in their ability to complete a task is called self-efficacy. Efficacy holds a significant role in everyday life, and a person will be able to optimize their potential with the support of self-efficacy (Rustika, 2012; Pajares and Miller, 1994). Self-efficacy plays a significant role in one's achievement and writing skill (Bandura, 1997). Self-efficacy affects the development of one's information literacy capabilities (Kurbanoglu, Akkonyulu, and Umay; 2005).

The problem shows that students' final assignments require information literacy skills to obtain various types of sources in the library or the internet. Credible information sources are required as a reference in scientific work. Students have received briefing and information literacy training through library roadshows, along with short instruction during new student orientation. Self-efficacy is one of the psychological factors that have an impact on information literacy. The use of literacy skills will be maximum and more developed when supported by self-efficacy.

Building confidence in using information literacy capabilities is as crucial as obtaining information literacy capabilities. Self-efficacy determines the actions, interests, emotions, and efforts to use and develop a student's information literacy skills in completing final assignments. The higher the self-efficacy for information literacy, the more students feel confident with their information literacy capability. On the other hand, low self-efficacy relates to the feeling of incompetence or limited capability of information literacy. The problem in this research is how the self-efficacy level of the students of the Faculty of Humanities Universitas Indonesia class of 2014 on their information literacy is? The purpose of this research is to know about the self-efficacy level of the students of the Faculty of Humanities Universitas Indonesia class of 2014 on their information literacy as a way to reach universal education globally.

2 LITERATURE REVIEW

Information literacy is the knowledge and skill possessed by someone to produce valuable information obtained from a computer database, creating information as needed, and apply those information sources to their work (Zurkowski, 1974). It is clearly stated in the sustainable development goals number four concerning quality of education (United Nation, 2009). Information literacy is directly linked with lifelong learning, critical thinking, and learning to learn concepts of education (Accardi, 2010). Basically, everybody in the society is in need of information literacy skills. A person who masters on the information literacy skill and technique uses various information facilities as a source of solution (Cacchione, 2014). Information literacy capability allows someone to recognize the need of information and the necessary information, identifying and locating the necessary information, evaluating information critically, organize and integrate information to the existing knowledge, and use and communicate the information effectively, legally, and ethically (Diao et al.; 2010), academician users (Campbell, 2004; Ralph & Jesus, 2008). Seven components of information literacy have been identified by Shapiro and Hughes since 1996 and were developed with an emphasis on media (Pattah, 2014). The Big6 Model became the focus (Eisenberg, 2006), although there is a number of other information literacy models like SCONUL (2011).

Someone's self-efficacy allows them to produce a level of work, determine and feel, think of self, motivate, and act. People with high self-efficacy on their ability see difficult tasks as challenges to overcome instead of threats to avoid. The people who have a high level of confidence in their ability have a way of thinking that cultivate intrinsic interests and deeper involvement in activities. They set a challenging goal and maintain commitment; they improve and sustain their efforts despite going through failures. They quickly recover their efficacy after each failure. Failure is seen as insufficient effort or lack of knowledge and skill. This kind of belief produces achievements, reduces stress, and is immune to depression (Bandura, 1994).

On the contrary, people who doubt their own capability choose to avoid difficult tasks. They have low aspirations and weak commitment to the goals that they have chosen. They think more about their personal weaknesses and losses rather than concentrating on how to successfully finish the difficult tasks that they are facing. They loosen their effort and give up quickly when facing an obstacle.

Their efficacy recovers slowly after a failure. They see insufficient effort as a result of a lack of talent, making it easy for them to lose confidence in their capability. Furthermore, they are also prone to be victims of stress and depression.

Four factors affect someone's self-efficacy. The first is the type of task that an individual is facing. The more difficult and complicated a task is, the more someone tends to evaluate their ability to finish the task and vice versa. The second factor is the incentive for from other people for their capability. According to Bandura, it is competence contingent incentives. The third is the status or role of an individual in their environment. A leader tends to have higher self-efficacy compared to their subordinates. This is because usually the orders come from a leader is usually obeyed by their subordinates. The fourth factor is the information about self-ability

Self-efficacy is a factor in information literacy skill (Mychalak, Rysavy, and Wessel, 2017), necessary in order to be a lifelong learner with self-resilience and toughness (Kurbanoglu, 2003). The higher the efficacy level of someone is, the bigger their efforts, resilience, and toughness (Pajares, 2002). Although knowledge and skills play essential roles in an individual's choice, everything is based on their own belief, including motivation and action (Bandura, 1997; Kear, 2000; Pajares, 2002 in Kurbanoglu, 2003).

