

DISCREPANCY OF GRATIFICATION SOUGHT AND GRATIFICATION OBTAINED IN USE OF PRINT AND ELECTRONIC INFORMATION RESOURCES BASED ON GENDER AND FIELD OF SCIENCE AT UNIVERSITY OF SUMATERA UTARA LIBRARY, INDONESIA

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ABSTRACT

The use of electronic information resources in several University libraries tend to increase than the use of print ones. Data at the University of Sumatera Utara Library describe different circumstances, that in general the use of electronic information resources are higher than the printed information resources, but specifically for text books, the use of printed textbooks still tend to be higher than the use of e-books. The objective of this study is to investigate discrepancy of gratification sought and gratification obtained of the use of printed and electronics information resources by undergraduate students at the University of Sumatera Utara Library. The method conducted in this study was a survey with data collection via questionnaires. The study sample consisted of 438 students from 47 undergraduate courses level (S1) at the University of Sumatera Utara. Data analysis and hypothesis testing was done using computer application programs for statistics, SPSS version 17 with test multivariate analysis of variance (MANOVA) and the Chi-Square test of Pearson. The result of this study clearly shown that, the discrepancy of gratification sought and gratification obtained by students of using various types of information resources of the University of Sumatera Utara Library did not differ significantly by gender, but differed significantly based on field of science.

Keywords: Gratification Sought, Gratification Obtained, Information Use, Library Use

INTRODUCTION

The presence of information technology brings great impact to all aspects of library services. Information technology affects library management (Aremu & Saka, 2006), and “role of libraries in the age of information and knowledge Societies” (Singh & Nazin, 2008). Information technology not only affects the technical services of libraries but also shapes the library services that are being offered to the public, and improves service quality (Rasul & Sahu,

2011). Library services now have to take advantage of information technology infrastructure such as the internet, using a number of computers and other equipment in order to access various electronic information resources available both in the library and in cyberspace. In addition, the presence of information technology in the library also affect user's behavior, especially in the search for information (Manikandan et al., 2013; Tanaka et al., 2017), the competence of librarians and/or library staff (Khoo, 2005) and also to the development of the collections of the college (Thornton, 2000).

Information technology encourages rapid growth of the information, especially, electronic information. The growth of such information significantly influences the growth and development of library collections, especially the college library. The presence of electronic information resources in the college library may be a new challenge. The establishment of paper-based information resources challenged by an electronic information resource that offers a different way of storing and information and otherwise may be new opportunities that enrich the availability of printed information resources that previously dominated the collections. The availability of electronic information resources will increasingly provide many options of information resources for library users. A common phenomenon shows the tendency of library users, especially at the college library in the use of electronic information resources both scientific and non-scientific increasingly widespread, there are even higher than predicted by the use of the resource is printed. Interest in utilizing electronic information resources in scientific communication today is growing (Al et al., 2010). The use of electronic information resources in a number of university libraries tend to be more rapid than printed. The study of Zha et al. (2012) in a number of University Libraries in China showed that the increased use of electronic resources, while the use of printed information resources tend to decrease. Even though there is a tendency increased use of electronic information resources, but the phenomenon is not always justifiable as an absolute truth. Recent research on the use and satisfaction with the use of electronic resources and printed performed by Cassidy et al. (2012) at Sam Houston State University in the United States show different things with previous studies. Research results show that, "Overall, 38% of the respondents have used e-books from the library. Among respondents who have used the library e-books, when given the option, 28% would prefer e-books and 31% would prefer print books. The latter finding likely reflects user preference for particular e-book platforms interestingly, more e-book users (70%) than the non-users (31%) reported a dislike for e-books as the reason they prefer print".

