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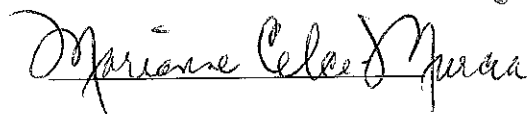
A thesis submitted in partial satisfaction  
of the requirements for the degree Master of Arts  
in Teaching English as a Foreign Language

by

Taguhi Sahakyan

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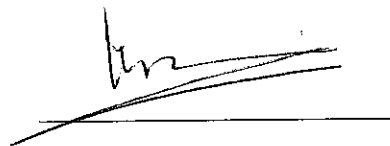
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## Abstract

This study investigates the problems that Armenian scholars and researchers face when they try to publish in international journals. The researchers of the three branches of the National Academy of Sciences participated in the study: the Branch of Natural Sciences, the Branch of Physical, Mathematical and Technical Sciences and the Branch of the Humanities. The participants of the study were researchers with a doctor of science degree or candidates for a doctoral degree. The participants' ages range from 22 to 66 and above. Questionnaires and interviews were used as instruments for data collection. The number of analyzed questionnaires was 96. The number of interviewed participants was 6 (2 researchers from each department).

The results of the study show that the main difficulties facing Armenian scholars are language proficiency and lack of material resources (i.e., computers, access to the Internet, printers, photocopiers, etc.). In spite of the increasing number of publications in English, the majority of publications are still in Russian, which shows the on-going link between Russian and Armenian scientific communities. However, it is mainly the older generation of scholars who consider publishing in Russian important. No young scholar mentioned Russian as an important language to publish in. The results of the study also show that senior researchers in Armenia are not at an advantage in comparison with junior researchers when they attempt to publish in international journals.

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## Chapter One: Introduction

In the Soviet Union Armenian scholars and researchers were isolated from the international scientific community. The language of science was Russian. People wrote academic papers mainly in Russian. Even today, Russian scientific literature is used widely and is readily accessible to many Armenian scientists since many of them have had a Russian education. Yet, since the collapse of the Soviet Union, Armenian scholars have obtained wider opportunity to communicate with their colleagues all over the world. They have got more chances to participate in international conferences, present their research to the international community and publish in international journals. In this new reality a switch from Russian to English in writing academic papers has become necessary for Armenian scholars and researchers as the language of the majority of international scientific publications is English.

In order to get published in international journals the researcher should not only carry out significant research but also in his/her research meet certain standards established for writing a scientific paper. Therefore, Armenian scholars have to overcome various obstacles in order to get published in international journals since they were accustomed to writing articles according to Russian standards and the academic discourse of international journals was not familiar for them.

Many researchers here investigated the difficulties of non-Anglophone researchers when they try to publish in international journals (Flowerdew 1999a, cited in Swales 2004, Flowerdew 2000, Canagarajah 2002, Swales 2004 et al.). Some of them (Wood 2001, Hyland 2004, Swales 2004) state that being a NS or NNS is not important when a scholar tries to publish in international journals. If research is significant, it will be published even if it is not written appropriately. Other scholars (Braine 2003, Sasaki 2003, Canagarajah

2002, Canagarajah 2003) point out that NNSs have to overcome more difficulties in order to get published. They state that imperfect language proficiency influences non-Anglophone researchers' success in getting published.

It is important to know the problems of non-Anglophone scholars in order to help them to overcome these problems more easily. However, no study has investigated the difficulties that Armenian researchers experience. Therefore, the purpose of the present study is to investigate the difficulties that Armenian scholars face when they try to publish in international journals and to find out whether language proficiency is considered an obstacle by Armenian scholars. The study also examines whether senior researchers have more chances to get published in international journals in comparison with junior researchers.

These questions will be addressed throughout the research, the coming sections of which are: the literature review, which among other questions discusses current issues related to academic writing and the Armenian academic context (Chapter 2); the methodology, which provides information about the participants of the study, the data collection instruments and the procedures (Chapter 3); the results of the study (Chapter 4); a discussion of findings (Chapter 5) and the conclusion (Chapter 6).



## Chapter Two: Literature Review

This chapter reviews prominent studies related to the present research. In order to situate the problems that Armenian scholars have in writing for publication, the following topics will be discussed: (1) the world of academia; (2) current issues related to academic writing; (3) the problems of academic writing for non-native speakers and (4) the Armenian academic context.

