Is English Language a Barrier in Research Productivity Among Information Professionals? A Descriptive Study

Muhammad Tariq
COMSATS Institute of Information Technology, Lahore
Email: tariqnajmi@ciitlahore.edu.pk

Tooba Ahmad
COMSATS Institute of Information Technology, Lahore
Email: toobaahmed@ciitlahore.edu.pk

Shafiq ur Rehman
University of the Punjab, Lahore
Email: s_rehman25@hotmail.com

The present study aims to highlight the issue with a specific reference of the information professionals about "English language as a barrier" in their research productivity. It further explores how information professionals acknowledge the challenges related to language barriers and to know their training needs to learn the (four) skills of English. The researchers proceed with a brief history of English as a "lingua franca" and how it turned out to be a barrier in the path of researchers belonging to information professionals. Survey method of quantitative research approach is used to probe out the issue regarding how the language can reduce the research productivity. A structured questionnaire was developed to conduct the research. Through convenient sampling technique, 357 information professionals, librarians and LIS research students were selected as sample and accessed to collect the data. Only 258 (72%) valid responses were received and considered to obtain the results. The study found that English language is a huge barrier for the research productivity of the respondents. The respondents also agree that there is positive relationship between training to learn English language and the research productivity. Respondents need training for all in four skills like reading, speaking, writing and listening. The results also show significant difference in language as a barrier based on gender, qualification and type of institute. The study also reveals that with the help of training sessions, the research productivity can be increased. This study will help the LIS schools to revise their syllabus as per need of the stake holders. Professional associations, policy makers and students can address this issue on professional and academic platform to overcome the language gap and deficiencies. The present research also put a stress to make English language as a mandatory part of the curriculum to increase the research productivity among information professionals.

Keywords English language barriers, Language issues-information professionals, Research productivity, LIS-Pakistan.

Introduction

English is without a doubt the actual universal language. It is the world's second largest native language, the official language in 70 countries, and English-speaking countries are responsible for about 40% of world's total GNP (Torres, 2015).

Among the many challenges that are being faced by the education sector, specifically, the information management professionals, is the role of English language as a barrier in reducing research productivity. It has been observed that

the rate of research productivity has been increased with the increase in research expenditures. As the sources of research funding have changed, the performance of the researchers in education sector has been emphasized more in Pakistani research universities. Consequently, the faculty of various departments is engaged in order to increase research productivity. But when it comes to the information management professionals specially the librarians, the research rate is not increasing up to a considerable level which is required in order to excel in the field of library science.

English has got the status of first global lingua franca, and is used widely as the language of communications, science, information technology, business, seafaring, aviation, [entertainment, radio, and diplomacy. Its spread beyond the British Isles began with the growth of the English overseas possessions. It became the dominant language in the United States, Canada, Australia, and New Zealand as a result of overseas colonization from 16th to 19th century. The growing economic and cultural influence has significantly accelerated the spread of the language across the planet. English replaced German as the dominant language of science-related Nobel Prize laureates during the second half of the 20th century. By the time of the foundation of the United Nations after WW II, English had become pre-eminent and is now the language of diplomacy and international relations.

A working knowledge of English has become a requirement in a number of fields, occupations and professions such as medicine and computing; as a consequence, more than a billion people speak English to at least a basic level. It is one of six official languages of the United Nations (United Nations, n.d.).

When we talk about teaching of English as a language in Pakistani schools and high schools it has been observed that education system has been divided and this division has left a grave impact upon students. As far as librarians are concerned English as language was not being taught to the students of library sciences since last many decades but personality development has now been introduced in many universities as a part of their syllabus and communication skills is a part of it. But this cannot fulfill the requirements of knowing a language and produce something into it. Now the question arises that if the students of library sciences do not know English than how it would have been possible for them to excel in the field of research productivity. Though they are the students of high cognitive abilities yet they cannot step ahead for research as language is a barrier for them. Though they can do research in Urdu language but they cannot publish their research internationally. The criterion for publication in international journal is to do research in English language. The present study addresses this complicated problem that the information professionals have been facing since long. English is with no doubt act as a barrier for them to reduce their research productivity among them.