Phenomenon at the University of Sumatera Utara Library (USU Library) shows that for this type of specific electronic information resources, its use is higher than the printed format, but contrary to the type of printed information specific resource use is higher than an electronic format. Data use of information resources at the USU Library within the last five years shows that the use of printed information resources tend to decrease by approximately 1.8% per year, while the use of electronic information resources increases significantly for about 19.8% per year in last five years. The increased use of electronic information resources and a reduction in the use of resources of the printed information relating to the needs and user satisfaction. The use of electronic and printed information resources happened at USU Library becomes such an interesting phenomenon to be studied. The use of electronic information resources increases

when the number of items of electronic collections are extremely few in number, only about 10.3%, of the total collections owned by USU Library, compared with the number of printed collections, which accounted for 89.7% of total collection. Based on these data, the use of printed information resources should be higher than on electronics, but what happens is precisely the opposite. Why users are more predominant use of electronic information resources, what satisfaction obtained from the use of it to be an interesting phenomenon under study.

Despite the increased use of electronic information resources compared with printed information resources, however, if investigated further increase was not the case for all types of information resources. The use of textbooks, the situation is precisely the reverse. Phenomenon at the USU Library (USU Library Report, 2015) of approximately 3.82 titles of textbooks in electronic format (e-books), only about 103,140 titles that are used and/or read during 2014, so that the level of use (turnover rate) is 0.27. This means that only 27% of the total e-books are readable owned or used by the user during 2015. Unlike the case with printed text books, from about 474,177 copies of books printed owned evidently borrowed 207,615 copies during 2015, so that the utility level is 0.44 or about 44% of the total printed books owned by the USU Library borrowed by the user and this data does not include books read in the reading room. The above data illustrates the conflicting and different circumstances of research and issues raised earlier, that specifically for textbooks, the utilization of printed textbooks still tend to be higher than the e-book. Therefore, the phenomenon of the tendency of the increasing use of electronic information resources compared with the use of printed information resources cannot be taken for granted, still need to be investigated further. Resource use printed and electronic information is still an issue that continues to be debated and researched interesting, and that's the background of this study.

LITERATURE REVIEW

Information resources available in the library are also a portion of the media. Various types of recording media or library materials are available in the library and available for use by the user. Library materials such as books, journals, magazines, research reports and so both printed (print resources) and electronic (e-resources) such as e-books, e-journals can be used by the user. Users are free to choose according to their needs. In substance, both printed materials and electronic libraries are equally contains knowledge and information, but how to use and access is different. Some researchers of electronic information (e-resources) as Shim (2001), Ibrahim (2004), Johnson et al. (2012), stating that the electronic information resources (e-resources) are all sources power information or information recording media which require access to electronic equipment, especially computers, both personal computers, mainframes, or handheld devices (hand-held mobile device). Information resources can be accessed remotely without having to be present at the place or location where the media was placed via the internet or using a local network (remote access). Electronic information resources can be accessed all the time because it is not limited by space and the number of users (unlimited access). The disadvantage is that access to electronic information resources is dependent upon electricity, computer equipment and information technology infrastructure. Unlike the case with printed information resources, access is limited by time, place and number of users. Not perhaps an

example of printed books can be read by two people at the same time. However, the advantage is that it can be read or used without having to depend on the internet network, electricity and other information technology equipment. There is a real difference between the electronic information resources with information resources in print, in addition to different physical forms, means of access and its use can be different. Users as library customers, basically free to choose type and format of information resources needed. Understanding the psychological needs that make up a person to use the media or certain information resources and the motives that drive them to use it, as well as the satisfaction obtained after needs are met is to be the object of study of the uses and gratification theory (Roy, 2009). Why someone chooses to use the media or not, becomes one of the fundamental questions that will be answered by uses and gratification theory. Media in this case regarded as something neutral or optional which is able to be chosen to use or not. The purpose of uses and gratification theory is to understand why someone use various types and formats of media (Ruggiero, 2000), and demographic characteristics of users that are different in gender, age, education etc., also can have different need of information resources, different in exploring various types of information resources, and different in satisfaction level.

