Communication between staff and users in academic libraries: An assessment study

Noor Abutayeh[*]

Abstract: The current study aims at assessing communication between librarians and users in the library of Al-Hussein bin Talal University from users' perspectives themselves. It shows the characteristics of qualitative-quantitative research by adapting the *Sequential Explanatory* strategy. It recommends that libraries leaders should pay attention to the necessity of holding training sessions for employees on how to communicate with users with disabilities. In addition, the researcher has found related reasons for problem in communication from outside sources. The probable causes of communications gap occur when there is a difference between service delivery intentions and what is communicated, as mentioned in SERVQUAL model descriptions of gaps.

INTRODUCTION
Academic libraries have done much effort to convince students that they understand and respond to their needs; thus, students have exploited technological tools to develop their collaboration, creativity and sharing (McDonald & Thomas 2006; Okobi 2014). "Libraries are no longer about books or even information. Instead, libraries are playing role of facilitating people to participate, interact, construct and create, to provide the means for that to happen" (Mackenize 2007). This reflects the complicated, dynamic and ever-changing nature of libraries field which relies on professional and personal competencies of staff members (Zeithaml et al. 1988; Morton 2000; Pérez Pérez 1998; Lowenfeld 1975).

[*] Noor Abutayeh (✉)
Department of Libraries and Information Science, Faculty of Educational Sciences, Zarqa University, Jordan
e-mail: noor.abutayeh@hotmail.com

In the developing countries, there is a lack of information services in public entities (Majinge & Stilwell 2013; Jenkins & Clinton 2006; Millán-Reyes 2010); lack of qualified staff (Copeland 2011), shortage of assistive technologies (Irvall & Nielsen 2005), unsafe, unsuitable and uncomfortable buildings (Wade 2003; Lacey 2004; Bawden, et. al. 2009), at the time the world witnesses knowledge revolution.

Therefore, human resources play an essential role in providing information services to every member in users' community (Cunningham & Stanovich 1997; Mackenize 2007; Mendle 1995; Seale 2013; Pellack 2004) and enhancing the academic staff and college students' skills and competencies (Babalola & Haliso 2011; Byerley & Chambers 2002) with taking into consideration the quality of services which depends on charging qualified and well- trained staff members who must have the adequate knowledge and sufficient awareness on how to communicate with persons with disabilities (Eshghi et al. 2008; Wang & Al-Said 2014; Blummer & Kenton 2014; Pinto et al. 2009). Workshops, training sessions and employee promotion enhance the personal and communication skills of the library employees who provide services to users (Dobson & Stanley 2002). This will be highly valued when "combined with related competencies such as listening, advocating, being articulate, collegiality, and building relationships" (Lewis 2015).

Furthermore, it is important for librarians to obtain knowledge and awareness towards the users' needs to access and retrieve information from libraries, databases and data warehouses (Babalola & Haliso 2011; CEDD 2008; Chu & Du 2012; Booth 2009; Duggan 2010) including the issues of staff-user interactivity, communication and information services delivery to users.

STUDY OBJECTIVES

The main objective of the current study is to examine the status of communication between employees and patrons in the library of the Al-Hussein bin Talal University. The study attempts to achieve the following objectives:

1. To discover the status of communication between librarians and users in the library.
2. To examine communication skills staff members have in providing information services.

3. To provide the library administrators researchers and academics with suggestions and recommendations concerning the information services provided for patrons.

SIGNIFICANCE OF THE STUDY

The greater demand for information for college students and in particular patrons justifies the need for more effective and life-changing learning tools in libraries. This study investigates a topic that is still open for more efforts in research. While the findings of the study will redound to the benefit of societies, it takes into consideration that academic libraries have shifted in less than a century from information management approach to user-centered/ content-management approach through which libraries adapt a real change in the essence of its activities by coining their mission towards developing theories, techniques, information resources, human resources skills and personal competencies to facilitate accessing to information as efficiently as possible.

The results of the study will be of interest to library managers, administrators and librarians. They will be guided on what should be taken into consideration in the process of communication in providing information services in the library. For researchers, the study presents collaboration to librarianship through discussing a topic that is open for future discussion.

