

RESEARCH ON STRATEGIES OF LIBRARY SERVICE INSTRUCTION BASED ON SURVEY OF INFORMATION LITERACY SKILL OF COLLEGE STUDENT IN ACEH INDONESIA

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Abstract

This study had main purposes about information literacy of college students and strategies of library service instruction. Firstly, this study discussed information literacy skill possessed by Aceh of Indonesian college students. Secondly, this study discussed about strategies of library service instruction under taken in Aceh Indonesia and have been practiced in the world to promote information literacy skill for college students. Thirdly, this study used questionnaire as research tools for influences factors and of college students' information literacy skill. The dimensions of questionnaires were: information literacy competency, demography data profile of students, instruction session and library service instruction under taken, and student's satisfaction of library service instruction. The survey was conducted on September 2018 to October 2018, in Aceh, Indonesia. Total numbers of respondents were 400 students were from three public Universities. This study found that the Information Literacy Skill level of Aceh, Indonesia students was 73.08, which was categorized at the "moderate level", it's also found that GPA, Class level and family income and student's satisfaction in library services have significant influences on information literacy of students. Besides, this study found that information literacy classroom program is the best strategy of library service instruction which has been practiced in the world for promoting information literacy skill of college students.

Key words: Information literacy skill, Strategies; Library service instruction, and Information literacy skill of college students; Indonesia

1. INTRODUCTION

Information literacy is an individual skill to recognize when information is needed and understanding to retrieve, assess, and use information effectively and efficiently (ACRL, 2000). In addition, the ability or skill is useful in finding and applying knowledge for students as life-long learners. As college students in academic environments, they must attend the necessary information class skills to seek and evaluate the information they need, because as all college students need information to solve their academic problems. Programs such as library service promoting and instruction offer to college students to develop their information literacy and solve their problems. Academic librarians have been playing the role of leader in the use of information technologies and instruction for both students and staff on how to use them constructively, ethically, and safely.

The IL framework offered by this official institution is intentional because it relates to a concept intended for all librarians and instructors. This framework is flexible for librarians to implement in institutions, rather than competency standards or learning outcomes. The core of this IL Framework is conceptual understanding that governs many concepts and suggestions about information, research, and conversation scholarships to be a coherent whole so that it can help librarians in building their institutions better [1]. According to what has been described by ACRL, demanding the libraries, librarians or instructors will develop content results that apply to the institution and their programs are based on broad abstract concepts presented in the Framework [2]. In a study were presented by The European Conference on Information Literacy (ECIL) France, they collected information about Finish Academic Libraries Perspective on the information literacy framework from two universities in Finland found that 97% of the college students were familiar with the IL Standards of ACRL 2000, and 71% of them were familiar with the IL Framework adopted by ACRL in 2015. In Asia, especially in Indonesia [3], some researchers found that information literacy competency of the college students fulfilled and the development of research on information literacy in Indonesia is very slow [4]. This study is to examine information literacy skill of college student and the influence factors could promote the information literacy skill of the student and the strategies of library service instruction have been practiced in the world. Based on the research findings, suggestion will be made on;

- 1. Findings of this study are real level of information literacy skill of college students in Aceh Indonesia and the factors in library service instruction could promote students' level of information literacy skill;
- 2. Findings are expected to be a motivated for Library of University in Aceh, Indonesia to support information literacy skill for higher education and provide appropriate curriculum, librarian and professional instructor;
- 3. Provide the innovating, strategies in library service instruction, targeting to promote students' level of information literacy skill. There are strategies that can help librarians in instruction library service which some of these strategies have been practiced in the world, and some could be developed by carrying out a systematic study librarians in instruction library service which some of these strategies have been practiced in the world, and some could be developed by carrying out a systematic study.