### 2.1 The world of academia

Science is highly connected with writing since in order to present one's research to a given discourse community, the scientist should not only conduct the research but also publish it. In the academic world different languages have dominated during different time periods. In the last few decades, English has occupied a predominant role in the international academic world. Over 70% of the world's scientists use English (Crystal 1997, Hasman 2000). It is the working language of the majority of international scientific conferences. English is the international language of research and academic publication, and people need English in order to have access to this material (Flowerdew & Peacock 2001, Swales 2004). In spite of the fact that the number of publications in English or in other languages varies in different disciplines (in the humanities and social sciences there are still a considerable number of papers published in native languages), the most prestigious and cited journals are published in English (Swales, 2004). In this situation "periphery scholars are compelled to get published in such [international] journals to validate the respectability of their work, disseminate their findings effectively to the academic channels that matter in their profession, and participate in knowledge

construction" (Canagarajah 2002, p.43). Publications in major Anglophone journals provide faculty recognition, advancement and promotion in many universities around the world (Swales, 2004). Publishing in English also increases the chances of being cited and, thus, to be included in the Science Citation Index (Wood 2001, Swales 2004). The value of knowing scientific English increases as more and more people decide to use English for their publications. Many journals such as those for German medicine and chemistry, Swedish medicine, French geology which are published in non-Anglophone countries have switched from being published in the language of the country to being published in English (Swales, 2004). Thus, in order to be involved in the international academic community, researchers and scholars need to have professional skills in English.

Being able to speak, read and write in English is not sufficient for writing an academic paper. Connor (1996) states that researchers need to learn how to write (linguistic and rhetorical conventions) in a given discipline and they should be familiar with the current values and practices in the field. The scientific research paper has a particular rhetorical structure accepted by the scientific community. Most scientific research articles follow the traditional IMRD (Introduction, Methods, Results and Discussion) rhetorical pattern, which can be modified depending on the discipline (Day 1988, Swales & Feak 2000, Wood 2001). As the purpose of scientific writing is to share new scientific findings, the article should be as clear and simple as possible. It also should be written in appropriate language.

Discussing the difficulties which NNSs face, Wood (2001) and Swales (2004) argue that researchers from countries where English is a foreign language are not greatly disadvantaged by the fact that they write in English. Both NSs and NNSs have to

overcome similar difficulties when they try to publish in international journals. Thus, the NS/NNS dichotomy is not significant. This view is discussed in the next section.

## **2.2 Current issues related to academic writing**

In the current research world, there is a big debate related to the distinction between NS and NNS scholars. Some scholars state that being a NS or NNS is not important when the scholar tries to publish in international journals (Wood 2001, Hyland 2004, Swales 2004). Other scholars (Braine 2003, Canagarajah 2002, Canagarajah 2003, Sasaki 2003) point out that NNSs have to overcome more difficulties to get published. In order to discuss these two views it is important to consider the existing views related to the spread of English in the world.

Brutt-Griffler (2002) differentiates English-speaking contexts into 'native' and 'non-native' contexts. Within 'non-native' contexts, there is another division - English as a second or as a foreign language. Kachru (1985) presents this idea in his model of the distribution of English. In the *Inner Circle* are included countries, where English is a native language, in the *Outer Circle* - countries where English is a second language and in the *Expanded Circle* - countries where English is a foreign language. Canagarajah (2006) points out that "the outer and expanding circles are quite central to the currency of English today" (p. 23), and in these circles English is used not only for relations between countries but also within their own borders. This global spread of English is affecting all spheres of society including those in scientific fields in all countries.

Wood (2001) argues that Kachru's model cannot be applied to the academic world as International Scientific English is defined not in terms of a native or non-native speaker language but in terms of a language of a member in an academic discourse community

which, as Swales (1990) points out, implies having “common goals, participatory mechanisms, information exchange, community specific genres, a specialized terminology and a high general level of expertise” (p.29). This view, however, does not contradict Kachru’s model. Kachru’s model and the view of the academic world in terms of discourse communities are interconnected and overlapping since scholars who are members of the same discourse community can belong to different circles (Figure 1).

