USAGE OF WIKIPEDIA BY HEALTH SCIENCE AND SOCIAL SCIENCES & HUMANITIES UNDERGRADUATES OF UNIVERSITY OF PERADENIYA AND SOUTH EASTERN UNIVERSITY OF SRI LANKA

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ABSTRACT

The study investigated the usage of Wikipedia among undergraduate students of two public universities in Sri Lanka. While the world scenario is much focused on the usage of Wikipedia in undergraduate learning and teaching, exploration of history of the previous studies in regarding Sri Lankan context inform that there are no studies has been carried out to understand the reasons behind usage of Wikipedia among undergraduate students. Total students of two different faculties, namely, Faculty of Allied Health Sciences, University of Peradeniya and Faculty of Arts and Culture, South Eastern University of Sri Lanka is selected for the study. Survey method was used to collect the data employing questionnaires as an instrument. On the basis of the outcome yielded from the study, findings shed light on the frequency of usage, reasons behind using Wikipedia as an information source and usage of information services and technologies among undergraduates within the selected sample. A major tendency of using Wikipedia of the undergraduate students from the both selected faculties were revealed in the study. Preferences of using Wikipedia and google over library resources were indicated by the students from the Faculty of Allied Health Sciences While there is an ongoing controversy of using Wikipedia due to its credibility and accuracy, the study depicts that majority of the students use Wikipedia in their academic work. To overcome the problems involved several limitations are involved with the study, using observations and focused group studies to understand the perception of students over the theme is suggested. It would be beneficial to conduct further studies on the perceptions of Wikipedia among lecturers and librarians of universities.

1. INTRODUCTION

Among Web 2.0 internet-based tools, wikis plays a major role in contributing in editing and redistribution of original content (Buffa and Grandon, 2006). The word Wikis derived from Hawaiian language giving a meaning of fast or quick, used to name collaborative tool based on the concept of online collaborative knowledge building system introduced by Ward Cunningham

in 1994. Wikis are a group of web pages that allow users to visit, read, add and edit the contents freely which is known as open editing (Leuf & Cunningham, 2001). Wiki codes are available freely under the GNU General Public License enabling developers manipulate the code. Thus, wikis are developed on variety of programming languages such as Perl, Ruby and Java etc. Users are permitted to read and edit contents of the wiki's including text and pictures merely through a web browser. Wikis are popularly used as tool for online collaboration, in education. Its ability of using as a tool in developing student projects, knowledge base for teachers, mapping concepts and brainstorming and course evaluation have attracted both students as well as teachers (Duffy and Bruns, 2006) . In the meantime wikis are being used in professional library practices in collaboration with libraries, library staff and between library staff and users (Bejune, 2007).

Wikipedia is freely licensed, multi- language online encyclopedia launched in 2001 by Jimmy Wales and Larry Sanger considered the most popular among many different wiki clones. Wikipedia that is built on a collaborative knowledge, can be used, copied and edited and modified by anyone. Wikipedia has become the fifth most visited web site in the world (Alexa, 2017) and by January 2017 English Wikipedia has 5.3 million articles with an average of 162.89 revisions per article. Notwithstanding the popularity, its reliability and potential use in academic standards are much debated (Rajagopalan et al, 2011) and its accuracy, credibility and completeness is subjected to criticism (Chesney, 2006; Denning et. al, 2005;Gorman, 2007).

2. LITERATUREREVIEW

Based on its openness, reliability, accuracy and completeness and intellectual rigor it is being arguing suitability of Wikipedia as a resource for research and its great potential in education. However, various studies report heavy usage of Wikipedia by undergraduate students. While Wikipedia is being increasingly used by undergraduates when searching for information, it is being further questioned for its defining factor of openness and mutable nature. MIT (2017) discouraging students using Wikipedia, in publishing its citation guidelines state,

"Wikipedia is Not a Reliable Academic Source. Many of us use Wikipedia as a source of information when we want a quick explanation of something. However, Wikipedia or

other wikis, collaborative information sites contributed to by a variety of people, are not considered reliable sources for academic citation, and you should not use them as sources inan academic paper."

On the other hand, Giles' (2005) study comparing the accuracy of Wikipedia and Encyclopedia Britannica on the basis of scientific topics mentions that the errors are taken place at similar rates in two encyclopedias. It is further contended that being able to see the history of editing and open for debate and criticism by any member has made Wikipedia a reliable source Some scholars like Suh et al (2008) contend that being able to see the history of editing and open for debate and criticism by any user has made Wikipedia a reliable source and this inherent nature of Wikipedia is itself is a part of academic process. Despite of continuous criticism over Wikipedia, two American Professors of Humanities (Davidison and Goldber, 2009)further assert that "to ban sources such as Wikipedia is to miss the importance of a collaborative, knowledge-making impulse in humans who are willing to contribute, correct, and collect information without remuneration: by definition, this is education." . Okoli et al (2014) affirm Wikipedia as "a unique opportunity for educating students in digital literacy".