Philosophy question of uses and gratification theory is, "What do people do with media?", it is contrary to the previous theory which questioned "What does media do to people. The main purpose of uses and gratification theory is to explain and understand psychological need which forms someone's reason to use media and the reason that motivates their behavior to get involved to use certain media and get satisfaction in order to fulfill the clingy need. Another purpose is to know how an individual uses media in getting satisfaction for their need fulfilled and to identify positive and negative consequences had by media users (Lin, 2009). The model uses and gratification theory explains that the use of media or information resources initiated by the motives and needs, so that the needs (needs) is an important variable in the use of information resources. Nabi & Oliver (2009) by quoting the opinion of Katz, Gurevitch, and Haas group the needs of media use into 5 categories of requirements, namely:

1. Cognitive needs, including the requirements relating to information, knowledge and understanding
2. Affective needs, including the needs associated with emotions, pleasure and feeling
3. Personal integrative needs, including the requirements relating to the credibility, stability and social status
4. Social integrative needs, including needs related to the interaction with friends and family
5. Release tension needs, including needs relating to the escape and diversion of the daily routine.

The uses and gratification theory assumes that media is an option and users freely choose it, so the user's needs of information resources use either print or electronic are different on the basis of their gender, education or field of science. There are many previous researches prove it. The research of Hiller (2002) for example, says that there is a difference of information need among scientists, engineers, and other academics in University of Washington. The use of information resources either print or electronic ones in theoretical perspective of uses and gratification is categorized into media use variable or media explore variable, which see the use of various information resources or media recordings. Based on media formats recording information or knowledge, that information resources available now in library are categorized into two groups namely print information resources and electronic/digital information resources (Liu, 2006), so that there is a new term for both of the resources namely print and electronics

resources. Electronic information resources basically are classified into two groups : (a) online e-resources, include e-journal (full text & bibliographic), e-books, online databases, e-repository, e-thesis and dissertation, web sites etc. and (b) other electronic resources include CD ROM, diskettes and other portable computer databases (Bajpai et al., 2009). This grouping is basically a grouping of resources following the printed information.

Related to the use of information resources, there are so many studies that examine it, on the basis of the difference of user's demographic characteristics like gender and education. The research of Oyesiku & Oduwole (2004) in Olabisi Onabanjo University Libraries discover that male students use the library more frequently than their female counterparts". The research of Rainie et al. (2012) says that e-reading is increasing, 21% of adults in United States of America have read e-books, and the level of ownership of computer hardware or other electronic devices that are able to support to read e-book increases significantly, and there are four times more people reading e-books now (in 2012) versus two years ago. The research of Liu (2006) in San Jose State University, Washington Square, said that the majority of postgraduate degrees use the print and electronic information resources simultaneously. Preference, frequency of reading and the use of print and electronic information resources vary greatly among different sciences. Postgraduate students expect the combination of print and electronic information resources (hybrid).

Last variable of uses and gratification theory is gratification or satisfaction. Gratification variable (satisfaction) is a dependent variable which is affected by media use and need. User satisfaction with media used becomes an important aspect of uses and gratification theory. Satisfaction is felt by the user because it fits with their expectations (Angeelova & Zekiri, 2011). Furthermore, Oliver in quotation of Salem & Ar-Rahimy (2013) define satisfaction as a summary of psychological conditions produced when emotional surroundings meet the expectations, compared with user emotions before accepting a consumption. Satisfaction and happiness had by users after using various types of information resources called gratification. In further learning, there are several new theories and models that are continued development and enlargement of uses and gratification theory. One of them is value-expectancy theory developed by Martin Fishbein in the mid-1970s (Palmgreen & Rayburn, 1979). This theory is as additional explanation of uses and gratifications approach which is has been before. Substantially, value-expectancy theory is not different from uses and gratification theory, but in seeing user's gratification and satisfaction on the use of a media, value-expectancy theory has two major concepts namely gratification sought (GS) and gratification obtained (GO). Palmgreen & Rayburn (1979) said that the differences between GS and GO are what users expect and need of the media use and what audience got from after using the media. So that gratification sought of value-expectancy theory has the same substance with the needs of uses and gratifications theory namely encourage someone to use a media, yet the satisfaction dimensions are measured from two gratification concepts (Dimmick & Lin 1998). Satisfaction measurement concept is called GS and GO. The use of this concept that led to the theory that a variant of the uses and gratifications theory, namely value-expectancy theory (Rosengren et al., 1985). GS is a satisfaction needed by an individual when using such a certain media, whereas GO is a real satisfaction found by someone after using such a certain media. GS is also often called as need or