2. LITERATURE OF REVIEW

Information Literacy has become an increasing phenomenon for librarians, information professionals, and educational environments. The Association College & Research Libraries (ACRL) defined the information literacy as a set of individual skill that requires to "recognize when information is needed and have the ability to locate, evaluate, and use the needed information effectively" [5]. Site last updated July 29: 2005, ACRL Approved The domain assessed by the Higher Ed *iSkills* Assessment conforms closely to the ACRL Information Literacy Competency Standards for Higher Education. The bulleted text describes the evaluations made of student performance on the *iSkills* assessment [6]. In the Framework for Information Literacy for Higher Education by the Association of College and Research Libraries (ACRL), furthermore, the information literacy has defined in 2016 as "the set of integrated abilities encompassing the discovery of information, the students know how the information produced and understanding of the valued, and how to use the information in creating new knowledge and participating ethically in communities of learning" [7]. Through Literacies Toolkit (2017), The Young Adult Library Services Association's (YALSA) a subspecialty of the American Library Association also has mission to support library staff in innovative learning, critical thinking, data literacy have a positive impact, library staff must rethink their approach to supporting information literacy through activities and programs.

Determining a concept and process in strategic planning was adopted by the library and information services from the 1970s, through much support such as professional associations and government bodies in improving the quality of libraries, including references to professional literature and suggestions for further competency and skill [8]. The approach is an important concept with fact and procedure to comprehension the meaning and understands the effects in use substantial in new situations, participate parts to make a new idea, assimilate learning problems and judge whether decisions supported



by facts [9]. In this study, the framework from ACRL and the strategies have been practice in the world described how information literacy programs intend to help librarians improve student literacy skills, and sustain value for its current programs with content such as knowledge about the use of IT, use of library facilities and its could promote information literacy skill of Aceh Indonesian college students.

3. METHODOLOGY OF RESEARCH

There were three kinds of methods in this study; (1) Questionnaire Survey, (2) Literature review and (3) Statistical analysis. The quantitative research method is applied for the first step of the research methodology to find the readiness factors including (Demographic, Information literacy competency and student satisfaction. Currently, there are three universities was popular in Aceh, Indonesia. This study used a literature review and quantitative descriptive analysis. The last method was used statistical analysis to find out what are the key factors were influences of libraries service instruction towards information literacy skill of Aceh Indonesian college students. The researcher was conducted exploration and clarification by describing some variables using inferential analysis. The survey will be taken in three Universities Syiah Kuala Banda Aceh, Universities Islam Negeri Ar- Raniry Banda Aceh and Institute Agama Islam Negeri Lhokseumawe from September until October 2018.Participant of this study were 400 college students in Aceh Indonesia from three Universities. Criteria which taken into consideration when college students registered in promoting and instruction libraries services and for information literacy skill, their condition is available for this type of study.

4. RESULT AND DISCUSSION

4.1 Research Result

This part describes the result where present in three section; firstly descriptive analysis result; (a) the level of information literacy skill of Aceh Indonesian college students, (b) the best strategies to undertake library service instruction Secondly, the research question analysis where present literature reviews; the strategies that could promote student's level of information literacy skill have been practiced over the world, and thirdly research question analysis ; (c) the key factors in the instruction of libraries service that will promote information literacy skill of Banda Aceh Indonesian college student.

1. Students' level of Information Literacy Skill

This analysis is trying to answer the question; the level of information literacy skill of Aceh Indonesian college students. The Information Literacy Competency Standards questionnaire was developed by assessment format of a five point Liker scale. In scoring the instrument, numerical values of 1-5 were assigned to each level of opinions: of 1=No skill, 2=Basic, 3=Good, 4=Proficient, 5=Expert, 332 students has attending library service instruction were completed the information literacy skills competency questionnaire

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Table 1 Mean and standard deviation of percentage scores of students according to
Information Literacy Competency Students

	N	Minimum	Maximum	Mean	Std. Deviation
Information Literacy Competency Students	332	25	125	73.08	18.208
Valid N	332				

Table 1 shows that the total score were summed in terms of the percentage of the total score, the mean (\bar{x}) of the total percentage score was 73.08, and standard deviation is 18,208. The average information literacy score was 73.08 out of 125 points.

Table 2 Percentage of criterion score in classification of Information Literacy Skill level ofAceh, Indonesia students

Percentage with	Percentage with	Percentage with
score ≥25	score ≥45	score ≥89
Low level	Moderate level	High level

Table 2 shows the criterion-scoring rubric used to evaluate the level of students' responses and scores were summed in terms. The percentage of the total score show the Information Literacy Skill level of Aceh, Indonesia students was 73.08 which was categorized at the "moderate level".