In the meantime some studies show that usage of Wikipedia is prevalent among Engineering, Computer, Mathematics or general science fields than those on Humanistic, Social Science and Education students (Selwyn and Gorard, 2016; Head and Eisenberg, 2010). Haslam (2017) also affirming the above provide examples from Scientific journals, working scientist and academics on promoting using and developing and contributing to Wikipedia as a resource of education. In finding the "intricacies, strength and weaknesses as a source of health information", Heilman et al (2011) state that "Wikipedia has evolved into an important medical resource for the general public, students, and health care professionals and therefore it is recommended to medical schools to "challenge their students not only to read Wikipedia's articles critically, but also to rewrite, discuss, critique, and improve them." However, academics from the humanities filed are in the opinion that Wikipedia can be introduced to medical school curricula but not to the undergraduate students of humanities (Purdy 2009; Maehre, 2009; Heilman, et al, 2011; Herbert, 2015).In the meantime a study carried out by Grassley (2009) discusses the possibility of usage Wikis for health science education, particularly in nursing education. Accordingly it allows

undergraduate students a perfect place for online group work. Also it can be used in developing nursing care plans and evidence-based nursing care projects.

While the world scenario is much focused on the usage of Wikipedia in undergraduate learning and teaching, exploration of history of the previous studies in regarding Sri Lankan context inform that there are no studies has been carried out to understand the reasons behind usage of Wikipedia among undergraduate students. A previous research carried out by Wijetunga (2014) on the digital information resource preferences of undergraduate students of three Health Science Faculties of University of Peradeniya indicate, a high tendency of using Wikipedia for their academic work. Hence the study point towards the necessity of further studies to understand the factors behind employing Wikipedia in their research.

Under the above setting, this study has undertaken with the purpose to investigate Wikipedia usage among undergraduate student in two universities in Sri Lanka. A questionnaire survey was used to collect data in 2016. The selected sample consisted of Health Science and Social Science and Humanities undergraduate students of two public universities of Sri Lanka.

3. METHODOLOGY

3.1 Population and Sample

Having above factors in the milieu, this study intend to examine the factors that lead undergraduate students using Wikipedia. Undergraduates of two different faculties from two Sri Lankan universities were selected for the study. Total students population of both faculties, namely Faculty of Allied Health Science (FAHS) Students, University of Peradeniya (UoP) and Faculty of Arts and Culture (FAC) of South Eastern University of Sri Lanka (SEUSL) were selected for the study.

3.2 Instrument and Measures

Survey method has been used to collect the data for the intended study. The survey was spilt in to 4 major areas: demographic features, frequency of usage of Wikipedia, reasons behind selecting Wikipedia as an information source, use of information seeking services and technologies. A self-administered 04 item printed questionnaires were administered among 1429

students of both faculties (total population). The questions included in the questionnaire were close ended in nature. Out of the 540 and 475 questionnaires were distributed, among FAHS and FAC undergraduates respectively, 423 completed questionnaires received from FAHS students yielding the 78% response rate. Among the 475 questionnaires administered 366 duly perfected questionnaires were returned from FAC. Accordingly response rate was 77%. The data collected from structured questionnaire survey was fed into Microsoft Excel and frequencies were calculated for analysis of data.

4. RESULTS AND DISCUSSION

4.1 Demographic Characteristics of the Participants
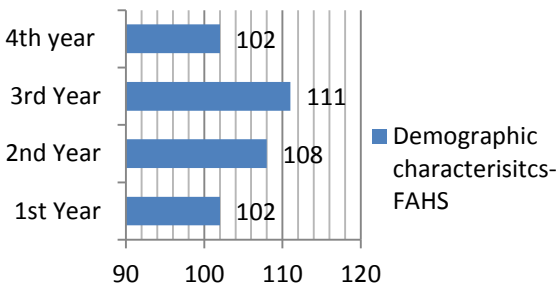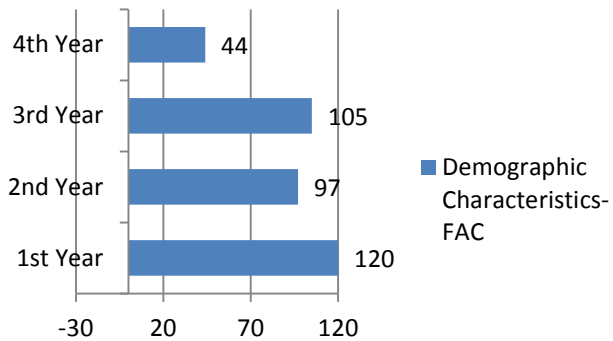