motive which refers to user's satisfaction before they come to use media or information resources (Mishra, 2012).

Based on the literature review in the previous section, the operationalization of value-expectancy theory is comparing the two concepts which are gratification sought and the gratification obtained. By comparing the two gratifications, gratifications discrepancy can be known by seeing the difference between the scores or the average value of the gratification sought and gratification obtained in using the information resources either the print or the electronic ones. The basic framework of this theory is as shown Figure 1 below:

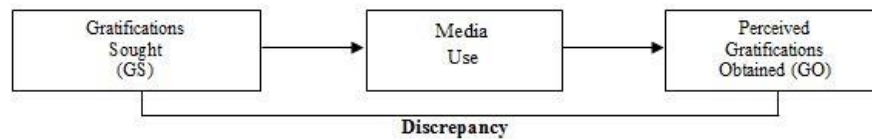


FIGURE 1
THEORETICAL FRAMEWORK

METHODOLOGY

Sample and Data Collection

The principle used to determine this research sample is probability sampling, namely gives the same opportunity to all population to be drawn as sample. The determination of individual samples is done by using proportionate stratified random sampling technique namely doing random act in a raffle to all population of every study program to be drawn as sample. The total number of sample in this research is 438 of 16,919 populations. This research population is users that have been ever borrowed books from USU Library at least three times a year. The population comes from 47 undergraduate study programs in University of Sumatera Utara. The total number of samples of exact sciences programs is 242 people. The samples come from 26 study programs. Whereas the total number of samples of non-exact sciences programs is 196 people and the samples come from 21 study programs.

The technique used to capture and collect the necessary data in this research were the study of documentation and questionnaires. Documentation studies using statistical document in the form of a performance report of USU Library. Primary data directly from respondents captured using a questionnaire. As a mean of data collection, the questionnaire contains a number of questions/statements with answer options provided in accordance with the variables studied to be filled by the respondents. Questionnaires shaped Likert Scale with 5 (five) options. Respondents were asked to answer a questionnaire whole grains associated with demographic characteristics, needs, the use of information resources, and the desired satisfaction about the use of information resources in the library. Prior to distribution to test the validity and reliability of the questionnaire to 40 students as library users, 20 people of exact science courses and 20 people from the program non-exact science program studies. Validity and reliability test performed using a computer application program SPSS version 17. All items of questionnaire declared valid and reliable because the correlation value (r) is greater than 0.312 or $r > 0.312$ and

the coefficient of reliability (Cronbach Alpha) is greater than 0.6 (>0.6). The spread of questionnaires is conducted for 5 weeks gradually to 47 study programs in University of Sumatera Utara. The spread of questionnaires is conducted by two approaches namely through the chief of study program or through library staff member in branch faculty.

RESULTS AND DISCUSSION

Hypothesis Testing and Discussion

Hypothesis testing was conducted to validate the research hypotheses that have been proposed previously. For testing the significance of discrepancy of GS and GO based on user's demographic characteristics is tested by a computer application program for statistics, SPSS version 17, using the test multivariate analysis of variance (MANOVA) and the Pearson's Chi-Square test.

