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Information Literacy for Female Population Around Bosscha Observatory

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People who live around Bosscha Observatory are quite far from city facilities such as complete bookstores, exhibition venues and others. As vegetable farmers, factory employees or housewives, women get information from limited mass media and book. Some activities such as contest of summarizing books or lecture and reading poetry contest or weekly reciting Al-Qur'an as well as visiting book exhibition are ways to get information. Muslim characteristics that suits to the aim of information literacy activities held by female population around Bosscha Observatory are from one community to a society, places people on the same level, etc. From reading Al-Qur'an and its translation women can teach their children a good guide of life. Information on cooking recipes or plant, etc gave knowledge which useful for everyday life and have selling value. Visiting book exhibition is preferred than visiting a distant library and they want a near spot for book collection.

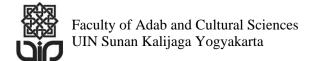
Keywords: Bosscha Observatory, information literacy, female population

1. INTRODUCTION

Bosscha Observatory, was built in 1923 and started its operation in 1928. A story before it was built as follow "on December 20, 1920 at Homann Hotel in Bandung Ru Bosscha as chairman of NISV (Nederland Indische Sterenkundige Vereeniging) and Ru Kerkhoven as secretary and treasurer had a meeting with other members to build an observatory. In a short time those Dutch tea businessmen could raise capital to order telescope at Askania Werke in Germany" (Voskuil, et al 2017). Meanwhile Ursone's family donated The full paper length should not exceed 20 pages including references and figures. their land on a hill in Lembang for the site. Later the observatory named as Bosscha's father; and on December 18, 2007 the former director's house was began to be called as "Wisma Kerkhoven" after the renovation. Simultaneously with the construction of other buildings in 1923 Kerkhoven donated a library building to keep collection for research purpose

In the beginning the observatory's employees were came from surrounding population, namely Pencut, Sterrewacht or Teropong Bintang and Bosscha Village. They work as technical assistant, night-guard and garden staff. Before Indonesian independence the astronomers were Dutch and guest scientists came from various countries. The name of Bosscha Observatory's directors are: Dr. J. Voute (1923-1940); Dr. A. de Sitter (1940-1942); Prof. Dr. Mashashi Miyaji (1942-1946); Prof. Dr. C.H. Hins ad interim (1947-1949); Prof. Dr. G.B van Albada (1949-1958); Prof. Dr. Ong Pik Hok and Santosa Nitisastro (1958-1959); Prof. Dr. The Pik Sin (1959-1968); Prof. Dr. Bambang Hidayat (1968-1999); Dr. Moedji Raharto (1999-2003); Dr. Dhani Herdiwijaya (2004-2005); Dr. Taufiq Hidayat (2006-2009); Dr. Hakim L. Malasan (2010-2011); Dr. Mahasena Putra (2012-2017); Dr. Premana W. Premadi (2018-now).

The Observatory which is located 13 km away from Bandung to the north is belongs to ITB since 1959. Institute of Technology Bandung organize astronomy education under the Faculty of Mathematics and Natural Sciences. The observatory is a place for astronomy





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student, for the time being all are Indonesia nations, to observe the sky with its telescopes. Few employees nowadays came from outside Lembang. Besides research and education, the other task of a university is community service. Bosscha Observatory receive student and public visits for its community service activity. Visitors can learn about astronomy from ITB students who serve as lecturer and tour guide.

Public obtain information about universe such as eclipse, hilal observation from astronomers. Meanwhile for people who live around Bosscha Observatory, especially for women, the librarian who lives at Bosscha Observatory complex arranged some activities related to information literacy. Sulistialie (2007) mentioned the activities held at the observatory are: "research-colloquium-international meeting; public visit; astronomy training; overseas cooperation; information publication and learning for all. Meanwhile activities of learning society at Bosscha Village include: Friday lecture and prayer; English learning and coloring picture for kids; Al-Qur'an recitation; learn to cook for women; playing football for boys; and developing reading interest or information literacy". Developing reading culture was popular term before 2000 to overcome illiterate and now people always say these activities as information literacy.

URGENCY

There is a need of female population who live around Bosscha Observatory, a far place from city to obtain information and perform positive activities so that they could be formed to be an empowered society.

AIM

This research is aimed to reveal effort of librarian and community to form an empowered society suited to the theme Empowering Marginalized Society Through Information Literacy.

PROBLEMS

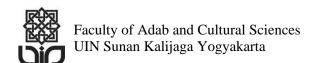
This paper presents questions of what kind of information literacy activities and what Information needed by female population around Bosscha Observatory in order to form an empowered society.

2. LITERATURE REVIEWS

Concerning information literacy Stevenson & Collin (1997) mentioned it as "the ability find relevant information for a particular situation or problem, and to interpret that information effectively". Women or female population who live around Bosscha Observatory need to have ability to find proper information not a hoax or misinformation.