Literature Review

Abundant research is available on the language barriers related to health, medical, medicine issued but only few researchers conducted in the area under investigation as Moghaddam, Peyvandi and Wang (2011) explored that the non-English students studying in English speaking country can feel language as a barrier and this barrier can affect the extent of student's openness to diversity (5). Are (2013) has explored in his paper that African research scholars face problem while working beyond their native languages particular in English. He also recommended, "research into the pedagogical implication of the existence of different languages within some communities in Africa must also be emphasized". Temple (2006) conducted a very interesting study entitled "Being Bilingual: Issues for cross language Research" and explored that the research different language communities are increasing very rapidly. Academicians and practitioners are developing bilingual community research. Such academicians and researchers thinks that they

bridge the gap between two or more communities which have different languages.

The medical students in Arabic countries also considered that English is a great obstacle for their learning and knowledge activities. Sabbour, Dewedar and Kandil (2008) conducted a study while using survey method and data were gathered from 400 medical students. And 150 staff members. The majority of medical students considered that the English is not an obstacle for their learning and academic activities. But on the other side the few faculty members think that they feel English as an obstacle only in first year of their medical schools. Few students desire to translate their medical terms in Arabic and majority of students prefers to learn clinical study in Arabic language. Most of the literature related to information, library or related fields is available in foreign languages. English language is the most widely used language in almost all areas of study. Mostly student particular researchers consult / develop the literature in English language (Anderson, 1974).

Constantino (1995) explored that students thinks that English can be barrier for their academic activities and to overcome this issue they consulted the public libraries to enhance their language skills and expertise. It is also concluded that the library can be a good place for students to learn information and literary skills and can also be the plat form for learning foreign language as well (Bordnoaro, 2006).

The language issues not only occur while conducting the research but also language is also a one of the big barrier in the classroom learning. Duff and Li (2004) conducted the research to explore the same phenomenon and explored that the teachers desired to provide extensive teaching and peer interaction but on the other side student needs less peer interaction and more error correction due to difficulties in understanding the second language. Chamot (2004) also discussed the language issues while research and teaching. In his paper, the fact revealed that "the language can affect the learning strategies including identification of

procedure of learning strategies, terminology and classification of the effects of learner characteristics on strategy use, the effects of culture and context on strategy use, explicit and integrated strategy instruction, language of instruction, transfer of strategies to new tasks, and models for language learning strategy instruction".

Despite the fact that English has attained the status of the international language and is quite recognized in most academic and non-academic fields, the survey and observations will reveal how English language can become a predicament in the field of research where it is used as a second language. Therefore, there are gaps in knowledge about the language barriers in reducing research by information professionals and this study will surely fill this intellectual gap.

Research Questions

Following research questions that were formulated to achieve the objectives:

1) Do the information professionals take English language as a barrier in their research output?

2) Does English language skills enhance the research output of LIS researchers?

3) Does the collaboration of English language experts have any impact on information professionals in reducing language gap / learning problems?

4) Is there any relationship between the research productivity and training of English Language skills?

5) What are the required training needs of the information professionals for English language skills for their research?

6) What are the significant differences on language as a barrier based on gender, designating, qualification and sector of the respondents?

Research Design

Due to its good characteristics (Fabunmi & Asubiojo, 2013), the Quantitative method has

been used throughout the research. Guided by an adapted structured questionnaire the study employed the survey research design to probe out the objectives of the research. Many studies (Connaway & Powell, 2004; Singh, 2007; Radhakrishna, 2007) adopted survey method in social sciences research. Practicing information professionals, librarians and LIS research students were the population for this study. The researcher has decided to use Pakistan Library Automation Group (PlagPk)7 serve list to determine the population because this is oldest serve list in Pakistan and most of the library professionals are registered on PlagPk serve list. On July 24, 2015, total 4610 library and information professionals are registered on the list which includes librarians, information professionals, LIS research students / teachers and researchers. Convenient sampling was used to access the participants because serve list don't give option to access the email or contact details of the members. The first author of this research paper also contacted the PlagPk group administrator to get the data but they were unable to provide the contact details of the members, so in this scenario only convenient sampling was possible to connect with the respondents (Ranjit, 2010). With the help of sample size table8 the sample size was calculated on 95% confidence level and 5.0% with margin of error, and the sample size was 357 of the total population.