Discrepancy between GS and GO Based on Gender

The first hypothesis (H_1) which will be tested is, supposedly there is a significant discrepancy between GS and GO of the information resources use based on gender in USU Library. Based on the hypothesis formulation, the null-hypothesis (H_0) is, there is no discrepancy between GS and GO of the information resources use based on gender at USU Library. Whereas the alternative hypothesis (H_1) states that there is a significant discrepancy statistically between GS and GO of the information resources use based on gender at USU Library. For testing the discrepancy between GS and GO of the information resources use based on user's demographic characteristics, the criteria or measurement level of significance (Sig.) used in this research is $\alpha=0.05$, so if probability value or Sig. ≥ 0.05 , H_0 is accepted and H_1 is rejected. However, if the probability value or Sig. <0.05 , H_0 is rejected and H_1 is accepted. The test results use statistically analysis of variance to find the discrepancy of GS and GO of the information resources use based on gender at USU Library can be seen from the Table 1.

Discrepancy	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.002	1	0.002	0.012	0.911
Within Groups	68.817	436	0.158		
Total	68.819	437			

Based on the test results from the Table 1, it is known that significance value or Sig. =0.911, where Sig. value =0.911 is greater that significance level $\alpha = 0.05$. Then, according to the criteria or significance level of acceptance and rejection of the hypothesis above can be concluded, that there is no significant difference statistically of discrepancy between GS and GO of the information resources use based on gender at USU Library. The research hypothesis states that supposedly there is a significant discrepancy between GS and GO of the information

resources use based on gender at USU Library is rejected, so it can be stated that there is no significant discrepancy between GS and GO of the information resources use based on gender at USU Library. The test results of the sub hypothesis of the first hypothesis (H1) were as follows:

Difference of GS Based on Gender

The formulation of sub-hypothesis (a) which will be tested is, “supposedly there is a difference of GS of the information resources use based on gender at USU Library”. Based on the sub-hypothesis formulation, the null-hypothesis (H_0) is, there is no significant difference of GS statistically of the information resources use based on gender. Whereas the alternative hypothesis (H_1) states that, “there is significant difference of GS statistically of the information resources use based on gender”. For testing the difference of GS of the information resources use based on gender, the criteria or level measurement of significance used in this research is, $\alpha = 0.05$, so if the probability or significance value (Sig.) of user demographic characteristics (DC) namely gender multiplied by the use of information resources or media use (MU), or $(DC*MU) \geq 0.05$ (greater than or equal to 0.05), so H_0 is accepted and H_1 is rejected. However, if the probability value or Sig. $(DC*MU) < 0.05$ (less than 0.05), so H_0 is rejected and H_1 is accepted. The test results statistically use multivariate analysis of variance (MANOVA) test of GS variable of the information resources use based on gender can be seen from the Table 2.

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender (G)	0.012	1	0.012	0.079	0.779
Information Use or Media Use (MU)	5.484	2	2.742	18.208	0.00
G * MU	0.023	1	0.023	0.15	0.699

a. R Squared = 0.083 (Adjusted R Squared = 0.075)

Based on the test results from the Table 2 found that the significance value or Sig. =0.699, where the Sig. Value =0.699 is greater than significance level $\alpha = 0.05$. Therefore, according to the criteria or the acceptance and rejection level of the hypothesis above can be concluded, that there is no significant difference of GS statistically of the information resources use based on gender. The sub-hypothesis of the research stated that, supposedly there is a difference of GS of the information resources use based on gender at USU Library is rejected, so it can be stated that, there is no significant difference of GS of the information resources use based on gender at USU Library.

Differences of GO Based on Gender

The formulation of sub-hypothesis (b) which will be tested is, supposedly there is a difference of GO of the information resources use based on gender at USU Library. Based on the formulation of the sub-hypothesis, the null-hypothesis (H_0) is, there is no significant difference

of GO of the information resources use based on gender. Whereas, the alternative hypothesis (H_1) states that there is a significant difference of GO statistically of the information resources use based on gender. The test results use multivariate analysis of variance (MANOVA) test statistically of GO after using the information resources based on gender can be seen from the Table 3.