2. The Strategies for Promoting students' information literacy skill Indonesia

This analysis is trying to answer the question; what strategy that could promote student's level of information literacy skill has been practiced over the world. The conventional systematic literature review was run in Elsevier (The Journal of Academic Librarianship), Sage, Wiley, Theses and Dissertations from 2013 to 2018. Twenty-five articles were included for data extraction to answer the research question.

Table 3 Data of library service instruction program of three universities in Aceh Indonesia

University	Library Service Instruction Program	Facilities
Universitas	Indvidual consultation with librarian	The Internet (Wi-Fi)
Syiah	Online tutorial (chat, phone, email)	Library website link
Kuala	Teaching in class room	service
Banda Aceh	Lecture at the hall	Journal Resources Link
	General library guidance	The rooms
	Uilis.unsyiah.ac.id as a material online	The books
	for IL	Online Public Access
		Catalogue (OPAC)



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Universitas	Indvidual consultation with librarian	The Internet (Wi-Fi)
Islam	Online tutorial (chat, phone, email)	Library website link
Negeri	Teaching in class room	service
Banda Aceh	Lecture at the hall	The rooms
	General library guidance/ orientation	The books
		Online Public Access
		Catalogue (OPAC)
Institut	Indvidual consultation with librarian	The Internet (Wi-Fi)
Agama Islam Negeri	Online tutorial (chat, phone, email)	Library website link
Lhokseumawe	Teaching in class room	service
	Lecture at the hall	The rooms
	General library guidance	The books
		Online Public Access
		Catalogue (OPAC)

Table 3 shows that the universities providing five Library Service Instruction Program were Indvidual consultation with librarian, online tutorial (chat, phone, email), Teaching in class room, Lecture at the hall and General library guidance. The program such as lecture at the hall, library orientation and general library guidance were held annually for new students. The others program; individual consultation with librarian, online tutorial (chat, phone, email) and Teaching in class room has to engagement with student who need that program to solve students' academic problem. It appears that programs were the best strategies to undertake library service would promote the information literacy of Aceh Indonesian students. Furthermore there are a comparison between the three universities, Syiahkuala universities has more programs to improve student information literacy.

Instructio	n Session	Frequency	Percent
	1	191	57.5
	2	84	25.3
Valid	3	26	7.8
	More than 3	31	9.3
	Total	332	100.0
Kinds of instruction library service		Frequency	Percent
	Indvidual consultation with librarian	89	26.8
	Online tutorial (chat, phone, email)	24	7.2
Valid	Teaching in class room	66	19.9
Valid	Lecture at the hall	138	41.6
	General library guidance	15	4.5
	Total	332	100.0
Kind of in	nstruction library service	Frequency	Percent
	Indvidual consultation with librarian	143	43.1
Valid	Online tutorial (chat, phone, email)	40	12.0

Table 4 Data of Library Service Instruction of students perception

Teaching in class room	53	16.0
Lecture at the hall	23	6.9
General library guidance	45	13.6
No	28	8.4
Total	332	100.0

Table 4 denotes the percentage of instruction session of students. 178 were freshmen, 126 were sophomores, the majority of instruction session 191 (57.5%) were once, followed two session 84 (25.3%), other students attended instruction library service session more than twice, whereas three session were 26 (7.8%) and more than three were 31 (9.3%). It appears that all students get the library service instruction at least one session. The kinds of instruction library service respondents have participated in. It was described were 138 (41.6%) of respondents had attended introduction library services in the hall. Followed individual consultation services with librarians 86 (26.8%) and the others program were 66 (19.9%) teaching classrooms, 24 (7.2%) online tutorial services (chat, telephone, e-mail) and 15 (4.5%) of respondents had attended services given general guidelines about libraries.

