CHILDREN INFORMATION SEARCH ABILITY ON SEARCH ENGINE BASED ON SURVEY IN ACEH

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Abstract
This study discussed about children information search ability on search engine. This study is quantitative research and the instrument for this research developed by the researcher on basis of objectives and theoretical framework. The instrument of this research was questionnaires. The survey was conducted on November 2017, in Aceh, Indonesia. Total number of children were 300 who responded from three public elementary school. The result of this study describe children's search ability on search engine.

Keywords: *Information search ability, Search Engine, Children,* and *Aceh*

1. INTRODUCTION

Currently the Internet widely used by information seekers in an effort to meet the information needs [1]. The development of the internet in Indonesia gives a huge impact, it can be seen from the internet in Indonesia that each year user increases. Based on Asosiasi Penyelenggara Jasa Internet Indonesia (APJII, 2014) survey, internet usage in Indonesia is increasing every year. In 2002, the number of internet users in Indonesia reached 4 million people, compared to 2000 only 1.9 million people, then in 2003 to 12 million, in 2004 to 14 million. In 2005 through 16 million, in 2006 rose again 18 million, in 2007 to 20 million people, and in April 2008 reached 28 million users. And in 2012 internet users in Indonesia has reached 63 million people. In 2016, the number of Internet users in Indonesia was 132.7 million users or about 51.8% of the total population of Indonesia which was 256.2 million then. Comparing with survey (APJII, 2014), the number of internet users was 88 million or about 51.5 %. This indicates that the number of internet user in 2016 increased significantly. In the same survey (APJII, 2016) found 786 thousand children aged 10-15 years using the internet actively. Children have been growing considerably more acquainted with technologies such as computers and the Internet. Children are part of a community experiencing a metamorphosis, these children are called cyber kids or the digital generation [2]. Some refer to these children as 'born digital' because they are born in the digital era. The digital generation or cyber children in this sense are a generation that is already familiar with information and communication technologies. This generation is the "player" of the internet, they find their ability to move online independently, and when compared with adults they are better able to master it.

Ministry of Information and UNICEF Indonesia (2014), observed that information searching by children is often driven by schoolwork and there are three motivations for children to access the internet, which is to search for information, connect with friends (old and new) and for entertainment. Basic search ability is an essential skill for children to be successful in school, in place of they are asked to complete in-class assignments and homework that hang on searchability. But even though, children seem common with internet and quite easy to search information on the search engine, but do they find information easily which is relevant to their need? While the use of search engines for the enhancement of learning tasks is very common, they are not designed with children in mind, and thus a number of issues arise when used by this audience [3]. Although most

children search what they want from the internet, many of them find it difficult to retrieve information that can help solve their problems especially school homework. The problem of finding relevant information may range from search engine tools they use to poor information search skills. Some factors that restrain children in Indonesia from retrieving important information relevant to their study can best be explained by carrying out in this quantitative study. The researcher will give an answer to the questions: What children's search ability of using search engines?

A search engine is a tool of information retrieval on the internet to large database collection. The term "search engine" gradually came to be used in preference to "information retrieval system" as the name for the software system that compares queries to documents and produces ranked result lists of documents. Currently, Search engines have become indispensable for all types of users, from novice to experts and from children to scholars, to perform information-related tasks.[4] The emergence of the internet increasingly opens opportunities for anyone including children to meet various information needs. Information that was originally obtained from schools, libraries and school textbooks are currently obtained using search engines facilities. Children are the fastest growing group of users on the Internet, there is a difference in the use of children's online activities; children use the web search engine to collect information related to their interests and school activities. In the line with the use of Web technologies is increasingly becoming a convenient and valuable asset for children's education [5], because it facilitates learning [6], Children are very enthusiastic about internet technology; in their opinion that by using the internet they could gain greater opportunities [7].