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender (G)	0.273	1	0.273	1.249	0.264
Information or Media Use (MU)	8.105	2	4.052	18.572	0.000
G * MU	3.339	1	3.339	0.000	0.999

a. R Squared = .093 (Adjusted R Squared = .084)

Based on the test results from the table above can be seen that the significance value or Sig. =0.999, where the Sig. value =0.999 is greater than significance level $\alpha = 0.05$. Therefore, according to the criteria or the acceptance and rejection level of the hypothesis above can be concluded, that there is a significant difference of GO statistically of the information resources use based on gender. The sub-hypothesis of the research states that supposedly there is a significant difference of GO of the information resources use based on gender at USU Library is rejected, so it can be stated that there is no significant difference of GO of the information resources use based on gender at USU Library.

Discrepancy of GS and GO Based on Field of Sciences

The second hypothesis (H_2) to be tested is, supposedly there is a significant discrepancy of GS and GO of the information resources use based on field of sciences (exact sciences and non-exact sciences) at USU Library. Based on the formulation of the hypothesis, the null-hypothesis (H_0) is, there is no significant discrepancy of GS and GO of the information resources use based on field of sciences at USU Library". Whereas the alternative hypothesis (H_1) states that there is a significant discrepancy statistically of GS and GO of the information resources use based on field of sciences at USU Library. The test results statistically use analysis of variance test to find the discrepancy of GS and GO of the information resources use based on field of sciences at USU Library can be seen from the Table 4.

Based on the data of the test results from the Table 4 can be found that the significance value or Sig. =0.000, where the Sig. value =0.000 is greater than the significance level $\alpha = 0.05$. Therefore, according to the criteria or the acceptance and rejection level of hypothesis can be concluded that there is significant difference statistically of GS and GO of the information resources use based on field of sciences (exact sciences and non-exact sciences) at USU Library. The research hypothesis states that, supposedly there is significant discrepancy of GS and GO of the information resources use based on field of sciences at USU Library is accepted, so it can be stated that there is significant discrepancy of GS and GO of the information resources use based

on field of sciences (exact sciences and non-exact sciences) at USU Library. Then, the test results of sub-hypothesis of second hypothesis (H2) are as follow:

Discrepancy	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.456	46	0.293	2.066	0.000
Within Groups	55.363	391	0.142		
Total	68.819	437			

Difference of GS Based on Field of Sciences

Sub-hypothesis (a) which is tested is, supposedly there is a significant difference of GS of the information resources use based on field of sciences at USU Library. Based on the formulation of sub-hypothesis, the null-hypothesis (H_0) is, there is no significant difference of GS statistically of the information resources use based on field of sciences. Whereas the alternative hypothesis (H_1) states that there is significant difference of GS statistically of the information resources use based on field of sciences at USU Library. The test results statistically use multivariate analysis of variance (MANOVA) test of GS variable of the information resources use based on field of sciences can be seen from the Table 5.

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Field of Science (FS)	8.594	46	0.187	1.394	0.053
Information or Media Use (MU)	4.933	2	2.467	18.408	0.000
FS*MU	9.521	44	0.216	1.615	0.011

a. R Squared = .350 (Adjusted R Squared = .177)

Based on the test results from the table above can be found that significance value or Sig. =0.011, where the Sig. value =0.011 is less than significance level $\alpha = 0.05$. Therefore, according to the criteria or the acceptance and rejection measurement of hypothesis above can be concluded that there is significant difference of GS statistically of the information resources use based on field of sciences. The research sub-hypothesis states that supposedly there is a significant difference of GS of the information resources use based on field of sciences at USU Library is accepted, so it can be stated that there is significant difference of GS of the information resources use based on field of sciences at USU Library.