With the help of literature reviewed language experts and LIS professional the questionnaire was developed. Apart from demographic section, the instrument was developed to measure the concepts i.e "is English language a barrier in research productivity among information professionals "with fifteen core questions in three dimension includes "Language as a Barrier", "Remedies" and "Training needs". The initial draft distributed among 10 respondents for pre-testing. They

identified few items that were confusing or difficult to understand, after their feedback we revised the data collection tool and incorporated the suggestions by respondents. The researcher used Cronbach Alpha coefficient to check the reliability of the scale. The result shows that our instrument has high internal consistency and reliability because the Cronbach alpha coefficient for our scale was equal to .84. This is more than recommended value of .7.

Through google docs, the questionnaire was developed online and sent via PlagPk serve list and through Facebook messages as well. Only those Facebook friends were selected whose account were available on PlagPk because PlagPk was considered as population frame. After collecting the 266 online response, screening was held and 8 responses which were not into the research population frame or non-usable were rejected. After screening of the feedback the researchers got 258 feedbacks and thus the response rate was 72%, which is good in social sciences.

The received data was analyzed through Statistics Package for Social Sciences (SPSS version 21 and research questions were answered through statistical interpretations.

Results and Discussion

The collected data was analyzed with the help of Statistics Package for Social Sciences (SPSS) as it is mostly used tools in social science research analysis.

Demographic Information

Among 258 participants, 191 (74%) were male respondents. Library / Information professionals emerged as the largest group of the respondents among the designation variable with frequency of 189 (73.3%) followed by LIS researchers / research students 59 (22.9%) and LIS faculty with frequency of 10 (3.9%). For detail please see the Table 1.

Table 1. Demographic information

Variable	Frequency	Percent
Gender		
Female	67	26
Male	191	74
Designation		
LIS Faculty	10	3.9
Library / Information Professional	189	73.3
LIS Researcher / Research students	59	22.9
Type of Institute		
Public	132	51.2
Private	126	48.8
Qualification		
Masters	168	65.1
M.Phil.	84	32.6
PhD	6	2.3
First language of respondents		
Urdu	72	27.9
Punjabi	154	59.7
Pushto	11	4.3
Saraiki	21	8.1

Research Experience of respondents

Refer to figure 1, it is found that most of the respondents do not have research experience. Only 97 respondents have research experience in English language and only 15 respondents give their feedback that they have 1-3 research papers in Urdu language. The respondents claimed that they do not write papers in English language (126) and 242 claimed they do not have any experience to write the papers in Urdu. The 126 respondents do not have any research experience neither in English nor in any other language.
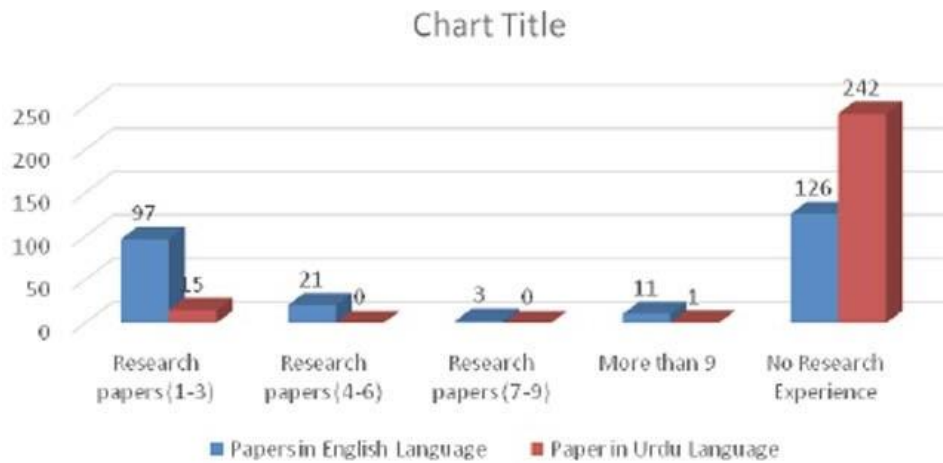
Figure. 1. Research experience of respondents

Language as a Barrier

The respondents were asked to give their opinion about the language as a barrier with the help of four statements on 5-point Likert type scale. Overall mean score (3.43) of Table 2 shows that the respondents agree that English language is a barrier for their research development. The mean score (2.70) shows that the respondents consider English language as a barrier but not a big or huge barrier. At the same time, the respondents agree (mean=4.07) that if they have command over the targeted language for research it can increase their research productivity. This result is aligning with the previous study like Moghaddam, Peyvandi and Wang (2011). But at the other end, Sabbour, Dewedar and Kandil (2008) concluded through their research that majority of medical students do not consider English language as a barrier for their academic activities