Children ages 11 to 13 reported four major reasons for using the computer for search: an increase in self-confidence, for the challenge of using the web, for a discovery of information, and for convenience [8]. Children can easily search information in any forms simply by typing in keywords on search engines. Google is one of the most widely used search engines in Indonesia based on surveys [9] there are four search engines that are often clicked by Indonesians, Google (98.09%) in first place, Yahoo (1.29%) in the second, and then Bing (0.43%), followed DuckDuckGo (0.6%), MSN (0.4%), and other search engines (0.9%). This founding was including children as the user of the internet in Indonesia because children in Indonesia were using the same search engine likely adult. From many of search engines and even, there is Yahoo! kids which targeted for children ages 7 to 12, who also has facilitated zone for study and homework help, query questions and answers, and resources for parents, but children prefer to use Google. Google is the leading search engine designed for general use but is the most liked and utilized by children [10]. Dutch children prefer using Google as their primary source for information-seeking [11]. Also, he exposed that almost 80% of children ages 8-12 in the Netherlands in 2008 used the Google-search engine to find information on the Internet. [12] Described that children desired to apply search engines to seek information for schoolwork as well as play game. Therefore, children may treat a retrieval interface as a toy in searching for information as a form of entertainment or take an interface as a learning tool for problem-solving.

At the ages of 6–10 children learn to read. They read simple books by mid-first grade and know about 100 common words. They learn to write with an understanding of words by first grade. They can write stories with a character, action, setting, and a little detail by second grade [13]. And formal operational stage (age 11-. . .) Adolescents in the formal operational stage learn to think logically about abstract concepts. This stage begins around age 11 and is typically achieved by age 15 [14]. At the age of eleven to thirteen adolescents read to learn about their hobbies and other interests. They read to study for school, understand more fully what they have read, read fiction, and nonfiction, including

magazines and newspapers. Their writing skills are more developed with the use of correct grammar, punctuation, and spelling. They become more fluent writers. They use a computer for writing and research.[15] Thus, it can be agreed children retrieval abilities differ from adults. [16] A survey has done by Medienpädagogischer Forschungsverbund Südwest in 2011, found that 23% children from 8-9 years old success to search information on the internet by their own ability, children 10-11 years old success 39%, whereas 50% children 12-13 years old ability appear to know very well how to search information on the internet. But they are still immature users of the web, undergoing through the process of cognitive, physical, emotional and social development [17]. Therefore, in this case, researchers will explain the abilities of children in finding information on search engines in this research.

1.1 Creating Search Queries

In information search on search engine there are two search strategies; Browsing and searching. [18] Found that twelve children aged 6 through 7 are capable of using both keyword search and category browsing, but generally prefer and are more successful with category browsing. There is a fact that search engines are not always effective in understanding children information needs, particularly because children often express those needs in long natural language or with ambiguous queries [19]. Numerous studies found that children when creating search query have difficulty. As disclosed [20] Children have difficulty formulating queries, and also less successful with the keyword search. Children face issues when using a search engine is creating queries that will eventually lead them to the information they are looking for.[21] Many search engines do not help children much in formulating queries or avoiding errors [22]. Often it is difficult for children to find the right category because they have only little domain knowledge and a smaller vocabulary than adults [23]. The limited domain knowledge of children is also a problem in keyword-oriented search engines, in order to formulate a search query, the user needs sufficient domain knowledge to find useful keywords [24]. Children understand that they have to input keywords, but it is difficult for children to select the keywords because it requires the ability of thinking in abstract categories [25]. Because children learn to think logically about abstract concepts only from the age of eleven [26]. Additionally, Children did not use advanced search syntax like Boolean operators "And, Or, Not".[27]

1.2 Typing Query

Another important barrier is children are not able to type queries without looking at the keyboard (touch-typing), Instead they typically "hunt and peck" on the keyboard for the correct keys [28]. So that for children typing a query is very time consuming, by looking at the keyboard while typing, children often do not spot spelling mistakes [29]. 32 children in the age range of 8, 9, 10, 11, 12 years was observed on how they search information for a school assignment.[30] The aim was to identify what problems children experience while conducting the search tasks on the interfaces. Several critical problems that children experience in using search engines were uncovered, these include problems with spelling and typing. Children's queries have a more informational intention in contrast to the ones of adults, they are misspelled more often and shorter on average, they surprisingly tend to undo spelling corrections provided by the search engine to insist on their original spelling, they also tend to click on the first results presented. As well, children tend more to use natural language queries, i.e. phrases or sentences more frequently [31]. The difficulty of knowing how to spell a search term was also a common problem children face [32]. Children often make spelling errors [33]. Spelling and typing

difficulties to be the most common reason for search failure with children aged 7-11. Various studies show children have difficulties in selecting the right words, they frequently make error spelling keywords or use keywords that are too wide or too narrow. The vocabulary problem is known as a major problem in information retrieval.