Figure 01: Demographic- FAHS

Figure 02: Demographic Characteristics-FAC

Age of the selected sample of the students ranges from 20-27 years. 61% of the First year students, 69% second year, 66% third year, 86% finals year FAHS of University of Peradeniya represented the study. In the meantime, 41% for the first year students, 44% of second year students, 46% of third year students and 57% of fourth year students from the FAC students of SEUSL have participated in the study. Among those who responded to the survey 39% male students and 61% female students represented both faculties.
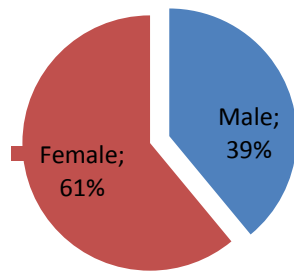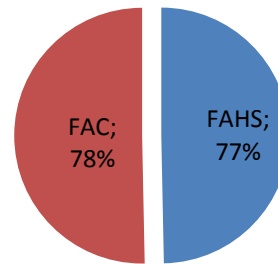
Figure 03: Demographic Characteristics Gender-wise

Figure 04: Response Rate

4.2 Frequency of Using Wikipedia

The results indicated that relatively high frequency of usage of Wikipedia is prevalent among the first year students of FAHS and 4th (final) year students of the both faculties. Accordingly, 71%final 4thyear students from the FAC and 79% first year and 77% final year students from FAHS indicated that they use Wikipedia more than once a week.
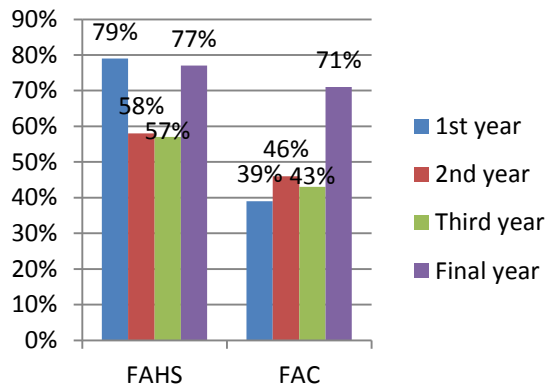

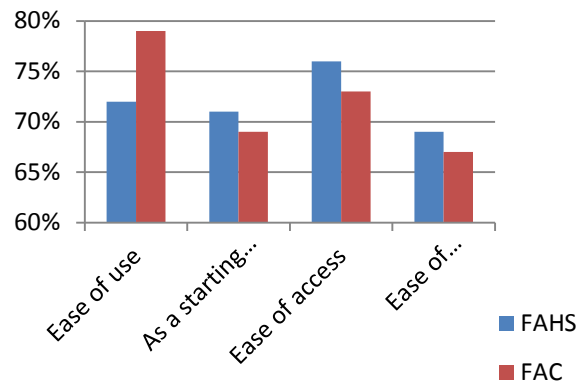**Figure 05: Frequency of Usage Wikipedia**

Figure 06: Reasons behind selecting Wikipedia

In the meantime a lower level of usage of Wikipedia is represented by first year students of FAC (39%), second year and third year undergraduate students from both faculties (FAHS: 58% and 57% ; FAC: 46% and 43%) use Wikipedia more than once a week. When the outcome of the results are analyzed by faculty wise, it indicates, that FAHS students have tendency of using Wikipedia over FAC students.

4.3 Reasons behind Selecting Wikipedia as an Information Source

When students were asked the reasons for selecting Wikipedia in searching their required information 72% first year students of FAHS and 79% of FAC indicated that they can easily find information they need from Wikipedia.73% FAC and 76% FAHS students reported that ease of access as the reason of accessing Wikipedia followed by ease of understanding (69% and 67% respectively). Denison and Montgomary (2012) also indicate the tendency of college students using Wikipedia due to their ease of accessibility. Mizrachi & Bates' (2013) in their study on "Undergraduates' Personal Academic Information Management and the Consideration of Time and Task-urgency" find that students physical and digital information ecology is arranged in a such a way that they can maximize accessibility and visibility and "their organizational schemes are driven by accessibility, visibility, urgency, and work flow factors which vary by context and are impacted by the multiple time factors, deadlines and calendars inherent in academia" (p. 1605).

Majority of the undergraduate students of both faculties (69% FAC and 71% FAHS) stated that they use Wikipedia as a starting point to their research. Findings of Head and Eisenberg (2010) in their research about how college students use Wikipedia for course related research, complying with the results of this study. In their study students indicate that their tendency to use Wikipedia as a starting point to research:

> "Students reported they could not begin their research process until they had an idea of what they were going to write about. They did not think that they could approach an instructor about an assignment, until they knew more about their topic. They did not use a scholarly research database early on, given the specificity of academic journal content.