3 METHOD

Quantitative research, which uses the descriptive survey method, aims to explain what happens right now (Morissan, 2012), and in the case of this research, it aims to know the self-efficacy level on the information literacy of the students of the Faculty of Humanities (FIB) Universitas Indonesia class of 2014. The population of this research is all students of FIB UI class of 2014 who were participants of OBM 2014 in order to obtain a significant number of sample estimation. The sample used in this research is some students of FIB UI class of 2014 who were working on their final assignments. The criteria of the research sample are students of FIB UI class of 2014 who are working on final assignments and who are willing to be a respondent. The method used for the research sampling is the convenience sampling technique which is a form of nonprobability sampling. The sample used in this research is sized using the Slovin formula and yields a result of 91 students.

The questionnaire is used as an instrument to collect data about self-efficacy for information literacy. *Information Literacy Self-Efficacy Scale* (ILSES) was created by Kurbanoglu (2003). ILSES was developed by Kurbanoglu, Akkoyunlu & Umay (2006) and has been used by researchers from several Asian countries such as Korea to evaluate the information literacy class in one Korean university by Sung-Won Kim (2011) and Indonesia to see the relationship between extrinsic and intrinsic motivation and self-efficacy for information literacy of the students of UIN Yogyakarta by Rifauddin (2017).

ILSES was made based on the consideration on and comparison of several definitions and standards of information literacy such as *Doyle's Rubrics for Information Literacy*, *AASL & AECT's Information Literacy Standards for Student Learning* (1998), *ACRL's Information Literacy Competency Standards for Higher Education*, (2000), *the Big6 Approach to Information Problem Solving*, (1998), *SCONUL's Seven Pillar Information Literacy Model*, (1999) and *ANZIL's Information Literacy Standards*, (2004). (Kurbanoglu, Akkoyunlu & Umay, 2006).

ILSES is divided into seven categories, which are defining the need for information; initiating the search strategy; locating and accessing the information resources; assessing and comprehending the information; interpreting, synthesizing, and using the information; communicating the information; and evaluating the product and process. ILSES is divided into three scales, which are 17, 28, and 40 items.

The questions in the questionnaire that the researcher uses refer to the 28-item indicator scale from ILSES. The likers scale used in this questionnaire ranges from score 1 to 5. Score 1 is very unconfident, score two is unconfident, score three is sometimes confident, score four is confident, and score five is very confident.

Table.1 Instrument grid on the self-efficacy for information literacy research, a 28-item scale

Variable	Category	Item
Self-efficacy for information literacy	Defining the need for information	• The belief in the ability to define the necessary information
	Initiating the search strategy	• The belief in the ability to identify a variety of potential sources of information • The belief in the ability to limit search strategies

Variable	Category	Item
		by subject, language and date • The belief in the ability to initiate search strategies by using keywords and Boolean logic
	Locating and accessing the information resources	• The belief in the ability to decide where and how to find the necessary information • The belief in the ability to locate information sources in the library • The belief in the ability to use library catalogue • The belief in the ability to locate resources in the library using the library catalogue • The belief in the ability to use different kinds of print sources (primary, secondary, and tertiary) • The belief in the ability to use electronic information sources • The belief in the ability to use internet search tools (search engines, directory) • The belief in the ability to use different types of library
	Assessing and comprehending the information	• The belief in the ability to use many resources at the same time to make a research • The belief in the ability to determine the authoritativeness, currency and reliability of the information sources • The belief in the ability to select most appropriate information • The belief in the ability to identify

