Choice of information sources of blind and visually impaired person

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ABSTRACT

The paper aims to develop a theoretical model to investigate the relationships between Information Need (IN), Information Quality (IQ), Service Quality (SQ), Carrier Quality (CQ), Personality (P) and Relationalism (R) with the Choice of Information Source (CIS) among the bind and visually impaired (BVI). It serves to establish the link among IN, IQ, SQ, CQ, BFP and R with CIS to fill the gap in the current literature. The research model is proposed based on reviews of the literature on information seeking behavior, human needs, quality, personality, relationalism and choice behavior perspective. With the new knowledge gained on the associations among the variables, librarians and other information providers can focus their effort on understanding the BVI's persons' information sources preferences and provide better information sources based on the IN, IQ, SQ, CQ, BFP and R. It is anticipated that this paper will contribute towards a sustainable development for better lives for the BVI in Malaysia.

Keywords: Blind and visually impaired (BVI); BVI library services; Choice of information sources; BVI's behavior

INTRODUCTION

The library is one of the important elements either in schools, academic institutions or other organizations that comes from the word *liber,* a Latin word that means book. It can be defined as a collection or group of collections of books and/or other print or non-print materials organized and maintained for use (reading, consultation, study, research, etc.) and meet the user needs (Reitz, 2004). There are five types of libraries namely the national library, public library, academic library, school library and special library. This study focuses on a special library, that is, the blind and visually impaired (BVI) special library since the BVI community is the biggest minority community in the world.

The literature published in the popular journals on different types of disabilities has studied the various disabilities and found out that visual disability ranked first amongst disabilities and this is followed by learning disability and physical disability, auditory, multiple and nonspecific, general types of disabilities (Hill, 2013). The first global estimation of BVI in 1975 stated that there are 28 million BVI people worldwide and this figure increases yearly with 38 million on 1990, 5.8 billion on 1996 and 7.9 billion in 2020 (WHO, 2007). A total of 10% of the world population live with disability with one -

third of this from BVI disability (UN, 2001) and 90% of the BVI community lived in developing countries (WHO, 2013). If a 10% projection is taken into account for the Malaysian population of 30,021,078 (Department of Statistics Malaysia, Mac 2014), the estimated number of people with disabilities is 3 million and one-third or 1 million are those from people that have BVI problems.

Information seeking behavior (ISB) has become a major research in library and information science (LIS) field since the early 1980's. Several ISB models had been created which focus more on the flow or process of ISB. Generally ISB involves three steps which are perception of the need for information, the search for information, and the use of information (Choo, 2006). A simplified process of the information search process is presented in the Figure 1. Hence this research will focus more on the information search which is the factor that influences the choice of information sources of BVI in the BVI special library in Malaysia.
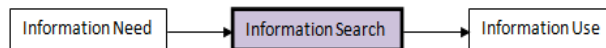

Figure 1: Information search process by Zimmer 2011

The development of the libraries for BVI differs from country to country and are often developed outside of the mainstream library system as an extension of charitable agencies to fulfil roles in education, training and lifelong learning for BVI people. In Malaysia, the Malaysian Association for the Blind (MAB) is the premier voluntary organization in Malaysia serving BVI with suitable information sources in their library. However technological evolution has also changed the ISB of the BVI and its sources of information. This study is important due to the different format of information sources available for this community rather than other disability community.

Previous research in this area found out that the choice of information sources was influenced by the task, the seekers, the source (O'Reilly, 1982) and social communication (Zimmer, 2011). In this research, the task will be represented as Information Need (IN), the seekers as Personality (P), the source as Source Quality (IQ, SQ, CQ) and the social communication as relationalism (R). This paper proposed the new framework to investigate the Relationship between IN, IQ, SQ, CQ, P and R with CIS based on the Customer Purchase Behavior (CPB) model (Kim, Forsythe, Gu & Moon , 2002), Information System Success (ISS) model (Delone & McLean, 2003), relationalism model on selection of information source (Zimmer, 2011) and the personality on the source of information (Sin, Kim, Yang, Park & Laugheed, 2011). All these models and theories are grounded based on the behavior theory and the same applies to this conceptual model that involves the choice behavior.

LITERATURE REVIEW

The research model is proposed based on reviews of the literature on ISB, information source, information need, personality, relationalism, choice and behavior perspective. One of the earliest theorists on ISB highlights the need to study information-seeking behavior, rather than just information needs (Wilson, 1981, 1999). Other researchers

examined in more detail about the ISB among different target groups (Dervin, 1983; Bates, 1989; Ellis, 1989; Kuhlthau, 1991; Savolainen, 1995, 2008; Mohammed Nasser, 2007; Yadamsuren, 2010; Zimmer, 2011 & Markwei, 2013).

Choice of Information Source

Information sources (IS) is a physical carrier of information and the most important element in seeking information either for the job or non-job related information and school or non-school related information. There are an infinite number of different information needs and there are also an almost unlimited number of different sources of information (Kari, 1997). IS or sometimes used as information resource or information channel is defined as any system producing information or containing information intended for transmission and it is distinguished by the form of representation either textual (books, journals, manuscripts), graphic (graphs, diagrams, plans, charts) and audiovisual (sound recordings, motion pictures, slides) (Great Soviet Encyclopedia, 2010).