METHODOLOGY

The current study reflects the characteristics of qualitative- quantitative research techniques described by Murray (2003), Barbour (2008), Bodgan and Biklen (2006), Bernard (2002) and Creswell (2003). The *Sequential Explanatory* strategy is adapted, which is characterized by gathering and analyzing the quantitative data followed by process of collecting and analyzing of qualitative data. Data collection procedures include the distribution of the benchmark questionnaire that follows SERVQUAL model and the use of interviews technique. Respondents to questionnaire are purposively selected. *Snowball technique* (Creswell 2003; Goodman 1961) was utilized for interviewing method. *Data analysis*

Data analysis procedures include descriptive statistics analysis using tables, graphics and qualitative assessment of response patterns. All data collected through the questionnaire survey are coded and analyzed using SPSS 20 (Bogdan & Biklen 2006). Validity and reliability of the

study (Bogdan & Biklen 2006; Fink & Litwin 1995) are addressed via triangulation of data (Patton 1990; Rothbauer 2008), peer review (Fink & Litwin 1995; Bernard 2002), content analysis of open-ended questions (Dey 1993), pilot test, and Cronbach's alpha result (.824).

POPULATION AND SAMPLING

The population of the study consists of users in the library of Al-Hussein bin Talal University. 208 different types of users of the library participated as a sample of the study. Figure 1 corresponds to the participants' gender of the sample. (82.7%) of the respondents are females. (17.3%) are males.

Figure 1: Gender of participants from Al-Hussein bin Talal University library users
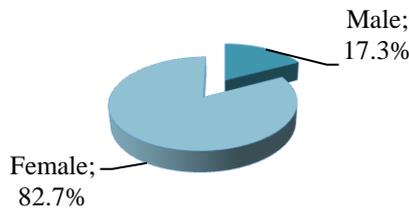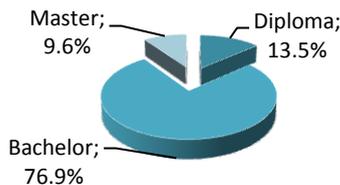
Figure 2 shows the qualification degrees of respondents. The least average percentage was 9.6% for Master's Degree group. 13.5% of participants are holding Diploma, and the majority 76.9 of the participants are holding Bachelor's Degree.

Figure 2: Qualifications of participants from Al-Hussein bin Talal University users

FINDINGS AND DISCUSSION

The findings are organized around fulfilling the study three objectives. Descriptive Statistics measures of Central tendency (mean, median, and mode) and measures of variability (range and standard deviation)

are used to gain the means and response average percentage. Distance Matrix correlation of values is provided. The values obtained were compared with each other and with the standard value of the Likert Scale "Agree" or "Disagree" ranking.

The findings of status of staff-user interactivity and communication in Al-Hussein bin Talal University library are shown in the below Table. The status was investigated from users' voice.

Librarian- user interactivity statistics in Al-Hussein bin Talal University: mean, median, mode and standard deviation

Dimension	Individuals attention to users	Communication: understanding & listening to users	Reliability: dependable and accurate manner	Security: feel free of danger or risk	Competence: skills and knowledge	Responsiveness: help user by prompt timely service	Access: convenient working hours	Knowing user: delight users with services	Credibility: equality despite race	Credibility: equality despite religion	Courtesy: respect and friendliness
Valid	208	208	208	208	208	208	208	208	208	208	208
Missing	0	0	0	0	0	0	0	0	0	0	0
Mean	4.11	3.90	3.94	3.61	3.92	4.23	4.07	4.07	4.01	4.1	3.94
Median	4.000	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.0	4.00
Mode	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.0	4.00
Std. deviation	.5825	.693	.802	1.08	.652	.674	.987	.836	.641	.56	.574

In this Table, results of the interactivity among librarians and users in the Al-Hussein bin Talal University library are revealed. The mean and standard deviation values of the paragraphs in ascending ranking are as follows: responsiveness: help user by prompt timely service (*mean=4.2308, SD=.67491*), credibility: equality despite religion (*mean= 4.1346, SD=.56112*), individualized attention to users (*mean=4.1154, SD=.58255*), knowing user: delight users with services (*mean=4.0769, SD= .83657*), access: convenient working hours (*mean=4.0769, SD=.98710*), credibility: equality despite race (*mean=4.0192, SD=.64140*), courtesy: respect and friendliness (*mean=3.9423, SD= .57440*) and reliability: availability of a staff

member to deal with   in dependable manner (*mean=3.9423, SD=.80229*), competence: skills and knowledge (*mean=3.9231, SD=.65218*), communication: understanding and listening to users with (*mean=3.9038, SD=.69338*), and the lowest value was concerning the question of Security: feel free of danger or risk (*mean=3.6154, SD=1.08743*).