The findings under the above measure suggest that majority of the undergraduate students from both faculties accept that Wikipedia is used for their research and learning activities due to its ease of use, validity as a pre research tool or starting point which lead to another sources, ease of access due to it user friendly interface and ease of understanding.

4.4 Usage of Information Services and Technologies

Participants were given five options to indicate how they use information services and technologies in searching for their study requirements. The study show that 79% of total students access Wikipedia and 78% use Google to find their information followed by Google scholar (60%), library (57%), and other databases 43% . 69% of FAC and 67% of FAHS students mentioned Wikipedia as their first source of information while embarking into searching for information.   79% students of both faculties use Wikipedia as the first source, while 69% use it as the only source.   Wikipedia, hence became the most common source used by the undergraduates of two universities. According to the outcome of the study, Wikipedia was crowned as the first source and most common source when undergraduates seeking for information.
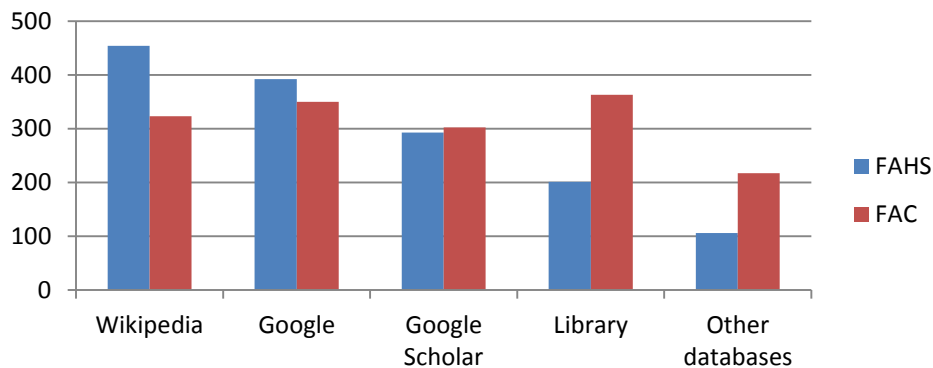

Figure 07: Usage of Information Services and Technologies

Analysis of data reveal that majority of Health Science students use Google (72%) and Wikipedia (79%) for their learning activities. These results are in compatible with the findings of the research carried out by Jude and Kennedy (2010) which indicate the continuous and improved use of Google and Wikipedia among medical and bio medical undergraduate students. They further state that notwithstanding the further improvements made to information sources especially provided by the libraries, students have a tendency to use Google and Wikipedia in their information seeking. Undergraduates' affinity with Google and Wikipedia demonstrate Y-generation students' attitude towards authoritative information sources. The findings show that

Wikipedia and Google is used by FAHS students over FAC undergraduates. There is a clear decline of usage of library by FAHS students.

5. CONCLUSIONS AND SUGGESTIONS

The study investigated the usage of Wikipedia among undergraduate students of two public universities in Sri Lanka. On the basis of the outcome yielded from the study, findings shed light on the frequency of usage, reasons behind using Wikipedia as an information source and usage of information services and technologies among undergraduates within the selected sample. There is a   major tendency of using Wikipedia of the undergraduate students from the both selected faculties were revealed in the study. While there is an ongoing controversy of using Wikipedia due to its credibility and accuracy, the study revealed that majority of the students us Wikipedia in their academic work.   To overcome the several limitations are involved with the study, using observations and focused group studies to understand the perception of students over the theme is suggested. It would be beneficial to conduct further studies on the perceptions of Wikipedia among lecturers and librarians of universities. Reliance on Wikipedia may not be limited to undergraduate students of the universities, therefore, it is significant to study how prevalent is Wikipedia among postgraduate students and teaching faculty   in their academic work.

 Findings of this study would benefit both librarians and lecturers to re-organize their information literacy packages. Rather being pessimistic over Google, considering it as an enemy embracing and integrating web 2.0 technologies to student learning and building relationship with Wikipedia with academic libraries would help students to be more efficient in information seeking skills as well as enhance their knowledge about pros and cons of information sources and technologies. In concluding we wish to draw our attention to the suggestion made by Colon- Aguirre and Fleming- May (2012) ''The academic library has been described as the ''heart of the university,'' (Leupp, 1924) charged with providing patrons with the best information sources for all types of academic endeavor. ….., however, that message is not reaching everyone in the academic institution. While we do not suggest that academic libraries adopt the organizational and information retrieval features of Google and Wikipedia uncritically, perhaps we can meet them halfway''.

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