All kinds of instruction library service had attended by students, hence in the table 5 also shows kinds of instruction library service solve student's academic problem. The majority of respondents 143 (43.1%) were chose individual consulting services with librarians help them in solve academic problem, followed librarian teaching in classrooms 53 (16.0%), other instruction library service program can solve student's academic problem were answered by respondent likely; online tutorial services (chat, telephone, e-mail) 40 (12%), and the general guidelines about libraries 45 (13.6%). The lower of instruction library service can solve the student's academic problem were in lecture at the halls 23 (6.9%) and some respondents 28 (8.4%) did not choose instruction library services program that helped solve academic problems.

The first	t step of students searching strategy at	Frequency	Percent
library			
	Locate books using the library's online cataloge	246	74.1
	Search a library database for journal articles	20	6.0
Valid	Analyze the topic to identify keywords or phrases and go to the filling book	61	18.4
	locate a newspaper or article based on own topic	5	1.5
	Total	332	100.0
library f	facilities that are preferred	Frequency	Percent
	The Internet (Wi-Fi)	219	66.0
	Library website link service	13	3.9
	Journal Resources Link	11	3.3
Valid	The rooms	20	6.0
valid	The books	36	10.8
	Online Public Access Catalogue (OPAC)	33	9.9
	Total	332	100.0

Table 5 Instruction Library Service data of students perception



Table 5 also shows the first step of students searching strategy at library and the percentage of Library Facilities that respondents like. From the table 5 above can be seen that the majority of the first step of students searching strategy at library was Locate books using the library's online cataloge 74.1 %, followed by Analyze the topic to identify keywords or phrases and go to the filling book 18.4% and the other first step in searching strategy at library was Search a library database for journal articles 6.0% and a little number of respondents answered locate a newspaper or article based on own topic 1.5%. As for the percentage of library facilities that are preferred, it shows that the majority of 66.0% of respondents who chose the Book, Online Public Access Catalog (OPAC) 9.9%, Room 6.0 %, Link library service website 3.9% and Link Resource Journal 3.3%.

Variation in the titles of IL credit courses and the facilities was noted in the academic libraries in Aceh, Indonesia. Each university had its own title for IL courses. Traditionally to promoting library of the university, library utilization instruction is to provide the educational experience for first year's student. Library orientations carry on stimulate instruction librarians everywhere. Accomplishment first-year students can pre-empt academic heartache and research the students needed continues to evolve [10]. A study "Library Experience and Information Literacy Learning of First Year International Students: An Australian Case Study" found that a robust response among students to the library environment is they spend in the library, and the beneficial nature of their endorsements for improvement suggest that they feel a strong connection with the library as a learning and social venue, frequently of Library utilization it will improve students learning.[11]

3. Key Factors are Influences to Promote the Development of Information Literacy Skill

This analysis is trying to answer the question: What are the key factors are influences to promote information literacy skill of Banda Aceh Indonesian college student. This research question was examined using The Pearson correlation coefficient and ANOVA. The Pearson correlation coefficient was used to examine the associated between the dependent variable Information literacy skill of students in Aceh Indonesia and independent variable

							Students	
	1 72	gender	CDA	Class	Family	Inform ation	satis faction	Instruction
	Age	gender	UFA	level	income	literacy skill	in library	session
							services	
Age	1							
gender		1						
GPA			1					
Class level	.462**			1				
Family income					1			
Information			**	**	**			
literacy skill			.223**	.232**	.278**	1		
Students								
satisfaction in						.300**	1	
library services								
Instruction			.177**					1
session								

Table 6 The Correlation Between Information Literacy Levels and Independent Variable

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

			-0-1-5	· · · ·		•
Statements		SS	df	MS	F	Sig.
Age	Between Groups	207.146	2	103.573	.311	.733
	Within Groups	109531.658	329	332.923		
	Total	109738.804	331			
Gender	Between Groups	527.693	1	527.693	1.595	.208
	Within Groups	109211.111	330	330.943		
	Total	109738.804	331			
GPA	Between Groups	6075.280	2	3037.640	9.641	.000
	Within Groups	103663.524	329	315.087		
	Total	109738.804	331			
Class Level	Between Groups	6440.338	2	3220.169	10.256	.000
	Within Groups	103298.467	329	313.977		
	Total	109738.804	331			
Family Income	Between Groups	8944.171	2	4472.086	14.597	.000
	Within Groups	100794.633	329	306.367		
	Total	109738.804	331			
Session Instruction	Between Groups	2758.376	3	919.459	2.819	.039
	Within Groups	106980.428	328	326.160		
	Total	109738.804	331			