Each question in this section, librarian-user communication, is illustrated in details as follows:

Individualized attention to users
Regarding the average percentage of respondents' perspectives towards the presence individualization of attention to users in the library, the study revealed that: only 3.8% of respondents disagree that there is individualized attention paid to users in the library; 19.2% of them strongly agree, and 76.9% agree but in a less degree that the library pay individualized attention for its patrons.

Therefore, according to respondents' perspectives statistics, reliability manners, accuracy and dependency in providing information services in the library of Al-Hussein bin Talal University exist and presented in a positive status.

Understanding and listening to users
As regards the average percentage of respondents' perspectives towards the presence of librarians' communication with users to understand and listen to their demands in the library are presented.

There is a clear increase of average percentage of agreeing towards the presence of connection among librarian and users in the library, so that staff members know users well and understand their needs of information services: 15.4% of respondents strongly agree on this statement; 63.5% of them agree in a lesser degree. "Disagree" was by 3.8% of participants, and 17.3% of them have no decision towards the statement that there is a communication among librarians and users in order to know their requirements of information resources and needs of a certain type of materials or service in the library.

Therefore, according to participants' perspectives statistics, communication in providing information services, understanding and listening to users, in the library of Al-Hussein bin Talal University exists and presented in a positive status.

Reliability

In the following table reliability is presented, average percentage of respondents' perspectives towards the librarians' in communication with users in the library. Reliability is concerned with availability of a staff member to deal with users in dependable manner.

Concerning the users' perspectives towards reliability, the study emphasizes that: 17.3% strongly agree with the statement that there is a staff member who is specialized to serve users in a reliable manner; 71.2% agree in a lesser degree; and 11.5% of the sample disagree.

Therefore, according to respondents' perspectives statistics, reliability manners, accuracy and dependency in providing information services in the library of Al-Hussein bin Talal University exist and presented in a positive status.

Security: feel free of risk

The study followed to find the average percentage of respondents' perspectives towards security in providing services: users feeling free of risk, physically and virtually.

So, most of respondents agree that there is secured environment in the library for users: 23.1% of them strongly agree that the library environment is safe; 38.5% of participants agree but in a lesser degree; 23.1% out of 326 disagree, while 15.4% have no decision.

Therefore, according to respondents' perspectives statistics, status of secured environment in providing information services in the library of Al-Hussein bin Talal University exists in a humble level.

Competence: skills and knowledge

Referring to the average percentage of respondents' perspectives towards librarians' competence, their skills of communication, knowledge and experience in providing information services for users, the study shows some important aspects. The respondents' perspectives towards staff members' competence point up that skills and knowledge are positive: 15.4% strongly agree on this statement; 63.5% agree in a lesser degree; 19.2% of them have no decision, while 1.9% disagrees.

Therefore, according to respondents' perspectives statistics, the status of librarians' competence, their skills and knowledge in providing information services in the library of Al-Hussein bin Talal University, are in a good level.

Responsiveness: help users by prompt timely services
In this regard, the research highlights that most of respondents agree that there is a prompt timely response for users' queries in the library: 32.7% of them strongly agree on this statement; 61.5% of participants agree but in a lesser degree; 3.8% out of 326 disagree, while 1.9% have no decision. Therefore, according to respondents' perspectives statistics, status of librarians' responsiveness to information queries of users in the library of Al-Hussein bin Talal University is in a good level.

Staff approachability: convenient working hours
About the average percentage of respondents' perspectives towards librarians' working hours, if they are adequate and convenient for providing services to users or not, the investigation focuses attention on the fact that: 40.4% of respondents strongly agree that working hours in serving users are adequate and convenient; 38.5% of respondents agree in a lesser degree, while 11.5% of participants disagree on this statement; 9.6% selected "no decision" as a response to the question. Therefore, according to respondents' perspectives statistics, users' access or approachability to librarians' with convenient and adequate working hours is in a good level.