Variable	Category	Item
		contradictory points (agreement and disagreement) among sources to obtain reliable information • The belief in the ability to evaluate information sources in websites
	Interpreting, synthesizing, and using the information	• The belief in the ability synthesize newly gathered information with previous information • The belief in the ability to interpret the visual information (i.e. graphs, tables, diagrams)
	Communicating the information	• The belief in the ability to write a research paper • The belief in the ability to determine the content and form the parts of a presentation, such as the introduction and the conclusion. • The belief in the ability to prepare a bibliography • The belief in the ability to create bibliographic records and organize the bibliography • The belief in the ability to create bibliographic records for different kinds of materials (i.e. books, articles, thesis, papers, web pages) • The belief in the ability to make citations and use text quotations • The belief in the ability to choose the appropriate form of communication for the audience (written, oral, visual)

Variable	Category	Item
	Evaluating the product and process	• The belief in the ability to learn from information problem-solving experience and improve information literacy skill • The belief in the ability to criticize the quality of information seeking process and its products

Source: Kurbanoglu, Akkoyunlu, and Umay (2006)

After creating the questionnaire, the researcher tested the validity of the questionnaire filled by 20 people. The value of df is found as 20-2 = 18, with df = 18 and alpha = 0,5, it is found that r table = 0,378. Validity and reliability tests were carried out with the help of SPSS 20. The result of the reliability test showed the value of reliability coefficient (r_{11}) to be 0.96 and the result of the validity test showed that all statements reveal that the calculated value of r is greater than r table (0.378).

After that, the data was processed through editing, coding, and tabulation. Then, the data analysis process used analysis tools that are appropriate for the research problem to avoid misinterpretation. Data analysis includes the activity of quantitative data presentation (Siregar, 2013).

4 DISCUSSION AND ANALYSIS

4.1 Information Literacy Program in UI Library

Information literacy activities are part of the UI library reference service. Since UI library subscribes to online databases, librarians are obligated to conduct socialization and training on how to access the database that has been running since 2001. The socialization service about the utilization of collection is managed by referral librarians through holding the information literacy training for users. Besides to optimize the utilization of the resources it has, the UI library also wants to show the image of librarians who can give a real contribution in higher education setting and become partners of educators and main supporters to achieve the vision of the university. (Naibaho and Mariyah, 2017).

In training, the librarians simply provide general guidance for vocational and undergraduate students,

and they are expected to explore themselves, unlike the postgraduate students who are considered to need more detailed training or tutorials on how to access various databases efficiently and effectively. As for lecturers, in addition to socialization and training, librarians also help to search the literature that these lecturers need because they tend not to have a lot of special time to search by them. Lecture schedules and other academic activities (seminars, research) are quite time-consuming, so they need help from other parties in fulfilling their literature needs (Naibaho and Mariyah, 2017).

4.2 Analysis of Self-Efficacy for Information Literacy of the FIB Students Class of 2014 based on the Information Literacy Self-Efficacy Scale (ILSES)

ILSES is divided into seven categories, which are defining the need for information; initiating the search strategy; locating and accessing the information resources; assessing and comprehending the information; interpreting, synthesizing, and using the information; communicating the information; and evaluating the product and process.

4.2.1 Self-Efficacy in Defining the Need for Information

This category has an item, which is: the belief in the ability to define the necessary information. A statement with code P 1 reads: I feel confident/competent to decide the topic of the information that I need for an assignment. The mode is 4 (confident) and the median is 4.00, while the average score of all respondents for statement P 1 is 3.71. This shows that most of the students are confident to decide their need of information.

4.2.2 Self-Efficacy in Initiating the Search Strategy

This category has 3 items, which are: the belief in the ability to identify a variety of potential sources of information, the belief in the ability to limit search strategies by subject, language and date, and the belief in the ability to initiate search strategies by using keywords and Boolean logic. This category has 3 statements, which are P 2, P 3, and P 4. Statement P 2 is: I feel competent to identify various sources of information (reports, books, journals, almanacs, etc.) that can potentially serve as an assignment's reference. Statement P 3 is: I feel competent to limit

the search strategy based on the subject, language, and year, while statement P 4 is: I feel competent to use keywords, Boole logic (and, or, not), marking instruction "…", range symbol (..), and other search facilities.