Table 7 Information literacy and demography Analysis of Variance (ANOVA)

An analysis of variance (ANOVA) was conducted to explore whether differences existed between the demography of students regarding how the students responded to the statements on the Information Literacy Competency Standards. As shown in Table 7 the age was not significantly associated with students' information literacy skills, F (.311) =.733, p > .001. The Information Literacy Competency Standards was providing for college students whereas range age 18 – above 28 are college students there was no different in college range students. Gender was also not significantly associated with students' information literacy skills, F (1.595) =.208, p > .001 it means there is no different between female and male in information literacy competency, female and male has the same skill in information literacy and the session instruction F (2.819) =.039, p > .001 was significantly associated with students' information literacy skill, it's mean the instruction not yet given effect for information literacy skill hence there is no associated between instruction session and students' information literacy skills.

Furthermore, table 7 indicates that GPA was significantly associated with students' information literacy skills, F (9.641) =.000, p < .001 more likely to class level F (10.256) =.000, p < .001 it appears that sophomore and the higher class level has more knowledge and experience in information literacy and library service usage. Freshman students at University in Aceh Indonesia usually have one library instruction for new student and more than once library instruction sessions from three required General Education courses they taken. The family income also was significantly F (14.597) =.000, p < .001. The mean number of matches was significantly higher for high family income of participants compared to low family income of participants.

There is a relation between information literacy skill of student and students' satisfied with library service instruction



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 Table 8 Correlations between information literacy skill of student and students' satisfied with library service instruction

	information literacy skill of student	satisfaction
Information Literacy Skill of Student	1	
Satisfaction	.300**	1

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

In table 8 indicate that satisfaction of student satisfaction in library service instruction was correlated with information skill of student (p < 0.01) (r = .300, p < 0.01). So this means there is a positive correlation between student's satisfaction in library service instruction and information literacy skill of the student. Additionally, To find out the relationship between the dependent variable (Y) and the independent variable (X), the data analysis method was used simple regression analysis with the least squares equation (Ordinary Least Square) in estimating the model.

The formula was: Y = a + bX

Whereas:

- Y : information literacy skill of the student
- A : Constanta
- B : Regression Coefficients
- X : Student satisfaction in library service instruction The result was analyzed by SPSS and then presented in this table:

		s ^a			
Model	Unstandardized	Standardized Coefficients	t	Sig.	
	в	Std. Error	Beta		
(Constant)	43.030	5.349		8.045	.000
1 Student satisfaction in library service instruction (X)	1.115	.195	.300	5.710	.000
a. Dependent Variable: informatio	on literacy skill o	f student (Y)			

Table 9 Regression analysis.

Presenting the equation was: Y = 43.030 + 1.115X

The regression results for functional relationship satisfaction in library service instruction of student and their information literacy skill were Constanta = 43.030; it was mean if the Student satisfaction in library service instruction was 1, therefore the information literacy skill of student were 43.030 and the regression coefficient of the Student satisfaction in library service instruction (X) is 1.115; this means that every increase in Student satisfaction in library.

Disscussion

1. Information Literacy of College Students

To solve this problem, as appealed by ALA, The new ACRL Framework for Information Literacy for college students, were designed more conceptual than the ACRL original Standards, it offers an opportunity for librarians and other partners to approach teaching and learning. To complete the information literacy competency and evaluate the level of information literacy skill of the college students and find out what was the point problem in the information literacy skill competency, librarian should recognize the four dimensions of information literacy are (1) defining information needs represents an awareness of the features of the required information, (2) access to information defines the knowledge of how to acquire the required information in the most efficient way possible, (3) use of information includes strategies to utilize and present information effectively, (4) ethical and legal use of information dimension covers the knowledge [12] and The Framework was established to organized into six frames, each consisting of a concept central to information literacy, a set of knowledge practices, and a set of dispositions [13], with this framework, librarian can increase the level of information literacy skill of college student.