Knowing users: delight users with services
As regards the average percentage of respondents' perspectives towards knowing users: their demands in order to make them satisfied with the services they provide in the library of Al-Hussein bin Talal University, the study shows that there is a positive view towards the fact that librarians delight users with information services they provide: 32.7% of respondents selected "strongly agree" as a reply to the question; 48.1% of participants agree but in a lesser degree; only 5.8% of the sample disagree on the statement; and "No decision" was selected by 13.5%. Therefore, according to respondents' perspectives statistics, status of delighting users with information services they provide in the library of Al-Hussein bin Talal University is in a very good level.

Credibility: equality despite race
Another question centered on the average percentages of respondents' perspectives towards dealing with users equally despite the race in the process of providing information services in the library of AlHuseein bin Talal University. According to the responses of participants in the

investigation, there is a positive view towards the fact that librarians deal with users equally despite race in providing information services: 19.2% of respondents selected "strongly agree" as a reply to the question; 65.4% of participants agree but in a lesser degree; only 1.9% of the sample disagree on the statement; and "No decision" was selected by 13.5%. Therefore, according to respondents' perspectives statistics, status of the fact that librarians deal with users equally despite race in providing information services in the library of Al-Hussein bin Talal University is in a high level.

Credibility: equality despite religion
Referring to this item, the research emphasizes that there is a positive view towards the fact that librarians deal with users equally despite religion in providing information services: 21.2% of respondents selected "strongly agree" as a reply to the question; 73.1% of participants agree but in a lesser degree; only 1.9% of the sample disagrees on the statement; and "No decision" was selected by 3.8%. Therefore, according to respondents' perspectives statistics, status of the fact that librarians deal with users equally despite religion in providing information services in the library of Al-Hussein bin Talal University is positive and is in a high level.

Courtesy: respect and friendliness
The question followed to find the average of respondents' perspectives towards dealing with users friendly and with respect in the process of providing information services in the library of Al-Hussein bin Talal University. The answers reveal that: 11.5% of respondents strongly agree that they are dealing with users with respect and friendly; 73.1% of respondents agree in a lesser degree, while 13.5% of participants disagree on this statement; 1.9% selected "no decision" as a response to the question. Therefore, according to respondents' perspectives statistics, status of courtesy: dealing with users friendly and with respect is positive and in a good level. In the following figure, total average percentages of population agreeing towards the staff-user interactivity indications.

The study ran towards an image of staff-user communication in Al-Hussein bin Talal University library, as it can be seen in the Figure 3:
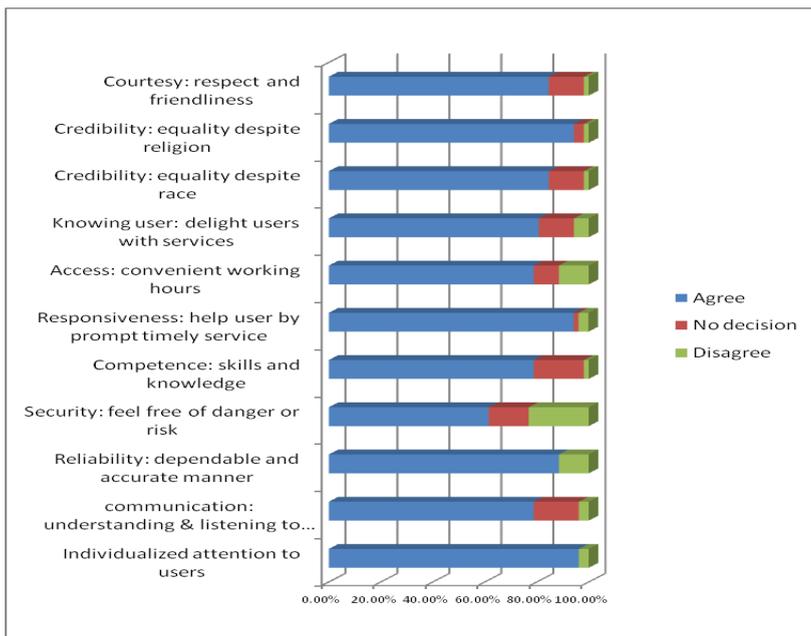
Figure 3:
Average percentage of staff-user communication in Al-Hussein bin Talal University library