1.3 Select Appropriate Information

An additional difficulty for children is to find the relevant results among the search results. Children have differing needs, skills, search criteria and search strategies than adults. It is the reason of why children have difficulties with finding relevant information on search interfaces provided for them on the internet. Generally, relevance from the user's perspective is a match between the content of a document and the user's information need as perceived by the user. Refer to students experienced difficulty in making selection decisions for good Web sites. In a recent study of children's interaction with Google observed 12 children ages 7, 9, and 11 years old while they searched for information on assigned tasks, found that the majority of these young users never went beyond the first results page and that their selection mainly included the first top-ranked result on the first page and results ranked 2 to 6. Noted that difficulties with result selection are common as are problems with reading comprehension. Many researchers have recognized that children encounter difficulty when selecting a result from the list after entering a query. Wallace and Kuperman in Bilal (2000) found that children made many navigational moves, but rarely examined more than five links from the latest hit list, used repetitive keywords in their searches, employed natural language in their search statements, and had problems with broadening and narrowing searches. Children are not properly trained to identify high-quality, suitable resources from among those retrieved by their favored search engines. A comparison of Google to other search interfaces with differences such as menu structure and density of information find that children 8 to 12 year's old encountered difficulty selecting results. In Google, children had trouble deciding which sources were related to their search task, and in other interfaces, they could not discern that results were clickable. Children have difficulties to judge the relevance of the retrieved documents to their information need (Bilal, 2000).

Moreover, children should understand that results are clickable. Otherwise, children would expect this short text to be already the answer to their information need (Jochmann-Mannak, Huibers, Lentz, & Sanders, 2010). Children are frustrated if the search engine returns a lot of results. Children often have a problem in choosing relevance result judgments, they choose a specific word from the result, and if they find that the result not containing the word in their topic they judge the result is not relevant (Frans, 2010). Additionally, children tend to take everything as being true and correct (Schacter, 1998). (Hutchinson et al., 2006) exposed that children are capable of using both keyword search and category browsing, but generally, they prefer and are more successful with category browsing. It showed that children meet struggle in selecting their appropriate result.

1.4 Understand the Information

The definition of what children understand to be good information was investigated by Harter in (Shenton, Nesset, and Hayter, 2008 in Bilal, 2012) they found that children had varied conceptualizations of what constitutes "good information." These included "pertinence to the user's requirements," "meeting need or a want," "finding what one is looking for," and "information about what the topic is." Children are problems with reading comprehension (De Belder & Moens, 2010). (Bilal and Boehm, 2013) Identifies that out of 300 retrieved results to satisfy the information needs of seventh graders, only one matched their reading level. (Wallace and Kuperman in Bilal, 2000) Children tended to seek answers rather than aim for understanding, did not evaluate the sources found. It

this not possible for children to use resources that are too hard for them to understand because the readability levels of the resources do not match to their respective reading comprehension abilities. (Collins-Thompson et al., 2011 in Azpiazu, et al., 2017) Reading proficiency and ability to understand vocabulary in children are different because it is depending on factors such as age, educational background, and topic interest or expertise. Further, (Lennon and Burdick 2004 in Azpiazu, et al., 2017) discussed that a reader must be able to read and comprehend at least three-quarters of a text if learning is to occur as a result of reading. This ratio is meant to set a balance between what the reader understands and the existence of challenging passages that will lead to the improvement of reading comprehension skills. Children' s vocabulary is not appropriate to understand many of the terms used as subject titles, even for books intended for their age group. (Moll, 1975 in Borgman, 1995) found that subject titles often stayed at a higher reading level or below the grade level of the book itself. Children's level of understanding of the type of information sought shown that most children (64%) were seeking information about the topic rather than a specific answer to the search task (Bilal, 2000). "Reading and understanding different forms of web content (e.g., titles, links) might be difficult for middle school children to comprehend" (Bilal, 2013).

2. RESEARCH METHOD

This study used structured questionnaires data collection methods that was used to 300 children in three elementary schools in Aceh. The instruments in this research were developed by the researcher on the basis of objectives and theoretical framework. The questionnaire in this research similar to the questionnaire designed by (Jochman, 2010) which children were asked about demographical data, such as age, grade, and gender, and children's Information search abilities. The same questionnaires were administrated to all elementary school children involved in the study.