The obtained data, it can provide evidence about what academic institutions can do before realizing library service instruction to decrease and stunned the challenges in teaching the information literacy in universities. So, the librarian of the university involved in executing six frameworks should identify the problem that the librarian are facing and provide the necessary strategy and support to help overcome these challenges.

2. Factors Influence Towards Information Literacy Skill

In this study, the researcher has defined four influence factors was significant; GPA, Class level, family income and Student's satisfaction in library services. The result has confirmation of the information literacy skill of college students was influenced by the four factors. In this study showed that the GPA has a significant factor. It appears the associated between information literacy and GPA. Elizabeth and Sarah [14]argued that as moreand more libraries consider GPA and year-to-year retention was meaningful and severallimitations of broadly applying GPA as measures of student success were recently factors while completing assessment. Furthermore, a similar study found that the only factors that had an impact were ACT score and current college GPA.grade point average (GPA) to evaluate the students' information literacy skills definition is that not only current university GPA and standardized test scores have any influence on information literacy test scores.[15]

Further lanning and mallek suggest that the GPA is part of the factors but it even can as measured by their high school GPAs or standardized test scores, but the study insists did one-credit information literacy course is a very necessary part of students' academic careers and is very successful in teaching these critical skills. In table 7 Pearson analysis also shows that the GPA associated with instruction session, it appears that all students get the library service instruction at least one session. The kinds of instruction library service respondents have participated in It was described was 138 (41.6%) of respondents had attended introduction library services in the hall. The Greater Western Library Alliance (GWLA) found that the effect of information literacy in library instruction as fragment library service has on the educational success of the college. Achievement of the students in this study is measured by their GPA, if astudent had once or more than one course with a library instruction session, additional records were included for that student its related session characteristics were represented. A study found that negative effect was receiving library instruction can be expected to complete



the credit hours per academic year than those who did not attend the training [16]. While the GPA was high it supports by skill of information literacy of the college students.

In term class level this study shows that the class level has a significant factor. According the demographic results shows that 178 were freshmen, 126 were sophomores and according questions about instruction library service. The majority of instruction session 191 (57.5%) were once, followed two sessions 84 (25.3%), other students attended instruction library service session more than twice, whereas three sessions were 26 (7.8%) and more than three were 31 (9.3%). It appears that all students get the library service instruction at least one session by freshmen. The kinds of instruction library service respondents have participated in introduction library services in the hall. The researcher also gives the question and collect data about facilities in the library could promote the information literacy skill, such as Internet (Wi-Fi) as their preferred library facilities, the Book, Online Public Access Catalog (OPAC), Room, Link library service. website and Link Resource Journal and more ICT to use that facilities, it shows that experience in library utilization. A study "Library Experience and Information Literacy Learning of First Year International Students: An Australian Case Study" found that a robust response among students to the library environment is they spend in the library, and the beneficial nature of their endorsements for improvement suggest that they feel a strong connection with the library as a learning and social venue, frequently of Library utilization it will improve students learning. [17]

Another study proves that a one-credit information literacy course is part of a very important experience of a student's academic career and is very successful in teaching these important skills.[18] Thus, the sophomores should be a higher score than the freshmen, because the sophomore attended instruction library service more than twice and get more experience.

3. Strategies of Library Service Instruction Program

The current study is developing research on students' influence on library service instruction strategies that affect students learning IL education and skills.[19] Research in Library and Information Science (LIS) [20] area is needed to generate new knowledge and contribute to professional development and increase literacy in students. [21]At the same time, several studies developed and investigated the improvement of problem solving skills and librarians' decision making and made them critical consumers of academic literature.[22] Thus, the library and librarian make an effort to give a good effect for Information literacy of college student.