As shown, 94.2% of population agrees that there is an individualized attention given to users, and their positive views towards working hours equals to 78.9%, responsiveness with prompt timely services has average percentage of 94.2%, agreeing for knowing the users' needs equals to 80.8%. Equality despite race equals to 84.6% and despite religion equals to 94.3%, while the average percentage of sample's views towards courtesy, dealing with users with respect and friendliness, equals to 84.6%. A high value also shown in the benchmarks of reliability of staff equals to 88.5%, and staff members' competence of skills 78.9% average percentage of participants sampled, while the lowest value in the chart is 61.6% which is belonging to security question, concerned with feeling free from risk and doubt including information, physical and confidentiality, and the last benchmark is concerned with agreeing with statement that librarians listen to users, which equals to 78.9% percentage of the respondents' positive views.

Actually according to statistics of indications, staff- user communication and interactivity in Al-Hussein bin Talal University library is in a good level.

CONCLUSION AND DISCUSSION

This study reveals the participants' responses percentages using "Likert scale" of the benchmarks that follow SERVQUAL model. The researcher has found that: 94.2% of population agrees that there is an "individualized attention" given to users and their positive views towards "working hours" equals to 78.9%. The benchmark of "responsiveness with prompt timely services" has average percentage of 94.2%, agreeing for "knowing the users' needs" is 80.8%. The criterion of "equality in providing services despite race" equals to 84.6% percentage of agreeing while the percentage of agreeing of "dealing with users despite religion" goes up to 94.3%. The average percentage of sample's views towards "courtesy, dealing with users with respect and friendliness" equals to 84.6%. A high value also shown in the benchmarks of "availability of a librarian to deal with users in a dependable manner equals to 88.5% and "librarian's competence of skills" reaches 78.9% average percentage of participants sampled, while the poorest value in the chart was 61.6% belonging to the "safety" question, which is concerned with the criterion of "feeling free from risk and doubt including information, physical and confidentiality". The last benchmark is concerned with agreeing with statement that "librarians know users' needs and listen to them", which goes up to 78.9% percentage of the respondents' views, which means that the status of communication in the Al-Hussein bin Talal University Library is satisfying.

However, Mendles' (1995), Burke's (2009) and Green's studies (2009), indicated the essential role of staff awareness in academic libraries is to enroll patrons in activities and/or training sessions (Cowgill et al. 2001; Davis 2007; Stanley 2010; Kavanagh & Skold 2005) in accessing to information resources (Huang 2008; Tripathi & Shukla 2013) and using assistive technology (Blummer & Kenton 2014; Tian 2014; Oreilly 2005). In addition, Cowgill, Beam, and Wess (2001) discussed that training of librarians modules on communication skills are very important for institutions success in order to get themselves from traditional role to information commons. Irvall and Nielsen (2005), Pinto (2009), Pindlowa (2002) and Partridge (2010) in their study show up the importance of interaction among library collections, staff, information services, and patrons. They indicate that they are toughly connected together, affecting each other, and couldn't be addressed separately.

Furthermore, Majinge and Stilwell's (2013), Negi (2009) and Kim & Abbas (2010) indicated that the information services presented in the libraries sampled aren't integrated and need to be improved through acquiring more collections, more assistive technology devices and more training courses for librarians. Seale (2013), through his study, discussed the importance of taking interior design into consideration to make the tour of the patrons inside the library building easier and safer while they are seeking information.

Consequently, based on participants' views towards communication among staff and patrons statistics, the researcher urges libraries leaders to pay more attention to the necessity of holding training sessions for employees on how to communicate with users with disabilities; the researcher found related reasons for any problem in communication from outside sources related, the probable causes of communications gap, as mentioned in SERVQUAL descriptions of gaps, which occur when there is a difference between service delivery intentions and what is communicated. These probable causes are: 1. lack of horizontal communication; 2. poor communication with marketing section; 3. inadequate communications among departments; 4. differences in policies and procedures across branches, and finally, propensity to overpromise (Zeithaml et al. 1988).

The researcher pay attention to the necessity of adapting modern Information and Communication Technologies (ICTs) in providing information services for patrons' community to accumulate with the dramatic technological changes (Millán-Reyes 2010; Méndez 2001; Hill 2013; Zineldin 2007) and to enhance accessibility for all persons to get an equal opportunity without challenges in their way of obtaining information which is considered to be a distinguishing feature of modern libraries in the current age.