The mode for P 2 and P 3 is 4 (confident) and the obtained median is 4.00, while the average value from the two statements is more than 3. On the other hand, the most recurring value (mode) of statement P 4 is 3 (sometimes confident). This means that most of the students are confident to identify various sources of information (reports, books, journals, almanacs, etc.) that can potentially serve as an assignment's reference and to limit search strategies by subject, language and year. However, a majority of the students are sometimes confident to use keywords, Boole logic (and, or, not), marking instruction "…", range symbol (..), and other search facilities. Most of the students are confident to initiate the search strategy.

4.2.3 Self-Efficacy in Locating and Accessing the Information Resources

This category consists of 9 statements. Statement with the code P 5 is: I feel competent to locate the place where the necessary information sources are stored and how to retrieve that information in UI Library; code P 6 is: I feel competent to use UI Library's online catalogue/OPAC facility; code P 7 is: I feel competent to use the Summon Discovery Search menu facility to access e-journal and e-book from all online databases that UI subscribes to; code P 8 is: I feel competent to use the Online Database List and the remote-lib.ui.ac.id menu facility to access e-journal and e-book from each online database that UI Library subscribes to; code P 9 is: I feel competent to use the free open access journal facility; code P 10 is: I feel competent to use various printed information sources; code P 11 is: I feel competent to use the UI Library's electronic information sources; code P 12 is: I feel competent to use the search tools on the internet [search engine and directory]; and code P 13 is: I feel competent to utilize different types of library. The mode and median of 4 (confident) belong to statements P 5, P 6, P 8, P 9, P 10, and P 12. The average score for all statements is more than 3 except for statement P 7 which is: confidence to use the Summon Discovery Search menu facility to access *e-journal* and *e-book* from all online databases that UI subscribes to. The majority of the students is confident to locate and access information sources, with the biggest percentage of them (40.1%) answered with the score 4 (confident).

4.2.4 Self-Efficacy in Assessing and Comprehending the Information

This category has 5 statements; the one with the code P 14 is: I feel competent to use many resources at the same time to make a research; P 15 is: I feel competent to evaluate the reliability, currency, and authoritativeness of the information sources; P 16 is: I feel competent to select the most appropriate/relevant information for the assignment; P 17 is: I feel competent to identify and compare contradictory points (agreement or disagreement) among sources of information to obtain reliable information; and P 18 is: I feel competent to evaluate information in websites.

The mode of every statement is 4 (confident) and the median is 4.00 except for statement P 17 whose median is 3.00. This shows that a majority of the students are confident in assessing and comprehending information. The summation of all the answers for the 5 statements show that most of the students is confident in assessing and comprehending the information, with the biggest percentage of the respondent (50.3%) answered with the score 4 (confident).

4.2.5 Self-Efficacy in Interpreting, Synthesizing, and using the Information.

This category has 2 items which are: the belief in the ability to synthesize and the belief in the ability to interpret visual information. This category has 2 statements with the code P 19: I feel competent to synthesize, and the code P 20: I feel competent to create information in a visual form.

Two respondents answered with the score of 1 (really unconfident) for statement P 20. Every statement in the category of interpreting, synthesizing, and using the information is answered with a score of 4 (confident) as the most frequent answer. The mode for statement P 19 and P 20 is 4 (confident) and the obtained median is 4.00. This shows that a majority of the students is confident in interpreting, synthesizing, and using the information.

4.2.6 Self-Efficacy in Communicating the Information

This category consists of 7 statements with the code P 21: I feel competent to write a research paper; code P 22 is: I feel competent to determine the content of a presentation, form the parts such as the introduction and conclusion, and deliver it orally or in a written/PowerPoint presentation form.; code P 23 is:

I feel competent in preparing the things to note when creating a bibliography (name of writer, release year, etc.) from different types of materials (PowerPoint presentation, books, journals, websites); code P 24 is: I feel competent to write a bibliography in the applied style; code P 25 is: I feel competent to create a bibliography for a journal article with the help of reference technology; code P 26 is: I feel competent to make citations; code P 27 is: I feel competent to decide the appropriate form of communication [written, spoken, visual, and multimedia] to communicate the ideas to the audience.

The mode for statement P 22, P 23, and P 26 is 4 (confident), and the obtained median is 4.00. On the contrary, statement P 21, P 24, P 25, and P 27 has a mode, or the most frequently appearing score, of 3 (sometimes confident). However, the average score for all seven statements is more than 3. This shows that a majority of the students is confident in communicating the information with the most significant percentage of them (41.8%) answered with score 4.