Difference of GO Bases on Field of Sciences

The formulation of sub-hypothesis (b) which will be tested is, supposedly there is significant difference of GO of the information resources use based on field of sciences at USU Library. Based on the formulation of the hypothesis, the null-hypothesis (H_0) is, there is no significant difference of GO statistically of the information resources use based on field of sciences at USU Library. Whereas the alternative hypothesis (H_1) states that there is significant difference of GO statistically of the information resources use based on field of sciences at USU Library. The test results statistically use multivariate analysis of variance (MANOVA) test for the GO variable after using the information resources based on field of sciences can be seen from the Table 6.

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Field of Science (FS)	18.647	46	0.405	1.916	0.001
Information or Media Use (MU)	4.454	2	2.227	10.524	0.000
FS*MU	13.721	44	0.312	1.474	0.032

a. R Squared = .296 (Adjusted R Squared = .108)

Based on the data of the test results from the table above can be found that significance value or Sig. =0.032, where the Sig. value =0.032 is less than significance level $\alpha = 0.05$. Therefore, according to the criteria or acceptance and rejection measurement of hypothesis above can be concluded that there is significant difference of GO statistically after using the information resources based on field of sciences at USU Library. The research sub-hypothesis states that supposedly there is significant difference of GO statistically of the information resources use based on field of sciences at USU Library is accepted, so it can be stated that there is significant difference of GO statistically of the information resources use based on field of sciences at USU Library.

The result of the first hypothesis stated that, statistically, there was no significant discrepancy of GS and GO of the information resources use based on gender at USU Library. The description of data shows that the differences of average value of GS (80.91%), the average value of the GS (76.13%) of the information resources use based on gender is not significant. For the needs or GS and GO which are gained by the university students of the information resources use are not different significantly based on gender, therefore it can be interpreted that print and electronic information resources available at USU Library satisfy the university students based on gender. It means that the information resources which are available at USU Library satisfy the students based on gender differences. Then, the test results of sub-hypothesis of first hypothesis (a) state that there is no a significant difference of GS of the information resources usage based on gender at USU Library. The test results are synchronic to the descriptive analysis conducted to the data. The description of data about respondent GS for the information resources use either print or electronic based on gender can be seen from the Table 7.

Gender	Category of Needs for Use Information Resources						Total	%
	Important	%	Ordinary	%	Non- important	%		
Male	107	81.68	24	18.32	0	0.00	131	100.0
Female	246	80.13	60	19.54	1	0.33	307	100.0
Total	353	80.59	84	19.18	1	0.23	438	100.0
The average %		80.91		18.93		0.17		100.0

Data describes that majority of respondents either male or female has a high need or GS, accesses or reads various information resources either in print or electronic at USU Library. Where there are about 80.59% of respondent's states that they have a strong motivation to use various information resources at USU Library. Data from the table above also show the need difference using various information resources based on gender is not significant enough. For the category important, the percentage value of male respondent needs (81.68%) is greater than the percentage value of female respondent needs (80.13%) using various information resources. The data can describe that GS of male and female students using, accessing, reading various information resources either in print or electronic at USU Library is relatively the same value. However, even the difference is little, the GS or motivation encourage male students to use, access or read various information resources either in print or electronic information resources is bigger than the motivation of female students.

Gender	Gratification Obtained of information Resources Use						Total	%
	Satisfied	%	Ordinary	%	Not Satisfied	%		
Male	80	61.07	51	38.93	0	0.00	131	100.0
Female	205	66.78	100	32.57	2	0.65	307	100.0
Total	285	65.07	151	34.47	2	0.46	438	100.0
The average %		63.93		35.75		0.33		100.0

Even though the difference was small, GS, or the motivation that drives male student use, access or read various types of information resources both printed and electronic tend to be stronger than the female student motivation. The test results of sub-hypothesis of first hypothesis (b) say that there is no significant difference of GO of the information resources usage based on gender at USU Library. Even though the statistical test does not show the significant difference of GO, but the descriptive analysis result shows that female students tend to be satisfied using various information resources either in print or electronic than the male students. The description of data of GO that is gained by respondent after using various information resources either in print or electronic based on gender can be seen from the Table 8.