Furthermore, it is recommended that there should be scheduled training sessions to raise the employees' awareness towards challenges facing users when they patronize the library, and enrich their knowledge with skills on how to get these patrons engaged in the library environment. In addition, the administrators of the academic libraries may take into consideration the importance of holding training sessions on marketing and disseminating libraries services for librarians to make them more aware of its relevancy to their interest and/ or work.

REFERENCES:

Abu-Tayeh, Noor. 2018. *Information Services and Staff-Users Communication in Academic Libraries.* Doctoral thesis. Santiago de Compostela: University of Santiago de Compostela.

Babalola, Yemisi, and Yacob Haliso. 2011. "Library and Information Services to the Visually." *Canadian Social Science*, 7, No. 1: 140-147.

Barnes, C., Mercer, G., & Din, I. 2003. *Research review on user involvement in promoting change and enhancing the quality of social 'care'services for disabled people.* Leeds: Centre for Disability Studies, University of Leeds.

Bawden, David, Andrew Calvert, Lyn Robinson, Christine Urquhart, Colin Bray, and John Amosford. 2009. "Understanding our value: assessing the nature of the impact of library servcies." *Library and information research*, 105.

Bernard, H. R. 2002. *Research Methods in Anthropology: Qualitative and Quantitative Methods* (3rd ed.). California: AltaMira Press.

Blummer, Barbara, and Jeffrey M. Kenton. 2014. "The Availability of Web 2.0 Tools from Community College Libraries' Websites Serving Large Student Bodies." *Community & Junior College Libraries*, 3: 75-105.

Bogdan, R. C., and S. K. Biklen. 2006. *Qualitative Research in Education: An Introduction to Theory and Methods.* Boston: Allyn & Bacon.

Booth, C. 2009. "Informing innovation: Tracking student interest in emerging library technologies at Ohio University" http://www.ala.org/ala/mgrps/divs/acrl/publications/digital/ii-booth.pdf. [accessed: Oct 20, 2016].

Byerley, Suzanne L., and Mary Beth Chambers. 2002. "Accessibility and usability of Web-based library databases for non-visual users." *Library Hi Tech*, 2: 169-178.

Chu, S. K., and H. S. Du. 2012. "Social networking tools for academic libraries." *Journal of Librarianship and Information Science*, 45, No. 1: 64-75.

Copeland, Clayton A. 2011. "Library and Information Center Accessibility: The Differently-able Patron's Perspective." *Technical Services Quarterly*, 2: 223-241.

Cowgill, Allison, Joan Beam, and Lindsey Wess. 2001. "Implementing an information commons in a university library." *The Journal of Academic Librarianship*, 6: 432-439.

Creswell, John W. 2003. *Research Design: Qualitative, Quantitative, and Mixed Method Approaches.* California: Sage.

Davies, J. Eric. 2007. "An Overview of International Research into the Library and Information Needs of Visually Impaired People." *Library trends*: 785-795.

Duggan, M. W. 2010. *Improving services for students with disabilities at community colleges.* Chicago: National-Louis University.

Dulle, F. W., and M. K. Minishi-Majanja. 2009. "Researchers' perspectives on open access scholarly communication in Tanzanian public universities." *South African Journal of Information Management*: 1-14.

Eger, Thomas, Marc Scheufen, and Daniel Meierrieks. 2016. "The determinants of open access publishing: survey evidence from countries in the Mediterranean Open Access Network (MedOANet)." *Economia e Politica Industriale*, 4: 463-489.

Fink, Arlene, and Mark S. Litwin. 1995. *How to Measure Survey Reliability and Validity.* London: Sage Publications.

Goodwin, William L. 1996. *Understanding quantitative and qualitative research in early childhood education.* New York: Teacher College.

Hill, H. 2013. "Disability and accessibility in the library and information Science Literature: A content Analysis." *Library and Information Science Research*, 3: 137-142.

Huang, Samuel T. 2008. "Reference services for disabled individuals in academic libraries." *The Reference Librarian*, 25-26: 527-539.

Irvall, Birgitta, and Gyda Skat Nielsen. 2005. "Access to Libraries for Persons with Disabilities: Checklist." *IFLA*, 89: 18.

Jenkins, H., and K. Clinton. 2006. *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century.* Chicago: MacArthur Foundation.