4.2.7 Self-Efficacy in Evaluating the Product and Process

This category consists of 3 statements with the code P 28: I feel competent to learn and improve information literacy skills from the experience of using information literacy; code P 29 is: I feel competent to criticize the quality (effectivity, efficiency) of the information-seeking process that I have gone through regarding the assignment topic; code P 30 is: I feel competent to criticize the quality of my research paper (information clarity, ethics/plagiarism-free).

The mode for statement P 28 and P 30 is 4 (confident) and the obtained median is 4.00. On the contrary, statement P 29 has a mode, or the most frequently appearing score, of 3 (sometimes confident). However, the average score of all three statements is more than 3 and not very different from each other. This shows that most of the students is confident in evaluating the product and the process (44.7%).

Information efficacy on undergraduate students as users of UI library, show confidentiality on their skills in information literacy to reach their objectives of using library digital electronic collection, as their resource of information. The skill in information literacy on students enhances to break poverty in moving towards quality education, to be a life skill for everybody in society.

5 CONCLUSIONS AND RECOMMENDATION

5.1 Conclusions

The higher information efficacy on individuals the higher confidentiality individuals promote lifelong learning through information literacy skills. Information literacy skills empower students to reach quality education and life. It is indicated by the average score of self-efficacy for information literacy, in general, is 3.53 in Likert scale, showing that most of the undergraduate students are relatively confident in using their information literacy capability. The highest average score is obtained from statement P 6 (I feel competent to use UI Library's online catalogue/OPAC facility (lib.ui.ac.id)). On the other hand, the lowest average score is obtained from the statement "I feel competent to use the Summon Discovery Search menu facility (http://uindonesia.summon.serialssolutions.com/) to access e-journal and e-book from all online databases that UI subscribes to". Furthermore, there are 2 statements whose average scores are below 3, which are statement P 4 and P 7. Information literate individuals improve society's quality of life in general and academically.

5.2 Recommendation

5.2.1 Recommendation for Students

The proposed recommendation or advice is, Recommendations for students:
1. Students should continue to try exploring the facilities that UI Library has provided so that both print and electronic collections can be fully utilized.
2. Students should improve their information literacy capability in doing assignments.

5.2.2 Recommendation for UI Library

Recommendations for UI Library:
1. The material in information literacy instructions from UI Library should emphasize on the materials of necessary information search strategies, such as by using keywords, Boolean logic (and, or, not), marking instruction, range symbol (..), and other search facilities in the search engine of journal database or other search engines like Google. Besides, the socialization should demonstrate more about

the facilities of the summon discovery search menu : (http://indonesia.summon.serialssolution.com) to access e-journal and e-book from all online databases that UI subscribes to.

2. Furthermore, the information literacy instruction should not only be given when the students are newly admitted but also before they do the final assignments so as to improve the students' self-efficacy for information literacy that can be utilized when and for finishing the final assignments.

Information literacy skills need to be inculcated among the students, by the teachers and librarians.

REFERENCES

Accardia, Maria T. (2010). Teaching against the grain: Critical assessment in the library classroom. In Accardi, Maria T; Drabinski, Emily; Kumbier, Alana (eds.). *Critical library instruction theories and methods.* Duluth, Minn: Library Juice Press.

American Library Association. (2000). Information literacy competency standards for higher education. Retrieved fromhttp://www.ala.org/acrl/standards/informationliteracycompetency

Bandura, Albert. (1944). Self-efficacy. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Cacchione, Pamela Z., Paul G. Zurkowski. (2014). Nurse scientists' information literacy is supported by librarians. Clinical Nursing Research: Vol 23, Issue 1, pp. 3 – 6

Campbell, S. (2004). Defining information literacy in the 21st century. Paper presented at the World Library and Information Congress: 70th IFLA General Conference and Council, August 22-27, Buenos Aires. Available at: www.ifla.org/IV/ifla70/papers/059e-Campbell.pdf

Diao, Ai Lien, dkk. (2010). Literasi Informasi Tujuh Langkah Knowledge Management. Jakarta

Dwiutami, Lussy, Tantri Dwinantika Wardi. (2015). Efikasi guru dan kemampuan literasi informasi pada guru sekolah menengah atas. Jurnal Penelitian dan Pengukuran Psikologi 4 (2)

Eisenberg, M. (2006). A Big6™ skills overview. http://www.big6.com/showarticle.php?id=16

Eisenberg, M.B., Lowe, C.A., Spitzer, K.L. (2004). Information literacy: essential skills for the information age. Greenwoord: Libraries Unlimited.