Several researchers have divided and categorized IS into a few categories. Information sources can be categorized into four categories which are: 1) self, 2) other people, 3) organizations, and 4) documents (Wilson, 1981; Chen & Hernon, 1982; Brown, 1991). IS also can be classified into internal and external sources (Huston, 1991), into normal and paranormal sources (Kari, 1997) or into people and media (Agosto & Hughess-Hassell, 2005). Based on the categories above, the researcher agreed that the recorded IS can be classified as a formal IS while non-recorded IS can be classified as informal IS.

IS for the urban youth adult revealed the most frequently consulted people included friends, family, and school employees while librarians appeared low on the final typology, after mentors and customer service personnel. For the media source, teenagers turn to telephones, televisions, computers and radios before turning to print resources such as newspapers, books and magazines (Agosto & Hughess-Hassell, 2005). However, the seniors' main source of information regarding health is the nurse or physician while newspapers or magazines are for information regarding hobbies. The seniors agreed that technology-mediated information (phone and the internet) always frustrates them although it was the best way to get information (Gray, Snarr & Vallance, 2005). Both researches found out that personal or word of mouth is a major source of information.

The evolution in technology has changed the sources of information in the world especially for the BVI community. The BVI's IS is identically different compared to other group of disabilities and other normal visual people due to the limitation of their sight. Due to this, several IS has been made available for BVI although the cost for each source is high like the Braille book, Digital Talking Book (DTB), audio cassettes, large print, adaptive technology and a few more. All these IS can be obtained from the BVI charity organization and the Blind Special Library. Special libraries for BVI produce materials in altrenative formats since it was not commercially available and they also provide free postal services (Pillar, 1995).

The services like access to digital texts, DTB, CD-ROMs, Braille, large print books and special format interlibrary loan had become a part of public library services (Craddock,

2003). Adaptive technologies are sometimes accompanied by training activities for BVI users and librarians (Cahil, 2003). The Daisy Consortium (2004) had also created the Daisy format for the BVI where users will be able to make large print and will be able to translate it into Braille, audio formats, and different languages. Availability of software like Job Access with Speech (JAWS) allows BVI users to read the screen either with a text-to-speech output or by a Refreshable Braille display. Nowadays, other speech software also had been embedded in the smart phone and tablet widely. This technological evolution may change the patterns of ISB and choice of information sources of the BVI.

Hence, the IS for the BVI had changed in parallel with the technological change and it has changed the ISB and ELIS of the BVI especially on their choice of IS or perhaps they will use the IS that requires the least effort due to their visual disability.

Relationship between Needs and Choice

Information needs influence the choice of information sources by stating that the more information is needed, the more sources and human sources are use (Byström's 1999). Findings from previous study revealed that the choice of information source are based on either meeting human acute needs, new needs, specific needs or future needs and the appropriate information sources will be scanned in the mind as long as the to-do list of information needs stays in the minds (McKenzie, 2003). Other than that, students turn to a plethora of IS to meet their information needs including people, telephones, televisions, and computers (Agosto & Hughess-Hassell, 2005). People also read for orienting their needs and choose new sources and stories that meet their needs (Yadamsuren, 2011).

Meeting the needs of the users is one of the important elements in marketing. The library is an information service provider that provides the user's information needs. Providing the right products or services to fulfill the customer needs is necessary where it becomes an ongoing marketing challenge in the competitive global market (Kim et al., 2002). Therefore, the consumer purchase behavior theory that examines the relationship between customer needs which are experiential needs, social needs and functional needs with the purchase behavior had been used in this study by assuming the Choice of Information Source (CIS) determined by the needs the BVI's itself. Based on this, the following hypothesis is proposed:

> H1: Information Needs of the BVI have a positive influence towards Choice of Information Source (IN → CIS).

Relationship between Quality and Choice

Previous findings on the ISB study revealed the quality of information source itself. Accuracy is most important when selecting information sources among the seniors (Gray, Snarr & Vallance, 2005). The criteria for quality of the information needed are physical form, amount of information needed and emphasizes on the information and delivery itself (Kari, 1997). He also found out that the ten criteria for quality of the information from the previous research are: 1) Width or holistic nature of information, 2) Cost of information, 3) Ease of accessing information, 4) Applicability of information

to the person's situation, 5) Depth or specialization of information, 6) Reliability of information, 7) Newness of information, 8) Precision of information, 9) Swiftness of getting information, and 10) Intelligibility of information.