Table 2. Mean score of different statements about Language as a barrier (N=258)

Statements	Mean	Std. Deviation
Do you consider English language as a huge barrier in your way to research	2.70	1.254
Being a library/information professional, do you think you have great ideas to conduct a research but you can't step ahead as English language is a barrier for you?	2.95	1.250
Do you think that you can produce more research papers if you have strong grip and understanding of your foreign (English) language	4.01	.954
If you have the command over the targeted language for research, it can increase research productivity.	4.07	1.013
Overall Means	3.43	

Scale: Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1

Language Skills and Research Output of LIS Researchers

To know the answer of research question two the respondents were asked to respond over three statements and the result (overall mean=4.05) shows that all the respondents considers that if they have command or better skills than they may produce more research papers. The result (mean = 4.09) in statement three also exposed that command over English language can make information professionals/librarians think and more receptive towards research productivity (See Table 3).

Table 3. English language skills and research output of LIS researchers (n=258)

Statements	Mean	Std. Deviation
Do you think that you can produce more research papers if you have strong grip and understanding of your foreign (English) language	4.01	.954
If you have the command over the targeted language for research, it can increase research productivity.	4.07	1.013
Command over English language can make think that information professionals/librarians more receptive towards research productivity	4.09	.716
Overall mean	**4.05**	

Scale: Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1

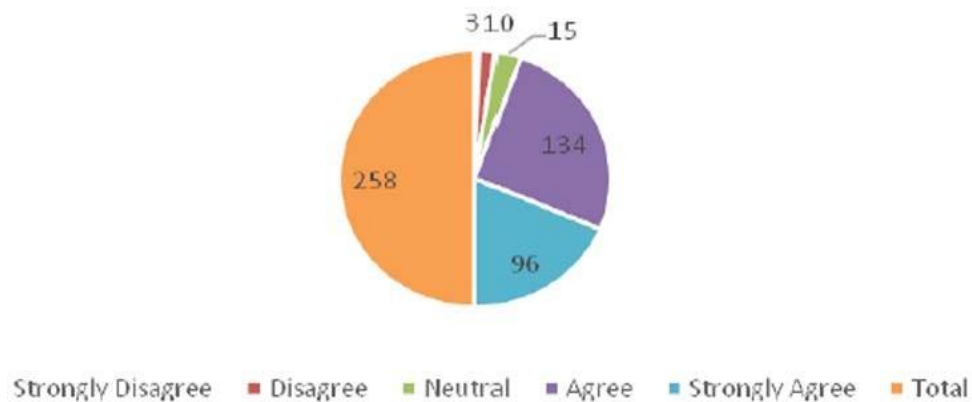*Impacts of collaboration of English language experts on information professionals*

Figure. 2: Frequency Table of the impacts of Collaboration with English language trainers/teachers on librarians in reducing language gap / learning problem

Scale: Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1

Research Productivity and Training of English Language Skills

In response to the question "Do you feel a great need for training to learn English language so that the research productivity could be increased?" the respondents agrees (f=129) that there is positive relationship between research productivity and training of English language skills. The 58 respondents (22.5%) respondents strong agree with the statement and only (.4%) strongly disagree with the statement. For detail please see the figure 3.
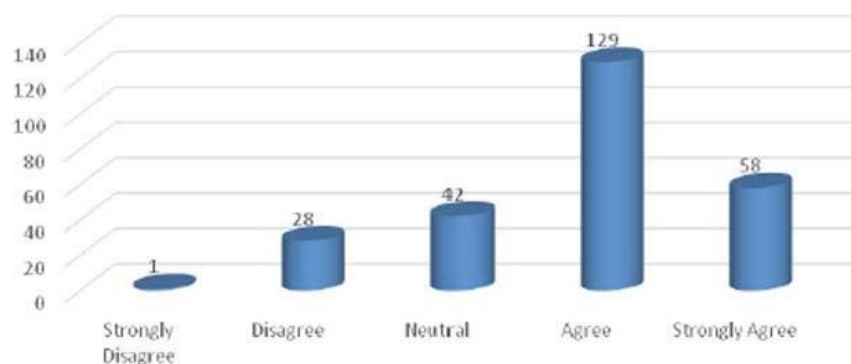
Figure. 3: Frequency Table of need of English language skills for research productivity

Scale: Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1

Training Needs for English Language Skills

In last section of the questionnaire, the respondents were asked about their training needs to enhance English language skills. The questions related to four skills like reading, writing, listening and speaking were asked to know the exact need for their English language skills.