Furthermore, female population are encouraged to have information literacy skill or ability namely "the ability to recognize information needs to solve problems, develop ideas, ask important questions, use a variety of information gathering strategies, determine information that is suitable, relevant and authentic" (Nurrohmah et al 2019). Women who live at Bosscha Village need information about life guidance and useful reading for daily practices such as cooking or planting flower and trees and other hobbies.

Kompas Advertorial August 3 (2019) stated "that the literacy program for adults according to UNESCO in 2016 has several benefits, especially to build selfesteem and empowerment. The National Library in this case acts as a stimulant for literacy activities for welfare ". By having information women will have selfesteem to do their daily work such as educating children as well as do other duties.



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3. METHODS

The author used qualitative approach and literature study for this research. Yin (2011) stated that "Qualitative research strives to collect, integrate, and present data from a variety of sources of evidence as part of any given study. The variety will likely follow from your having to study a real-world setting and its participants. The complexity of the field setting and the diversity of its participants are likely to warrant the use of interviews and observations and even the inspection of documents and artifacts. The study's conclusions are likely to be based on triangulating the data from the different sources". In this research the author convey a problem and find its solution.

Literature study namely to find reference that suit to the case or problem. This method also as suit as documentation activity which its aim is "to obtain direct data from the place of research, consisting relevant books, rules, activity report, photos, documentation film, and other data relevant to research" (Riduwan, 2009). To find out the quality of activities, interviews were carried out in a free guided manner with questionnaires. Interviews are carried to obtain information directly from the source.

4. DISCUSSION

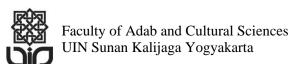
Female population who live around Bosscha Observatory consists of housewives, they who are working in the field as vegetable farmers, factory employees, self employees, etc. From about 100 families which are 100 % Muslim, there are more than 40 women who join the monthly Al-Qur'an recitation which held at Nurul Islam mosque.

Beginning of the Al-Qur'an reading activities was started in March 2010. At that time mothers or female population needed to arrange a useful activity. Fortunately this weekly activity is still going on until now. Women obtained information about Islamic life guidance namely carry out orders and avoid restriction of God from the activities of Al-Qur'an recital.

To reach more members, a monthly program in the fourth week the community invite Ustadz/Ustazah to give religious lecture (Tausiyah) in Nurul Islam Mosque since April 2019. For discussion purpose Whatsapp group also maintained. Highlight of activities of female population around Bosscha Observatory since 2010 are:

- Beginning of Al-Qur'an recitation (2010)
- Commemoration of Isra Miraj, Learn Tausiyah at Lembang Village (2011)
- Khatam Al-Qur'an (2012)
- Marhaban (2013)
- Visiting Book Fair; Khatam Al-Qur'an (2014)
- Cross country with Lembang Village (2015)
- Information Literacy about Total Solar Eclipse in Indonesia in bulletin board (2016)
- Contest of singing NU and religious song at Lembang Village; Botram (2017)
- Botram (2018)
- Learning from Tausiyah (Islamic lecture) & read information from WA Group (2019)

Information Literacy activities held by female population around Bosscha Observatory consists of several form such as Al-Qur'an recitation, learning from Tausiyah, visiting book fair, reading clips on environmental issues, joining contest at Lembang Village, Botram, reading information from WA Group and/borrowing/lending books. "Information literacy carried out in conjunction with botram activities can develop reading interest, which raises creativity and supports the creation of innovative societies" (Sulistialie 2019). Botram activities which including having meal together and reading contest for family is one way of information literacy at Bosscha Village.

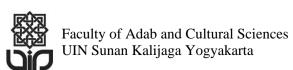




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Table 1 Data of Women at Bosscha Village Who Join Monthly Al-Qur'an Recital