2.1 Participant. The study samples consisted of total 300 children, there were 198 boys and 202 girls. Children who participated in this study were restricted ages from 10 to 12 years old. Children were recruited from public schools who studied in three different elementary schools; SD 1, SD 20, SD 67 which located in Banda Aceh, Aceh, Indonesia. Criteria which taken into consideration when selecting the sample was that the students selected must be conversant information and communication technology. These students were recommended by their teachers in the schools and classroom survey method was used to collect the data.

2.2 Data Collection Procedure. The researcher was targeted that 100 children from each school. Three or four classes were selected from each school by the schools itself. Schools were required to ensure that they included classes from grade 4, 5 and 6 in the elementary schools. Questionnaires were distributed to children at each school on different dates. The duration of each session in one class was about one hour in each elementary schools; where children were assisted by four researchers and the students were free to ask questions for more clarifications. In every class, the researcher explained about the purposed of the questionnaires and explain detailed how to fill the questionnaires. After children answer the questionnaires, researchers were given the responses from their answer likely asked the answer they were filled to ensure that children fully know what they fill and to get more explained from children. The researchers have given the same treatment in each class.

2.3 Data Analysis. This analysis is trying to answer the question; what information search ability of children on search engine*.*

(1) Creating Search Query

Table 1: Do you usually use sentence or keyword when search information?

		Frequency	Percent
	Sentence	160	40.0
	Keyword	60	15.0
Valid	Use both	134	33.5
	I don't know both of that	46	11.5
	Total	400	100.0

Table 1 depicts the number of children who use "sentence" in searching information were 160 (40%), children who "use both" sentence and keyword were 134 (33.5%), those who use "keyword" were 60 (15%), and children who answered "I don't know both of that" were only 46 representing (11.5%).

Table 2: What will you do when you search information on the internet?

		Frequency	Percent
	I will use dictionary before search for information I need	75	18.8
Valid	I will use thesaurus (explanation book term) before search for information I need	161	40.3
	I will ask to people who will understand	88	22.0
	I just choose the keyword by myself	76	19.0
	Total	400	100.0

Table 2 indicates that many children answered "I will use thesaurus" when searching information 161 (40.3%), "I will ask to people who will understand" were 88 (22%), children who answered "I just choose the keyword by myself" were 76 (19%), and 75 (18.8%) answered "I will use dictionary before searching for information that I need".

Table 3: When search information on the internet about "How invertebrate animals are breed", what does the keyword do you type?

		Frequency	Percent
	Invertebrate	52	13.0
	How animals breed	84	21.0
Valid	Vertebrata	47	11.8
	Invertebrate animals breed	217	54.3
	Total	400	100.0

Table 3 shows over half of children answered "Invertebrate animals breed" 217 (54.3), "how animals breed" were 84 (21%), children who answered "Invertebrate" were 52 (13%), and the other answered "Vertebrata" 47 (11.8%).

Table 4: If you want to search about "fruit", so you want to find mango and apple not orange. How can you type the keyword?

		Frequency	Percent
	Apple or mango	41	10.3
	Fruit not orange	16	4.0
Valid	Mango and then Apple	6	1.5
	Mango and Apple	337	84.3
	Total	400	100.0

Table 4 summarises that the highest number of children who answered "Mango and Apple" 337 representing (84.3%), the others answered "Apple or Mango" 41 (10.3%), "Fruit not orange" were 16 (4%), and "Mango and then Apple" were 6 (1.5%).

Table 5: When search information on the internet, the result will be many there. How do you use keyword so that you get what you want?

		Frequency	Percent
	I use "AND", "OR", "NOT"	299	74.8
Valid	I use "....." sign	35	8.8
	I don't use anything	66	16.5
	Total	400	100.0

Table 5 shows that many children who use "AND", "OR", "NOT" were 299 representing (74.8%), those who don't use anything were 66 (16.5%), and children who use quotes ("....") sign" were 35 representing (8.8%).

(2) Typing Query

Table 6: How many words you can type on Microsoft office in five minutes?

		Frequency	Percent
	Less than 100 words	211	52.8
	100 words	103	25.8
Valid	200 words	39	9.8
	More than 200 words	47	11.8
	Total	400	100.0

Table 6 below shows that 211 representing (52.8%) children can type less than 100 words, 103 representing (25.8%) can type 100 words, 39 (9.8%) children can type 200 words, and only 47 (11.8%) children can type more than 200 words in five minutes.