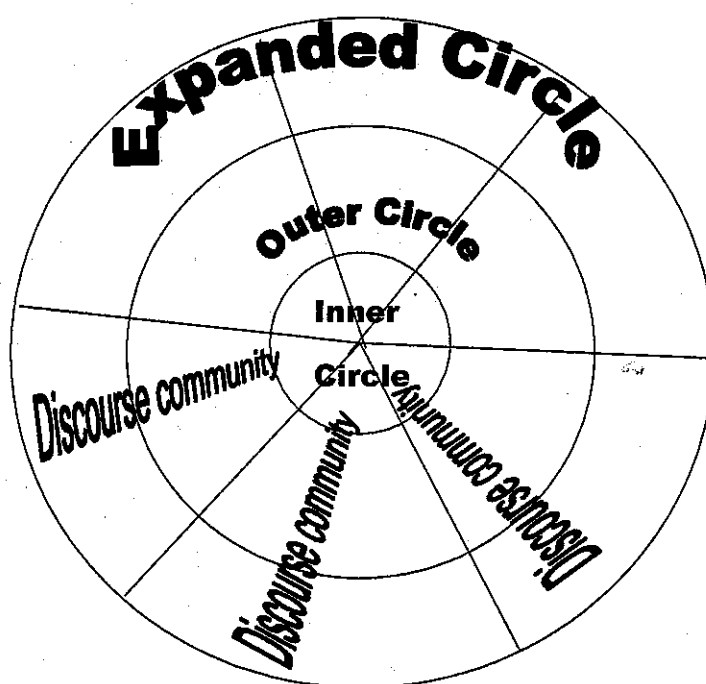


Figure 1. *Discourse communities and the distribution of English.*

According to Figure 1, countries of the Inner Circle form the academic center, countries of the Outer and Expanded Circles are periphery countries. Canagarajah (2002) points out that center scholars have more chances to get published because they belong to the academic circle created by the center. In this case the closer the country is to the Inner

Circle, the more chances scholars have to get published and scholars of the Expanded Circle probably have the most difficulties with being published in international journals.

Some scholars emphasize that the difficulties which non-native scholars experience are similar to those experienced by native speakers. Both NS and NNS need to learn to write using an academically accepted style (Wood 2001, Hyland 2004, Swales 2004). They have similar problems: difficulties with cohesion, lexical choice, sentence order, tense-choice. For these authors the differences between NS and NNS experiences are more quantitative than qualitative. They emphasize that the level of expertise in English is not as important as the scientific significance of the research. According to the followers of this view, in order to become a member of a particular scientific community, the scholar should produce research claims that are significant in the field and accepted by the community. Hence, NNSs are not at a disadvantage when compared to NSs.

Canagarajah (2002) argues that even if the research has great significance it can not be published if it does not conform to the specific genre established by the journal. NNSs have to overcome a significant number of obstacles in order to get published in international journals. The difficulties which non-native scholars experience are related not only to their language proficiency and to their ability to use the academic discourse of a particular field but also to many technical nuances discussed in the following section (lack of material resources (i.e., computers, access to the Internet, printers, photocopiers, etc.), access to the recent research in the field, difficulties in corresponding with editors and reviewers, interpreting comments and suggestions made by the referees and the editors, different cultural practices and social conditions). Lack of institutional support and funding creates additional difficulties for periphery scholars.

Swales (2004) highlights that more and more articles are published from non-Anglophone countries. Today's research world is becoming more international and non-Anglophone researchers are obtaining more recognition. In this case the distinction between NS and NNS is no longer significant. Swales suggests another distinction - between experienced senior researchers (SR) and less experienced junior researchers (JR). According to Swales, this distinction determines one's success in getting published.

However, the SR/JR dichotomy may work in the countries of the Inner Circle as SRs of that circle have social power within the whole discourse community and not only in the part which belongs to the Inner Circle. SRs of the center occupy key positions, set standards and determine what is considered good or important in their field. They have a great influence on their colleagues all over the world. They are not only recognized in their discipline and successful in publishing but also establish the rules as they are also the referees for major international journals (Hyland, 2004).

This SR/JR dichotomy probably does not work in case of periphery countries. Being a SR in the periphery does not imply having more chances to publish in international journals. SRs of the Outer and Expanded Circles may have the power in their local discourse communities but not in the center. In order to be recognized internationally local 'big names' must publish in English and participate in the conferences where again English is the language of communication. Therefore, SRs in the periphery are probably not privileged when compared to JRs. It is even possible that JRs will succeed more since they are more flexible. They can more easily learn the language and adopt English academic discourse. A better distinction in today's research world might be between *internationally recognized scholars* and *internationally non-recognized scholars*.