Kim, Y. M., and J. Abbas. 2010. "Adoption of Library 2.0 functionalities by academic libraries and users: a knowledge management perspective." *The Journal of Academic Librarianship*, 36, No. 3: 211-218.

Lacey, Andrew. 2004. *Designing for Accessibility.* Vol. 2. London: Centre for Accessible Environments.

Lewis, J. K. 2015. *The Academic Library in the 21st Century: Competencies Library Directors and Senior Managers Must Possess to Successfully Lead their Organizations into the Future.* Doctoral Dissertation. Washington: University of Maryland.

Lindsay, Elizabeth Blakesley. 2009. "Using Social Networking in the Library." *Public Services Quarterly*, 3: 208-211.

Lowenfeld, B. 1975. *The Changing Status of the Blind.* WI: Thomas.

Majinge, R. M., and C. Stilwell. 2013. "Library services provision for people with visual impairments and in wheelchairs in academic libraries in Tanzania." *South African Journal of Libraries and Information Science*, 2: 38-50.

McDonald, R. H., and C. Thomas. 2006. "Disconnects between library culture and millennial generation values." *Education Quarterly*, 3.

Mendle, Jill. 1995. "Library Services for Persons with Disabilities." *The Reference Librarian*, 49-50: 105-121.

Millán Reyes, and Ana Nieves. 2010. "Servicios bibliotecarios: la perspectiva de los estudiantes con discapacidad y el personal bibliotecario a través de seis universidades madrileñas." *Revista española de Documentación Científica*, 1.

Murray, Thomas. 2003. *Blending Qualitative and Quantitative Research Method in Theses and Dissertations.* California: Corwin Press.

Negi, R. 2009. "Determining customer satisfaction through perceived service quality: A study of Ethiopian mobile users." *International Journal of Mobile Marketing*, Vol 4, No. 1: 31-38.

Okobi, Elsie, A. Rogers Halliday. 2014. *Library Services for the Adults in 21st Century.* California: Libaries Unlimited.

O'Reilly, Tim. 2005. "What is Web 2.0: Design patterns and business models for the next generation of software." *O'Reilly Media, Inc.* http://oreilly.com/web2/archive/what-is-web-20.html [accessed: January 15th, 2017].

Parasuraman, A., V. A. Zeithaml, and L. L. Berry. 1985. "A conceptual model of service quality and its implications for future research." *Journal of Marketing* 49, No. 4: 41-50.

Partridge, H., J. Lee, and C. Munro. 2010. "Becoming "librarian 2.0": The skills, knolwedge, and attributes required by library and information science professionals in a web 2.0 world (and beyond)." *Library Trends*, No. 59: 315-335.

Pellack, L. J. 2004. "Interpersonal skills in the reference workplace." *The Reference Librarian*, 40, No. 83-84: 57-70.

Pindlowa, W. 2002. "High-quality information services to users as the fundamental necessity for building a modern information society in the European Union." *EBIB Electronic Information Bulletin for Librarians*, 2.

Pinto, M., V. Fernández-Marcialb, and C. Gómez-Camarero. 2009. "The impact of information behavior in academic service quality: a case study of the science and technology area in Spain." *The Journal of Academic Librarianship*, 1: 70-78.

Rothbauer, P. 2008. "Triangulation." *The SAGE Encyclopedia of Qualitative Research Methods*, pp. 892-894.

Russell, S. E., and J. Huang. 2009. "Libraries' role in equalizing access to information." *Library Management*, 1-2: 69-76.

Seale, J. 2013. *E-learning and Disability in Higher Education: Accessibility Research and Practice.* Routledge.

Stanley, Theresa C. 2010. *Leading Edge Technologies in a Community College Library Setting: Identifying Disconnects of Academic Libraries and Their Users* Doctoral dissertation. Malibu: Pepperdine University.

Zeithaml, V. A., L. L. Berry, and A. Parasuraman. 1988. "Communication and Control Processes in the Delivery of Service Quality." *Journal of Marketing*, 52, No. 2: 35-48.

Zineldin, M. 2007. "The quality of higher education and student satisfaction self assessment and review process a TRM philosophy and 5Qs model." Paper presented at *Second International Conference Education, Economics, and Law: Traditions and Innovations.* Sweden: Vaxo University.