No.	NAME	AGE	OCCUPATION	EDUCATION
1	Ai Sukaesih	55	Self employee: village staff	Junior High School
2	Asih	56	Self employee: vegetable farmer	Elementary School
3	Atikah	53	Grocery shop	Elementary School
4	Awang	53	House keeper	Elementary School
5	Cacah	59	House keeper	Elementary School
6	Dede	26	Housewife	High School
7	Deuis	43	Housekeeper	Elementary School
8	Dewi	34	Housekeeper	Junior High School
9	Dewi Oleh	38	Factory employee	High School
10	Dian	37	Self employee: culinary & sewing	High School
11	Een	67	Grocery shop	Elementary School
12	Engkoy	38	Housewife	Elementary School
13	Entin	45	Self employee: vegetable farmer	Elementary School
14	Euis Sumiati	38	Housewife	Junior High School
15	Eulis Tuti	49	Housewife	High School
16	Eut <mark>i</mark> k	48	Housewife	Junior High School
17	Iim Control	45	Self employee: culinary	Junior High School
18	lis Company	47	Self employee: vegetable farmer	Elementary School
19	Ika Wartika	46	Housewife	Junior High School
20	Ikah	73	Housewife	Elementary School
21	Imas Mastiah	na 41 Coi	Housewife Information and C	Elementary School
22	Imas Sara	47	Self employee: vegetable farmer	High School
23	Jujun	47	Housewife	High School
24	Karsinah	65	Self employee: culinary	Elementary School
25	Kimi	51	Grocery shop	High School
26	Lilis	37	Self employee: vegetable farmer	High School
27	Mara	32	Housewife	High School
28	Onih	68	Housewife	Elementary School
29	Popon Lasmaya	70	Housewife	Elementary School
30	Ratna	39	Self employee: culinary	High School
31	Reni M	23	Self employee: village staff	High School
32	Santi	31	Housewife	High School
33	Suryati	63	Self employee: vegetable farmer	Elementary School
34	Tati Hayati	51	Housewife	High School
35	Tuti	40	Factory employee	High School
36	Uji	56	Self employee: vegetable farmer	Elementary School



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No.	NAME	AGE	OCCUPATION	EDUCATION
37	Uti	57	Housewife	Elementary School
38	Wangsih	49	Factory employee	High School
39	Yeni K	32	Housewife	High School
40	Yuli	38	Housewife	High School

From the table we can see that the community consists of 25 women in age between 20-49 years old or young lady (62.5%) and 15 women 50 years old –up (37.5%) or mature lady. Their occupations are housewife (42.5%), Self employee (32.5%), Housekeeper (10%), Factory Employee ((7.5%), and Handling a grocery shop (7.5%). The education of the community are Elementary School (45%), High School (40%) and Junior High School (15%).

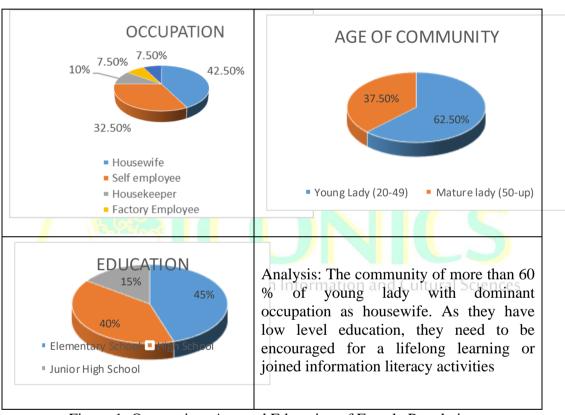
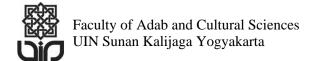


Figure 1: Occupation, Age and Education of Female Population

One form of information literacy namely using Whatsapp Group whereas the members are encouraged to wrote down the summarize of lecture from Ustadz/Ustadzah who come monthly to Nurul Islam mosque. By reading the summarize members of WA group who did not come to the meeting could obtain information. If someone have information about environment and social matter such as earthquake, eclipse and how to educate children it could be posted also on the WA Group. One of the environment issues in Lembang is about Lembang sesar namely Avengers: Relawan siaga gempa di Sesar Lembang (https://www.youtube.com/watch?v=_cNxqaOtG244&t=4s). It is about volunteers who alert to the earthquake of Lembang Fault.

Meanwhile to add information librarian posting clips about astronomical and environmental issues on the bulletin board and circulates books to be read by women and their children. Information from Al-Qur'an are obtained by reading Arabic verse and its



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translation every weekend. Al-Qur'an donation from Mrs. Ike & her husband are very useful for women at Bosscha Village. Each participant reads one verse and its translation, so that the meaning of Al-Qur'an could be understand and applied in everyday life.

Information literacy activity is aimed to form an empowered female community. According to the Tafsir Al-Qur'an Tematik (2012) the characteristics of Muslim society are:

- One community (ummah wahidah)
- Brothers and sisters one another
- A society tied with God bond
- Mediating, fair and selected society (ummah wasatan) who acted as witness for other people
- Balanced society, world and hereafter
- People who help each other
- Society that like discussion
- A society that treats people on the same level

Those characteristic suits to the aim of information literacy held by female population around Bosscha Observatory, namely from one community to a society that places people on the same level. The final purpose of the activities is to form an empowered society with Muslim character.

From getting acquainted women obtained information about how to cook; how to plant and how to coping with the problem, etc. More women came to attend the monthly program and few on weekly meeting because of their busy. Happily on special occasion more women could attend the event, such as Islamic day commemoration, because there were performance of children and mother. Informal discussion is also a form of information literacy, so that female population could get important information.