Table 7: Do you think typing is difficult?

		Frequency	Percent
Valid	Yes	342	85.5
	No	58	14.5
	Total	400	100.0

Further, table 7 shows that more than half of children answered "yes" they think typing is difficult 342 representing (85.5%) and few of the children answered "no" they did not think that typing is difficult 58 representing (14.5%).

Table 8: How long do you need to search information online?

		Frequency	Percent
Valid	Less than 10 minutes	191	47.8
	11 minutes – 20 minutes	94	23.5
	21 minutes – 30 minutes	65	16.3
	More than 30 minutes	50	12.5
	Total	400	100.0

Table 8 depicts most of the children was taken less than 10 minutes to searching information 191 representing (47.8%), 94 (23.5%) children answered 11 minutes to 20 minutes to searching information, children answered 21 minutes to 30 minutes were 65 (16.3%), and 50 representing (12.5%) children answered they take more than 30 minutes to searching information.

(3) Select appropriate information

Table 9: How do you select information on internet?

		Frequency	Percent
Valid	Select the first page result	130	32.5
	Select the interesting result	34	8.5
	Select by the heading	236	59.0
	Total	400	100.0

Table 9 shows over half of children answered "Select by the heading" about select information on the internet were 236 (59%), children answered "select the first page result" when selected information on the internet were 130 representing (32.5%), "select the interesting result" were 34 representing (8.5%) children.

Table 10: What problem do you encounter as you search information from the internet?

		Frequency	Percent
Valid	Choose the keyword	125	31.3
	Typing and spelling words	59	14.8
	Choosing the relevant result from many	161	40.3
	I don't get what I want	55	13.8
	Total	400	100.0

Table 10 shows children encounter problem in choosing the relevant result from many were 161 (40.3%), those who encounter problem in choose the keyword were 125 representing (31.3%), and children who encounter problem in typing and spelling words were 59 (14.8%), and 55 representing (13.8%) children were answered they don't get what they want.

(4) Understand the information

Table 11: Do you find the information which is you need on the internet?

		Frequency	Percent
Valid	Yes	52	13.0
	No	38	9.5
	Sometimes	310	77.5
	Total	400	100.0

Table 11 shows that many children who answered "sometimes" find the information that they need on the internet 310 representing (77.5%), the rest of children answered "yes" they find the information that they need on the internet 52 (13%) and just little number of children who answered exactly "no" they did not find the information that they need on the internet 38 (9.5%).

Table 12: There are so many website choices on the internet, what does your strategy to choose information which is you need?

		Frequency	Percent
Valid	Understand the information	314	78.5
	Judge by the topic	51	12.8
	Instantly choose it	35	8.8
	Total	400	100.0

Table 12 summarises that most of children answered they choose the information that they need by understanding the information wanted 314 representing (78.5%), 51 (12.8%) children were judged by the topic they need, and the rest instantly chose the result 35 (8.8%).

3. RESULT AND DISCUSSION

This study found that children often search for games, movies, other entertainment and also lesson on the internet, this is similar to (Gossen & Hempel, Et al, 2012), which found that children use the internet not only for entertainment but also plays an increasing role in education. In the same research were found that about half of the children are search information for education purpose at least once per week, they are looking for facts about historical events, mathematical formulas, the latest news and much more. This study found children were searching information in Google than others search engine, this result is similar to (Bilal, 2003; Druin et al., 2010; Olsen, 2009) Google is the leading search engine designed for general use but is the most liked and utilized by children. As defined by (Piaget, and Inhelder, 1969) about human development information processing and human psychosocial development, children in Concrete operational stage (age 7 – 11) they use the trial and error approach, and begin to reason logically. But, their understanding is limited to concrete and physical concepts, they can classify physical objects according to several features and order them along a single dimension for example size (Ormrod &Davis, 1999). Refer to (Piaget, 1969), children in this study were ten to eleven years, children in this age are not fully mature in information retrieval that is why search information on the internet is difficult for children. **(1) In creating search query**, In this study found that Indonesian children face the problem in creating search query, almost half of the children 160 (40%) use sentence when creating their search query, even though 134 (33.5%) children also use both of sentence and keyword, still it shows that they face problem in creating queries, researcher was investigated children who answered use sentence and keyword, and found that children were used sentence before keyword because they did not find the information that they need when they use sentence, and then they try to create a keyword that describes their information need till they find what they want.