Thus, many factors may affect the success of getting published: the significance of the research, the researchers' experience in the discipline and in publishing, their language proficiency, availability of material resources, technical problems and so forth. Both NSs and NNSs have to overcome these difficulties but in addition to the problems experienced by NSs, NNSs have difficulties specific to them. The next section discusses the problems that NNSs face when they try to publish in international journals.

### **2.3 The problems of academic writing for non-native speakers**

When trying to publish in English-medium journals, non-Anglophone researchers face many difficulties which can be categorized into three main areas: linguistic, understanding the conventions of academic writing and having sufficient resources. Linguistic difficulties are related to rhetorical differences between English and the researchers' mother tongue, which result in their having problems related to language and use of academic discourse. Very frequently non-native writers of English write in the second language using linguistic and rhetorical conventions of their native language and culture (Kaplan 1966, 1987, Swales 1990, Connor 1996). In different languages, the topic is identified and developed differently. Each language has many forms but their occurrence and distribution are different. The native speaker can choose what form to use under what circumstances. He/she can use each form appropriately. NNSs do not know all the possible alternatives and their sociolinguistic constraints. Very frequently NNSs write academic papers using English words but they develop the idea according to the rhetorical patterns of their mother tongue.

While teaching academic writing to non-native students, Swales and Feak (2000) analyzed the writing problems of their students and in *English in today's research world*:

*a writing guide* (2000), they highlight the following differences between research English and other research languages. According to them English:

- has more explicit structure
- is less digressive
- uses short sentences and simple grammar
- has strict conventions for subsections and their titles
- uses more citations
- relies more on recent citations
- indicates “gaps” in the previous research
- the writer not the reader is responsible for clarity and understanding

Swales and Feak (2000) mention that very often NNSs have problems with these peculiarities of scientific English.

The second problem concerns the structure of academic papers written in English. As indicated above, scientific English has explicit structure and academic papers should follow the IMRD pattern. Each part of the paper has a specific purpose, organization and key features. However, the structure of a research article and the main features of its parts are not necessarily the same in all cultures. In the research article *Attitudes of journal editors to nonnative speaker contribution* Flowerdew (2001) investigates attitudes of journal editors to manuscripts submitted by non-native speakers of English. In this study editors and reviewers state that many non-native writers have problems with introduction/literature review section, which should show writers’ awareness of recent related studies and familiarity with the field. This problem is related to another one – lack of material resources. In the periphery countries, only a few journals may be available. Researchers do not necessarily have access to recent studies in the discipline. This not



only complicates the literature review writing but also cuts off periphery scholars from the current research in the field (Canagarajah 2002, 2003). Canagarajah (2003) emphasizes that even if researchers of the periphery have access to the journals and books important in the field, they do not know how the writing process should be done. They try to guess this from the journal articles they have access to. Another problem related to material resources is lack of up-to-date equipment essential for doing valid research. In some periphery countries scholars even do not have computers or typewriters, printers, photocopiers and other devices which are easily accessible in developed countries (Canagarajah 2002, 2003).

Additional problems to writing a literature review can be caused by different citation standards. To show the awareness of recent research in the field, the scholar has to cite other researchers. In some cultures the standards of citation differ from those in English. Moreover, plagiarism which is not acceptable in Anglophone culture, might be acceptable in other cultures depending on "how writers treat source material and conceptualize the idea of authorship" (Casanave 2004, p.175).

Another problem mentioned by editors in Flowerdew's research (2001) is parochialism since research in the periphery very often is localized and does not address current issues for the international community. This problem is again connected with a limited number of journals available in the periphery. Without having access to the recent studies periphery scholars do not know what is 'in fashion' in the discipline, which again decreases their chances to get published.

An additional problem relates to corresponding with editors and referees. In some countries scholars do not have access to the Internet. In this case the correspondence by mail takes too much time (Canagarajah, 2002). Non-Anglophone scholars also have

difficulties related to the interpretation of comments made by editors and reviewers. Frequently the comments are ambiguous or even contradictory (Canagarajah 2002, Braine 2003, Sasaki 2003). Both for NS and NNS researchers it can be hard to decide what the reviewers or editors imply and what exactly should be changed. However, insufficient language proficiency makes the process of interpreting comments more complicated for NNSs. Therefore, many researchers give up revising and resubmitting their papers when their first attempt to get published is not successful. The experience of being rejected creates the attitude that “publishing is all about finding the suitable niche for one’s study – the journal, referees, and editor who approximate one’s academic interests and ideological values” (Canagarajah 2003, pp. 206-207).