The following is a brief explanation of result achieved. In the early of activities (2010-2013). Earlier if the women should visit book or Islamic exhibition as well as lecture at other mosque, the transportation fee were covered by the donation from Mr. Raharto's family, meanwhile for Islamic commemoration all society of RW 10 Bosscha Village funded it. Now, female population become independent as they could collect money for the transportation fee of Ustadzah who come to give monthly lecture at Nurul Islam mosque.

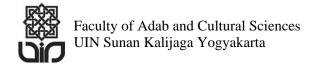








Fig 2: Activities of Information Literacy



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In addition to the information literacy activities Mr. Evan Irawan Akbar (lecturer of Astronomy Study Program) provides novels to be read by female population and their family around Bosscha Observatory. Mrs. Resti Andriani provided the community some cooking books to be circulated by librarian of Bosscha Observatory. In the near future it is hope they can allocate their funds to buy book for themselves.



Fig 3: Books read by female population around Bosscha Observatory

The development of skill of female population who joined Al-Qur'an recitation after having finished reading Al-Qur'an in 2012 namely they could hold a Marhaban activity or pray for new baby born in 2013. From reading book and articles as well as Al-Qur'an translation the women know much better. They can cook well more over sell cookies and meal, plant various vegetables and educate family well.

Interview with 2 representatives of young lady and mature lady given 3 questions namely what information they need? What kind of information literacy activities do they like? And from reading Al-Qur'an or listening to the Islamic lecture do they obtained information about life guide or knowledge, are as follow:

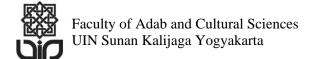
Young lady: Mrs. Imas Mastiah answered likes: novels, cooking books and religious books, etc. She likes to visit book exhibition and from reading Al-Qur'an she knows life guidelines. Meanwhile Mrs. Imas Sara likes cooking books and books about plants. She likes to visit book exhibition rather than library and knows life guidelines from attending the religious lecture.

Mature lady: Mrs. Tati Hayati likes cooking books, religious books and plants. She likes to visit book exhibition and obtain life guidelines from reading Al-Qur'an. From Mrs. Kimi we obtained information that she likes reading religious books, such as Al-Quran with latin letter and cooking books. She likes to visit exhibition and from reading Al-Qur'an or attending Islamic lecture she obtains useful information on life guideline which are very important to educate family.

The answers revealed that the community need more information on cooking recipes namely cooking books and other books. They just want to visit book exhibition in a while than visit a distant library and they want to borrow a book from near place or from private collection. From reading Al-Qur'an and listening to the tausiyah, the women obtain information about life guidance.

4. CONCLUSION

To form an empowered society the librarian and community have arranged several activities of information literacy for female population who live around the observatory. The





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activities are Al-Qur'an recitation, contest, botram, visiting book fairs, arrange a discussion in whatsapp group and borrowing book from private collection. From reading Al-Qur'an women obtain information that useful for educating family namely life guidance. Women who fond of cooking and other hobbies wanted the articles from near spot such as borrowing book from private collection than go to a distant library. By joining information literacy activities female population around Bosscha Observatory gain more knowledge and skill that useful for everyday life and they can encourage their children to pursue higher education for better life according to Muslim characteristics.

REFERENCES

- Avengers (2019) *Relawan Siaga Gempa di Sesar Lembang* (https://www.youtube.com/watch?v=_cNxqaOtG244&t=4s).
- Kompas Advertorial (2019). Transformasi Perpustakaan untuk Peningkatan Kesejahteraan, Sabtu 3 Agustus. Jakarta: Kompas
- Nurrohmah, Oom dkk. (2019) *Pedoman Pembudayaan Kegemaran Membaca*. Bandung: Dispusipda,
- Riduwan (2009). Pengantar Statistika Sosial. Bandung: Alfabeta
- Stevenson & Collin (1997). *Dictionary of Information & Library Management*. London: A&C Black
- Sulistialie, E (2007). Learning Society di Kampung Bosscha: Praktek Kepustakawanan di RW 10 Kampung Bosscha Lembang Jawa Barat. Jakarta: Media Pustakawan vol 38 no 3&4.
- Sulistialie, E. (2019). *Botram Activities to Improve Community Reading Culture*. Paper presented at West Java Achievement Librarian Competition. Bandung: Dispusipda.
- Tafsir Al-Qur'an Tematik (2012). *Moderasi Islam*. Jakarta: Lajnah Pentashihan Mushaf Al-Qur'an bidang Litbang dan Diklat kementrian Agama RI
- Voskuil, R. dkk (2017). Bandoeng, Beeld van een Stad/Bandung: Citra Sebuah Kota (alih bahasa Supardan, dkk). Bandung: ITB Press
- Yin, Robert K. (2011). Qualitative Research: From Start to Finish. New York: Guilford