The researcher also found that 161 (40.3%) children tend to use explanation book term before they create a query. But the interesting found from Indonesian children was that they answered "Mango and Apple" 337 (84.3%) when researcher ask "if you want to find mango and apple, not orange. How can you type the keyword?" It seems like they understand how to create a keyword for what they want to search. 299 (74.8%) Children also answer "I use "AND", "OR", "NOT" but they do not really understand what this Boolean operator stand for, they just put the "and" when they want to search two things. But still, when the researcher asked about what problem they face in searching information on the internet they answered face a problem when choosing the keyword (31.3%). As mention by (Piaget, 1969) children have more difficult time verbalizing their thoughts, especially when it concerns abstract concepts and actions.

This study shows that children were not good in searching information, (Borgman, 1995; Hutchinson et al, 2006; Druin, 2003; Bilal, 2000; Schacter et al., 1998) stated that browsing oriented search tools were better suited to the abilities of children than are keyword search tools because recognition imposes less cognitive load than recall. The result of this study similar to (Bilal, 2002; Large, Beheshti, & Breuleux, 1998) Children have difficulty formulating queries, and also less successful with keyword search (Bilal, 2002) and they have difficulties to express their information needs using keywords (Gossen, 2013). **(2) In typing query**, the researcher found that most of 211 (52.8%) children only can type less than 100 words in five minutes, because children 342 (85.5%) think that typing is difficult. Children naturally "hunt and peck" on the keyboard for the correct keyword (Borgman, 1995). When asking about their problem in searching information, children answered typing and spelling words 59 (14.8%) were their problem nevertheless the children number was not many. This found was similar to (Gossen,

2012), her study found that typing a query is very time consuming, by looking at the keyboard while typing, children often do not spot spelling mistakes. It is shows from Indonesian children perform in searching information they answer that they need less than 10 minutes 191 (47.8%) and 94 (23.5%) answer 20 minutes for one query they want to search. (Druin et al, 2009) stated that children may face difficulties with spelling and typing. As defined by (Bilal, 2002) children have difficulties in selecting the right words, they frequently make errors spelling keywords. Moreover, children use natural language for their queries so this proves more difficult for children when typing.

(3) Selection of appropriate information, Indonesian children seems to be good in select the appropriate information. Children 236 (59%) answered that they select by the heading of the result list when they get the result after input their query in the search engine. In contrast with (Kafai and Bates 1997) in his study, he found that children experienced difficulty in making selection decisions for good Web sites. But researcher also found an interesting result that children still answered that they encounter a problem in choosing the relevant result from many 161 (40.3%) in the result list. In line with (Druin et al. 2009) he observed 12 children ages 7, 9, and 11 years old interaction with Google found that the majority of these young users never went beyond the first results page and that their selection mainly included the first top-ranked result on the first page and results ranked 2 to 6. This study also found that children 130 (32.5%), just select the result from the first-page result when select information on the internet. So that children do not read more than one page of the result, they just pick the result which answers their query. **(4) Understand the information,** most of children answered that they choose the information which they need by understanding the information 314 (78.5%) also children said that positively they found what they need on the internet 52 (13%) but on the other hand, many children 310 (77.5%) who stand for that sometimes they find the information which they need on the internet, this shows that Indonesian children do not understand the information where they find on the internet. As stated by (Wallace and Kuperman in Bilal, 2000) Children tended to seek answers rather than aim for understanding, did not evaluate the sources found. It this not possible for children to use resources that are too hard for them to understand because the readability levels of the resources do not match to their respective reading comprehension abilities. The researcher has investigated children who answered sometimes, they decide that because sometimes the information was too long and they did not understand the content of information result, this relay with (De Belder & Moens, 2010) found that children face problems with reading comprehension. Shenton, Nesset, and Hayter (2008) in Bilal (2012) gave the definition of what children understand to be "good" information and they found that children had varied conceptualizations of what constitutes "good information." These included "pertinence to the user's requirements," "meeting a need or a want," "finding what one is looking for," and "information about what the topic is".

4. CONCLUSION

The current study is based on self-report of children. On the other hand, it means these findings may lack depth and richness. Therefore, the future research may take both of quantitative and qualitative studies that could be doing interviews, questionnaires and observation when children search information on search engine especially Google that was the most used search engine by children in Aceh.

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