The result of this study shows that majority of the studies (14 out of 25, or 56%) were the journal articles published that the information literacy classroom programs was a strategy of library service instruction that affects students learning IL education. Teaching a fully weighted course in information literacy (IL) through course implementation, objective course and curriculum it was helping information literacy skill of student.[23] Subsequently, a model of teaching in class room with a group of student has the potential to help information literacy instructors understand and research the ways in which students transfer information literacy skills.[24] It appears that the information literacy classroom is a strategy as the program with content regarding framework by ALA could promote the information literacy college students. So, that program required by the student, the course is offered the positive outcomes. As asserted by ALA that this framework is provided by librarians in teaching for first year scholars, while the four dimensions of information literacy information literacy assessment as a measuring tool that shows the effectiveness of teaching in student learning and six frames each consists of the concept of information literacy centers, a set of practices knowledge, and a set of dispositions [25]. The library usages instruction program is provided for first year students early can prevent academic heartache and research despairs and students' lived experiences of utilizing the library and information, in general and for assignments.

Another study found that perceptions about the literacy value of standard competency and the Framework about individual experiences in applying the framework into information literacy skills instruction found that concepts from the Framework have influenced their teaching and help them to define the role of librarians better and the concept of information literacy, collaborate with faculty, and present new empirical research opportunities for academic librarians [26]. Hence, IL programs must follow the standards of the Association of College and Research Libraries (ACRL) and the American Library Association through the main purpose of these two associations were work on IL advocacy, communication plans, resources and services. They formulate new standards according to new challenges and technological changes related to IL issues. [27]

5. CONCLUSIONS

The results of this study point to useful future directions for instruction library service and the identification of the key information literacy needs that students have. There are four points to conclude in this study (a) information literacy skill level of Aceh Indonesia students is 73.08, whereas that level score was categorized at the moderate level, students are able to identify and elaborate on answers to some points. The students had lacked in technical skill and understanding skill. (b) Strategies that could promote student's level of information literacy skill have been practiced over the world were information literacy classroom. Those strategies as the student required a program have been practiced over the world. The program is offered positive outcomes for the student, such as the role of IL in higher education, engagements with instructors and student motivation. c) the best strategies to undertake library service according to strategies to undertake library service instruction in the three universities. The results of perception of the student about kind of library service instruction as a strategy can help the student to solve student's academic problem found that Individual consultation with librarian answered and teaching in classroom answered has majority percentage. On these grounds, that the best strategies to undertake library service instruction were instructors preparing their IL courses hence they should explain the process of search thoroughly, assisting students and be available and supportive along the whole search process and give feedback teaching in the classroom. Another strategy to undertake library services instruction is preferred library facilities such as the Internet (Wi-Fi), Rooms, books, and Journals. (d) The key factors in the instruction of libraries service that will promote information literacy skill of Banda Aceh Indonesian college student are GPA, Class level. Family income, and student's satisfaction. As a result of the correlation analysis conducted, the relationship level between information literacy and independent variable GPA, Class level, Family income, and student's satisfaction and a one-way ANOVA results also indicated that GPA, class level and family income significantly associated with students' information literacy skills. In addition, the regression result was conducted for functional relationship satisfaction in library service instruction of student and their information literacy skill.