Hasugian, Jonner. (2008). Urgensi Literasi Informasi dalam Kurikulum Berbasis Kompetensi di Perguruan Tinggi. Universitas Sumatera Utara

Kear, M. (2000). Concept analysis of self-efficacy: Graduate research in nursing. http://graduateresearch.com/Kear.htm

Kim, Sun-Wong (2011). Re-conceptualization of scientific literacy in South Korea for the 21st century in JRST. https://doi.org/10.1002/tea.20424

Kurbanoglu, S. Serap. (2003). Self-efficacy: a concept closely linked to information literacy and lifelong learning. Journal of Documentation

Kurbanoglu, S. Serap, Buket Akkoyunlu, Aysun Umay. (2006). Developing the information literacy self-efficacy scale. Journal of Documentation

Kurbanoglu, S. Serap. (2009). Self-efficacy an alternative approach to the evaluation of IL. Turkey: Department of information management, Hacettepe University

Kurbanoglu, S. Serap. (2010). Self-Efficacy: An alternative approach to the evaluation of information literacy. Hacettepe University

Morissan. (2012). Metode Penelitian Survey. Jakarta: Kencana Prenada Media

Pajares (2002). *Overview of social cognitive theory and of selfefficacy.* Diakses dari: http://www.emory.edu/EDUCATION/mfp/eff.html

Naibaho, Kalarensi, Mariyah. (2017). Kompetensi pustakawan dalam pemenuhan kebutuhan informasi guru besar: studi kasus di Universitas Indonesia. Perpustakaan Universitas Indonesia

Pattah, Sitti Husaebah. (2014). Literasi Informasi: Peningkatan Kompetensi Informasi Dalam Proses Pembelajaran. Jurnal Ilmu Perpustakaan dan Kearsipan Khizanah Hikmah Vol.2 No. 2, hlm 117-128

Ralph, Catts and Jesus, Lau (2008). Toward information literacy indicators. Paris: UNESCO

Rifauddin, Machsun. (2017). Hubungan efikasi diri literasi informasi dengan motivasi akademik mahasiswa pascasarjana program studi interdisciplinary Islamic studies uin sunan kalijaga Yogyakarta

Rustika, I Made. (2012). Efikasi diri: tinjauan teori Albert Bandura. Buletin Psikologi Fakultas Psikologi Universitas Gadjah Mada 20 (1-2)

Sastroasmoro, Sudigdo, Sofyan Ismael. (2014). Dasar-Dasar Metodologi Penelitian Klinis. Sagung Seto

Shapiro, J. Jeremy, Shelley K. Hughes. (1996). "Information literacy as a liberal art." Educom Review 31 (2): 31

Siregar, Syofian. (2013). Metode Penelitian Kuantitatif. Jakarta: PT Fajar

United Nation (2009). Sustainable Development Goals. 4 Quality Education. Retrieved in www.un.org/sustainabledevelopment/education on 27th July 2019

Universitas Indonesia. (2014). *Jadwal kegiatan obm 2014.* diakses dari http://www.ui.ac.id/notice/jadwal-kegiatan-obm-2014.html

Wairata, C. Martha. (1998). Efektifitas pelatihan rational emotive therapy (R.E.T) terhadap peningkatan self efficacy pada underachiever

Yudistira. (2017). Literasi informasi pustakawan di perpustakaan fakultas teknik ugm menggunakan pengembangan model the big6. Berkala Ilmu Perpustakaan dan Informasi 13 (1): 100-101

Zinn, Sndy E. (2013). The information literacy self-efficacy of disadvantaged teachers in south Africa. Worldwide

commonalities and challenges in Information Literacy Research and Practice

Zurkowski, P.G. (1974). The information service environment relationships and priorities. Related paper No.5.Washington D.C.: National Commission on Libraries and Information Science