Refereeing to Table 4, the respondents claimed that they need training for all in four skills (mean=3.83) like reading, speaking, writing and listening but the data from the respondents also shows that writing in English is less hurdle (mean=2.68) for information professionals than reading (mean=3.05) in the same language. The respondents strongly agreed (mean=4.19) if English is made compulsory for the information professionals / librarian in LIS schools, it can be positive step toward learning English and consequently towards research productivity. The result of this section is aligned with the previous studies (Chamot, 2004; Bordnoaro, 2006).

Table 4. Training Needs for English learning skills by Information Professionals (N=258)

Variables	Mean	Std. Deviation
Do you find writing in English more difficult?	2.68	1.044
Is understanding of English language through listening a difficult area?	2.88	1.017
Do you feels speaking in English is a tough job?	2.92	1.070
Do you feel difficulties in comprehending English language while reading?	3.05	1.099
Can the productivity of research be directly inter-related to knowing the use of English language	3.48	.930
Do you feel a great need for training to learn English language so that the research productivity could be increased?	3.83	.912
Do you think if English is made compulsory for the librarians in LIS schools, it can be a positive step towards learning English and consequently towards research productivity?	4.19	.916

Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1

Differences on language as a barrier based on gender, designating, qualification and sector of the respondents

Language as a barrier on gender: An independent-sample t-test was conducted to see the significant differences of language as a barrier on male and female. The independent samples t-test results (t=2.82, significance =.005) indicates that there is significant difference in language as a barrier scores between male and female respondents. Male and female respondents think differently on the phenomena. By observing of the mean score the researchers found that female students (mean=3.67) consider English as a huge barrier for their research productivity, as compare to male students (mean=3.34).

Language as a barrier on designation: A one-way ANOVA test was conducted to explore the language barrier on designation. Designations was divided into three groups i.e. LIS Faculty, Library information professionals and LIS researchers includes research students. There was no statistical difference (p<.05) in language as a barrier for three groups i.e. designation (F=.715 with significance level of .490). Despite reaching no statistical significance, the actual difference in mean scores between the two

groups i.e. Library / Information Professionals (mean=3.46) and LIS Researchers/ Research students (mean=3.36) was also quite small. So all three group have similar opinion on language as a barrier.

Language as a barrier on qualification: The results of one-way ANOVA test (F value of 3.59 with significance level of .029) shows that there is significance difference in language as a barrier based on the qualification of the respondents. Qualification was divided into three groups i.e. Masters, M.Phil. and PhD level. The mean scores of the groups shows that there is slight difference between M.Phil. (mean=3.24) and PhD respondents (mean=3.25) but a significance difference can be observed between Masters (mean=3.53) with M.Phil. (mean=3.24) and PhD respondents (mean=3.25).

Language as a barrier on type of institute: An independent-sample t-test was conducted to compare the significant differences of language as a barrier on type of public and private institutes. The independent samples t value 2.20, with significance level of .029 shows that there is significance difference between the uses belongs to public and private sector institutes. The mean value shows that respondents belong to private sector (means=3.54) considers English as a great barrier for their research productivity as compare to the respondents belongs to public sector (means=3.32).

Table 5. Difference in language as a barrier based on personal and academic variables (N=258)

Variables	Mean	Statistics	Sig
Gender		t=2.82	.005
Male	3.34		
Female	3.67		
Designation		F=.715	.490
LIS Faculty	3.20		
Library / Information Professionals	3.46		
LIS Researchers / Research Students	3.36		
Qualification		F=3.59	.029
Masters	3.53		
M.Phil	3.24		
PhD	3.25		
Type of Institute		t=-2.20	.029
Public	3.32		
Private	3.54		

Scale: Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=

Summary, Conclusion, Limitations and Implications

The present study was conducted to know whether English language is a barrier for information professionals or not. The registered members of PlagPk list serve includes LIS faculty, information / library professionals and LIS researchers was the population (n=357) of this study. Some objectives also included to explore the language as a barrier, remedies and training needs of the information professionals and to know the significant difference in language barrier based on their personal and academic variables. The data, collected from 258 respondents having different gender, qualification, designation and different level of experience and analyzed with the help of different statistical test includes t-test and ANOVA to check the significant difference in language as a barrier based on gender, qualification, designation and type of institutes.