The difficulties discussed above are related to non-native scholars but some of the difficulties might be more significant in one country and less significant in another country. In order to investigate the problems of Armenian scholars, we need to consider the Armenian academic context.

#### **2.4 The Armenian academic context**

The National Academy of Sciences (NAS) of the Republic of Armenia is a major institution where important research is conducted. The NAS was founded in 1943 (Sargsian et al., 2003). It was a part of the Soviet academic system until the collapse of the Soviet Union. Since Russian was declared the second official language of the Soviet Union (first being the mother tongue of the Republic), almost all the academic literature was in Russian. Scholars and researchers published their works mainly in Russian, following the standards of academic writing established by the Soviet System (Khazanov, 1995).

After the collapse of the Soviet Union, the Academy became independent and faced many political, financial, organizational and other problems. During the first post-independence years, it was very hard to continue working on scientific projects as only 1% of the budget of Armenia was given to the Academy. However, since the collapse of the USSR, many international funds, benevolent organizations and individual sponsors have provided financial support to the researchers of Armenia (Sargsian et al., 2003).

After independence, the NAS had to set new goals: to establish new relations with the academic centers of other countries and collaborate with them, to be involved in the international research world. In 1993-94 the NAS signed a contract with the Russian National Academy of Sciences. It became a member of the International Council of Scientific Unions and the International Association of Academies of Science. Nowadays the scientists and researchers of the NAS are involved in projects of different international organizations, such as NATO. Different institutions of the NAS are members of the International Federation of Information Processing, International Brain Research Organization, and the International Astronomy Union. The NAS actively collaborates with researchers in Russia, the USA, Great Britain, China, Germany, France, Italy, India, among others.

During post-independence years the difficult economic situation caused a 'brain drain'. As a result, the number of young researchers in Armenia is decreasing. The average age of the candidates of science is 40 and that of researchers with a Ph.D. is 60 (Sargsian et al., 2003).

According to the *Research Proceedings of the NAS of the Republic of Armenia, 2004*, the NAS has 3 branches, which include about 50 research institutions where the total number of researchers is 2273 (Table 1). The same report presents the number of

published works in 2004 (Table 2). According to this data, 1354 papers were published in Armenia and 798 - abroad.

*Table 1. The number of scholars and researchers in the National Academy of Sciences of the Republic of Armenia*

Branches	N of researchers	N of academicians	N of corresponding members	N of members with Ph.D	N of candidates for PhD
The Branch of Physical, Mathematical and Technical Sciences	748	14	5	114	333
The Branch of Natural Sciences	968	9	3	104	423
The Branch of the Humanities	515	9	2	105	248
Total in the branches	2231	32	10	323	1004
<b>Total in the NAS</b>	<b>2273</b>	<b>41</b>	<b>11</b>	<b>337</b>	<b>1024</b>

*Table 2. The number of published works in 2004*

Branches	The number of monographs		The number of textbooks		The number of articles, theses and other papers	
	in Armenia	abroad	in Armenia	abroad	in Armenia	abroad
The Branch of Physical, Mathematical and Technical Sciences	6	3	1	-	377	329
The Branch of Natural Sciences	11	6	-	2	326	370
The Branch of the Humanities	95	3	4	-	651	99
<b>Total in the NAS</b>	<b>112</b>	<b>12</b>	<b>5</b>	<b>-</b>	<b>1354</b>	<b>798</b>

Publishing in English may create many difficulties for Armenian researchers. However, no research has been done related to the difficulties that Armenian researchers have when they try to publish in international journals. Therefore, to investigate these issues the following research questions are asked:

1. *What difficulties do Armenian researchers face while trying to publish in international journals?*
2. *Is language proficiency an obstacle for Armenian scholars when they try to publish in international journals?*

## **Chapter Three: Methodology**

The present research is a survey, which has been conducted using qualitative research methodology. This chapter provides information about the participants of the study, data collection instruments and the procedures.