Data from the Table 8 describe that for category sought, the percentage value of GO of female students (66.78%) is greater than the percentage value of male students (61.07%) after using various information resources either in print or electronic. The data indicate that female students tend to have bigger motivation to use various information resources than the male

students; even the difference is not too large or not significant. The test results of second hypothesis (H2) say that there is a significant discrepancy of GS and GO of the information resources use based on field of sciences (exact sciences and non-exact sciences) at USU Library. Data show that the average percentage value of respondents GS (80.74%) of the information resources use is greater than the average percentage value of GO (65.29%). For GS value is greater than GO value, it can be interpreted that information resources either in print or electronic available at USU Library have not been able to satisfy library users based on the differences of the field of sciences. The second sub-hypothesis test results (a) say that there is a significant difference of GS of the information resources use based on field of sciences at USU Library. The test result has synchronic descriptive analysis result to the data. Data about the information resources use based on respondents' field of sciences can be seen from the Table 9.

Field of Sciences	Information Resources Use						Total	%
	Often	%	Sometimes	%	Seldom	%		
Exact sciences	73	30.17	166	68.6	3	1.24	242	100.0
Non-exact sciences	68	34.69	125	63.78	3	1.53	196	100.0
Total	141	32.19	291	66.44	6	1.37	438	100.0
The average %		32.43		66.19		1.39		100.0

Data from the Table 9 show that the “often point” value of respondents either of exact or non-exact sciences using, accessing, or reading various information resources either in print or electronic is dominant than “sometimes point” (66.44%). Data from the table above also shows that there is difference of often point percentage value of the information resources use either in print or electronic. In “often” category, the percentage value of respondents of non-exact sciences (34.69%) is greater than the percentage value of respondents of exact sciences (30.17%). These data indicate that students of non-exact sciences tend to be more frequent use, access or read different types of resources both printed and electronic information from the USU Library compared with students of the field of exact sciences. The second sub-hypothesis test results (b) states that there is a significant difference of GO of the information resources use based on field of sciences (exact sciences and non-exact sciences) at USU Library. The test result has synchronic descriptive analysis describing the difference of the percentage value of GO by respondents after accessing or reading various information resources either in print or electronic based on field of sciences.

Field of Sciences	Gratification Obtained in Information Resources Use						Total	%
	Satisfied	%	Ordinary	%	Not Satisfied	%		
Exact sciences	153	63.22	89	68.6	0	0.00	242	100.0
Non-exact sciences	132	67.35	62	63.78	2	1.02	196	100.0
Total	285	65.07	151	66.44	2	0.46	438	100.0
The average %		65.29		66.19		0.51		100.0

Data from the Table 10 describe that there is a difference of respondents' GO after using various information resources based on field of sciences. In gratification category, the percentage value of GO by respondents of non-exact sciences (67.35%) is greater than the percentage value of GO by respondents of exact sciences (63.22%) after using various information resources either in print or electronic. The data describe that after using various information resources either in print or electronic at USU Library, the students of non-exact sciences tend to have larger GO than GO by the students of exact sciences. The data indicate that the information resources available at USU Library tend to fulfill the students' needs of non-exact than the students' needs of exact sciences.

CONCLUSION

The result of this study clearly shows that, the discrepancy of GS and GO by students from the information resources use at USU Library is not different significantly based on gender, but differed significantly based on field of sciences that was being offered to the students. The print and electronic information resources available at USU Library satisfy the students' needs based on gender, but do not satisfy students based on different fields of science that was being offered. The information resources available at USU Library tend to satisfy the students' needs of non-exact sciences than of the exact sciences. The printed and electronic information resources that available in the library are jointly utilized by the user, so that the hybrid library model is very appropriate to be applied.

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