REFERENCE

- [1] ACRL. (2016). *Framework for information literacy for higher education*. Retrieved from http://www.ala.org/acrl/standards/ilframework.
- [2] Benny, G., (2016). *Introduction to Quantitative Research*. https://www.resear chgate.net/publication/30599254.DOI:10.13140/RG.2.1.2786.5847.
- [3] Ben, V., K., Tamara. A., S., (2013). *Literasi Informasi Mahasiswa Tingkat Akhir., Sekolah Tinggi Ilmu Ekonomi Indonesia Banking School*. Journal Universitas Indonesia.
- [4] Arief., W., (2016). Profil Literasi Informasi Pustakawan Indonesia. Berkala Ilmu Perpustakaan dan Informasi - Volume XII Nomor 1.
- [5] ACRL. (2016). Framework for information literacy for higher education. Retrieved from http://www.ala.org/acrl/standards/ilframework.
- [6] ACRL. (2016). Framework for information literacy for higher education. Retrieved from http://www.ala.org/acrl/standards/ilframework.
- [7] ACRL. (2016). Framework for information literacy for higher education. Retrieved from http://www.ala.org/acrl/standards/ilframework.
- [8] Çoklar, A., N.,Yaman., N., D.,Yurdaku., I., K. Information literacy and digital nativity as determinants of online information search strategies. Computers in Human Behavior 70.
- [9] Joyner Library, (2017), Information Literacy Concepts: An Open Educational Resource. ECU. http://libguides.ecu.edu/c.php?g=17392&p=5113280.
- [10] Brown, L., (2017). You have one hour: developing a standardized library orientation and evaluating student learning. Education Libraries, 40:1.
- [11] Hughes, H., Hall., N., Pozzi., M. Library Experience and Information Literacy Learning of First Year International Students: An Australian Case Study. Communications In Information Literacy.
- [12] Ahmet, N, Ç., Nihal, D,Y., ,Is, K, Y. (2017) *Information literacy and digital nativity as determinants of online information search strategies.* Computers in Human Behavior 70.
- [13] ALA. (2016). Definition of a Library: General Definition. Retrieved from http://libguides.ala.org/library-definition.
- [14] European Conference on Information Literacy (ECIL)., (2017). A Finnish Academic Libraries'Perspective on the Information Literacy Framework. Saint-Malo, France.
- [15] Lanning, S., Mallek, J. (2017).Factors Influencing Information Literacy Competency of College Students. The Journal of Academic Librarianship, (43) 443–450. http://dx.doi.org/10.1016/j.acalib.2017.07.005.
- [16] Glenn, J., Susan G., Elisa S., Lindsey, (2016) PERSPECTIVE ON ; Patience, Persistence, and Process: Embedding a Campus-wide Information Literacy Program across the Curriculum, The Journal of Academic Librarianship (42)750–756.
- [17] Hughes, H., Hall., N., Pozzi., M. Library Experience and Information Literacy Learning of First Year International Students: An Australian Case Study. Communications In Information Literacy.
- [18] Karen, S. (2018) The Actor-oriented Transfer Perspective in Information Literacy Instruction. The Journal of Academic Librarianship 44 627–632.
- [19] Marcia E, R., (2018) Collaborative Learning in an Information Literacy Course: The Impact of Online Versus Face-to-face Instruction on Social Metacognitive Awareness. The Journal of Academic Librarianship 44 383–390.

- [20] Noa A., Tali G.(2018) Students' information literacy self-efficacy: An exploratory study.JournalofLibrarianshipandInformationScience113sagepub.com/journalspermissionDOI:10.1177/0961000618790312journals.sagepub.com/home/lis.
- [21] Lorelei, R., Sarah, L. (2017) Broadening Boundaries: Opportunities for Information Literacy Instruction inside and outside the Classroom. Libraries and the Academy, Vol. 17, No. 2, pp. 347–362. Johns Hopkins University Press, Baltimore, MD 21218.
- [22] Ángel B, Jordi A, Cristóbal U. (2018) Librarians as Research Partners: Their Contribution to the Scholarly Endeavour Beyond Library and Information Science. The Journal of Academic Librarianship 44 (2018) 663–670. https://doi.org/10.1016/j.acalib.2018.07.012.
- [23] McKeever, C., Bates. J., Reilly. J (2017). School library staff perspectives on teacher information literacy and collaboration. Journal of Information Literacy, 11(2) http://dx.doi.org/10.11645/11.2.2187.
- [24] Kultawanich., K., Koraneekij.,P., Na-Songkhla., J. (2015) Development and validation of the information literacy assessment in connectivism learning environment for undergraduate students. Procedia Social and Behavioral Sciences 1386 1390.
- [25] ALA. (2016). Definition of a Library: General Definition. Retrieved from http://libguides.ala.org/library-definition.
- [26] Melissa, G., Don, L., Heidi, J. (2018) What the framework means to me: Attitudes of academic librarians toward the ACRL framework for information literacy for higher education. Library and Information Science Research. https://doi.org/ 10.1016/j.lisr.2018.09.008
- [27] Munazza J, Liu Y, Muhammad R, Misbah J, Muhammad A. (2014) Information literacy in academic and research libraries of Beijing, China: Practices, methods andproblems.InformationDevelopment,Vol.32(3)579591sagepub.co.uk/journ alsPermissions.navDOI:10.1177/0266666914562845idv.sagepub.com

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