Quality of the information and sources viewed influenced the CIS. However, he only took content and availability of the information as the information quality element in his study which influences the information source horizon (Savolainen, 2008). The quality and credibility of the online news source was also tested and found that the quality of writing (source of news, well-written, low quality, objective, slanted, fair, balanced, bias, twist stories, wisdom of crowd and accuracy), design/usability (layout, usability and design) and a few others like validity, reliability, faith, reasonable, trust and integrity are criteria are used to judge the quality of the information and its source (Yadamsuren , 2011). In consequence to this previous ISB and ELIS findings about the information quality, the well established ISS model will be used in this study. Choice of Information Source (CIS) is determined by the quality of the carrier, service and information itself (Delone & McLean, 2003). Based on this, the following hypotheses are proposed:

> H2: System Quality has positive influence on BVI Choice of Information Source (SysQ → CIS)
> H3: Service Quality has positive influence on BVI Choice of Information Source (SQ → CIS)
> H4: Information Quality has positive influence on BVI Choice of Information Source (IQ → CIS)

Relationship between Personality and Choice

CIS is influenced by the personality of the seekers itself. This statement has been supported where behavior and choice preference of individuals can be explained to great extent by underlying personality traits (Allport, 1937). The major drivers of source selection are the seekers' characteristics itself that lead them to choose different information sources to fulfill their needs (O'Reilly, 1982).

The choice of mode transport is influenced by the attitudes and personality traits (Johansson; Heldt & Johansson, 2006) while personality plays a role for choice of website (Kosinski, Stillwell, Kohli, Bachrach & Graepel, 2012). Hence the influence of personality on information behavior requires further investigation. On the ISB, information source vary with personality traits (Sin, Kim, Yang, Park & Laugheed, 2011) as information behavior can vary with personality traits (Heinström, 2003, 2006; Farmer, 2007). Findings show that individuals with different personality traits favoured certain sources that were seldom used by others. CISis determined by the personality of the BVI's itself. Based on this, the following hypothesis is proposed:

> H5: Personality has positive influence on BVI Choice of Information Source (BFP → CIS)

Relationship between Relationalism and Choice

Another variable that influences the choice of information source is the relationalism that has been established between seekers and the sources because individuals not only

communicate with the source, but create feelings (Duck, 1988). In this study, relationalism can be defined as the perception that an individual can form a relationship with a source (Zimmer, 2011). He viewed relationalism as the new factor that influences CIS. Relationalism is rooted in two separate research findings. First, in the course of studying how to best store and organize information for easy retrieval, researchers found that some individuals rely heavily on interpersonal communication instead of formalized information systems (Gerstenberger & Allen, 1968). Second, more recent research found that individuals perceive differences in accessibility for different types of sources (Zimmer, Henry & Butler, 2008).

Several information sources can contain equivalent information and the seekers will decide to choose the information source that enables relationship formation. Although face-to-face interaction is rich in establishing connections, individuals also establish connections through IT-enabled communication sources like Web 2.0, blogs, wikis, instant messaging and chat function because it can establish and maintain connections (Nardi, 2005) as well as allow for the exchange of substantive information and allow users to interact, openly share information, and generate the network effects that result from individuals combining their collective knowledge (Parameswaran & Whinston 2007; Zammuto, Griffith, Majchrzak, Dougherty & Faraj 2007). The availability of several information sources will make the seekers choose the source that have a high relationalism with the source. Hence the following hypothesis will be tested.

> H6: Relationalism has positive influence on BVI Choice of Information
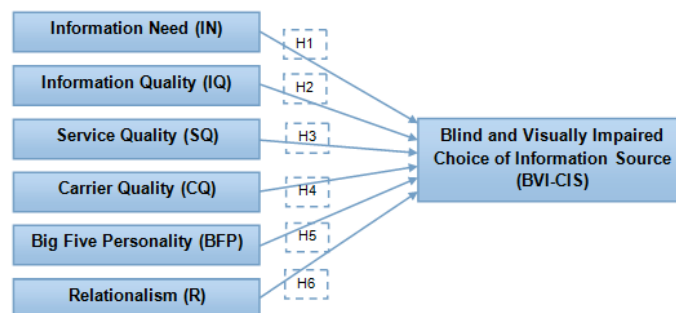> Source (R → CIS)

Theoretical Model

Figure 2: Proposed research model for BVI Choice of Information Source (CIS)

IMPLICATION

The main contribution of this model is the integration of needs, quality, personality and relationalism to improve the existing services of the library for BVI users especially in terms of information sources. It will also provide government and private organization an understanding about information needs of BVI in Malaysia. Librarians, information professionals and information providers could improve library services through understanding of the BVI's information need, identify and improve the quality for the

frequently used information source among BVI and could become cost effective organizations by eliminating the less frequently used information sources and vice versa.

This study wil contribute to the ISB body of knowledge with the development of a new model. The suggested model will assist researchers to determine the linkage between IN, CQ, SQ, IQ, BFP and R with CIS. These six variables have been developed as a result of literature reviews.

CONCLUSION

Library services for the BVI and the information sources available have changed following the evolution of technology and the BVI community will not miss this change. Understanding the factor that influences CIS among BVI is vital for libraries and other information providers to meet the needs of the users especially BVIs in Malaysia. The proposed model identifies the relationship between IN, IQ, SysQ, SQ, P and R with the CIS. This suggested model perhaps will be used for future research and by information providers to prepare the best possible service and become a cost-effective organization.

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