The results in the study show that respondents consider that English language is a huge barrier for their research productivity. The respondents also agree that if they have command over the targeted language for research, it can increase research productivity and they can produce more research papers if they have strong grip and understanding of English language. The respondents also agree that there is positive relationship between training to learn English language and the research productivity and with the help of training sessions the research productivity can be increased. The questions related to four skills like reading, writing, listening and speaking were asked to know the exact need for their English language skills. The respondents claimed that they need training for all in four skills like reading, speaking, writing and listening but the data from the respondents also shows that writing in English is less hurdle for information professionals than reading in the same language. The results also show significant difference in language as a barrier based on gender, qualification and type of institute.

The study used convenience sampling technique because the contact details were not available to the researchers. Although the sample size is good but it might not be representing the whole population and may not be generalize. These limitations should be kept in mind when reading the results.

This study also has some implications for policy makers and professionals. This study will help the academicians to revise their syllabus as per need of the stack holders. This study will also guide professional associations to conduct workshops which enhance the communications and language skills of the LIS professionals. Through this study, policy makers and academicians can get the directions to increase the research productivity in library and information science discipline. Students can get to know the importance related to the language issues and to know the remedies to overcome the language gap and their personal deficiencies.

No study was available on the topic under discussion in Pakistani perspective. In this context, it will be a very good addition in the literature and will cause to fill the gap particular in LIS and Pakistani perception. This study will also provide the dimension and new avenues for further research. We recommend this research to the other academic professionals as well and at large scale of population to check whether the English language acts as a barrier for them in their research productivity or not?

References

Anderson, J. D. (1974). Foreign language barriers in information transfer. *Journal of Education for Librarianship*, 171-184.

Are, O. B. (2013). Conceptual Issues in Second Language Research in Africa *Linguistic Online*, *58*(1).

Bordonaro, K. (2006). Language learning in the library: An exploratory study of ESL students. *The Journal of Academic Librarianship, 32*, 518-526.

Chamot, A. U. (2004). Issues in language learning strategy research and teaching.

Electronic journal of foreign language teaching, *1*(1), 14-26.

Connaway, L. S., & Powell, R. R. (2004). *Basic Research Methods for Librarians, Fifth Edition*: ABC-CLIO.

Constantino, R. (1995). Minority use of the library. *California Reader, 28*, 10-12.

Duff, P. A., & Li, D. (2004). Issues in Mandarin language instruction: Theory, research, and practice. *System*, *32*(3), 443-456.

Fabunmi Miss, O., & Asubiojo, B. (2013). Awareness and Use of Online Public Access Catalogue by Students of Obafemi Awolowo University, Ile-Ife, Nigeria.

Moghaddam, J. M., Peyvandi, A., & Wang, J. (2011). Impacts of Language Barriers on Students' Openness to Diversity Attitude. *International Journal of Business and Social Science*, *2*(7), 52-58.

Radhakrishna, R. B. (2007). Tips for developing and testing questionnaires/ instruments. *Journal of Extension, 45*(1), 1-4.

Ranjit, K. (2010). *Research Methodology: A Step-by-Step Guide for Beginners*: SAGE Publications.

Sabbour, S. M., Dewedar, S. A., & Kandil, S. K. (2010). Language barriers in medical education and attitudes towards Arabization of medicine: student and staff perspectives. Retrieved from the link http://apps.who.int/iris/ bitstream/10665/118065/1/16_12_2010_ 1263_1271.pdf ?ua=1

Temple, B. (2006). Being bilingual: Issues for cross-language research. *Journal of Research Practice*, *2*(1).

Torres, C. C. (2015). English as a universal language. Retrieved from http:// www.omniglot.com/language/articles/en gunilang.php

United Nations (n.d.). Official languages. Retrieved from http://www.un.org/ en/sections/about-un/official-languages/