### **3.1 Participants**

The study was conducted in Yerevan. The participants of the study were 96 researchers and scholars of the National Academy of Sciences of the Republic of Armenia who either had a doctorate or were doctoral candidates. Different age groups participated in the study. The age range was from 22 to 66+. Both males and females were included in the study. The participants were researchers of the three branches of the NAS: the Branch of Physical, Mathematical and Technical Sciences, the Branch of Natural Sciences and the Branch of the Humanities.

### **3.2 Data collection instruments**

Questionnaires and semi-structured interviews were used as instruments for data collection. These instruments will now be described in further detail.

#### ***3.2.1 Questionnaire***

As all the respondents were Armenians with different levels of English proficiency, the questionnaire was administered in Armenian (the Armenian version of the questionnaire is given in Appendix A and the English version in Appendix B). In the questionnaire, the respondents indicated some background information: age, degree, department and field of research.

The questionnaire consisted of 9 questions; 4 questions required a *Yes/No* response, 2 questions required respondents to choose one answer out of several given, and in 2 questions the respondents could choose more than one answer out of those provided. In the last question, the respondents could add any comments about their experiences in attempting to publish in English. Some questions (3 out of 9) required respondents to explain their responses. The questions were about respondents' publication experiences (the respondents had to indicate whether they had any scholarly publications since 2000 and in what languages, what language they considered most important and why). The questionnaire contained a question about the way the respondents write articles for international journals. The questionnaire contained questions about the respondents' experiences in attempting to publish in international journals, and any difficulties connected with this.

### **3.2.2 Interviews**

The interview questions were designed to elicit the respondents' own ideas. I attempted to minimize my influence on what the interviewee said, but at the same time, the interviews followed a framework so that they covered certain key areas identified in my research. The questions were open-ended and descriptive, such as "Do you think that senior researchers have more chances to get published in international journals? Why? Why not?" (see Appendix C for sample questions). The interviewees were asked to clarify and explain their responses to the questionnaire questions. For example, "In your questionnaire you identified Armenian as the most important language to publish in. Your explanation was for *developing our culture and science*. What do you mean here?". Contrast questions were used to compare participants' responses across interviews. "Some

participants of this study think that language is not a problem if the research is significant. What do you think? Why?" The length of interviews varied from 20 minutes to more than an hour.

### 3.3 Procedures

In the present study, 132 questionnaires were distributed to researchers with a doctor of science degree or candidates for a doctoral degree which is 10% of all PhDs and candidates for a PhD in the NAS. The researchers of the Branch of Natural Sciences were given 52 questionnaires and 43 were returned, the Branch of Physical, Mathematical and Technical Sciences - 44 questionnaires and 26 were returned, the Branch of the Humanities - 36 questionnaires 27 were returned (Table 3). The overall number of returned questionnaires was 96 (72.7%). The responses were tallied and the percentages were calculated.

Table 3. The number of distributed and returned questionnaires.

Branches	N of distributed questionnaires	Returned questionnaires	
		N of returned questionnaires	%
The Branch of Physical, Mathematical and Technical Sciences	52	43	82.7
The Branch of Natural Sciences	44	26	59
The Branch of the Humanities	36	27	75
<b>Total</b>	<b>132</b>	<b>96</b>	<b>72.7</b>

The interviews were conducted after analyzing the questionnaires. Six people were interviewed (2 researchers from each branch). The interviewees belonged to different age groups: 22-35 age group - 3 researchers, 46-55 - 1 researcher, 56-65 - 1 researcher, 66 and above - 1 researcher. The majority of interviewees (5 researchers) were candidates for

a PhD and 1 researcher had a doctoral degree. The interviewees were chosen taking into consideration the responses in their questionnaire. The interviews were all recorded and analyzed. The interview data was listened to for repeated categories and sorted into categories. The aim was to look for both commonalities and differences within the interviews.



## Chapter Four: Results

The results are reported in two parts. In the first part, the findings of the questionnaires are presented and in the second part the findings of the interviews.

### 4.1. Questionnaire

Table 4 shows the background information about the participants. The majority of participants (56.3%) belong to the 46-65 age group. The results of the study show that out of 96 respondents 74 (77%) are candidates for a doctoral degree and 22 (23%) are doctors of science. Their major fields of research are: chemistry – 14 (14.6%), history – 14 (14.6%), medicine – 12 (12.5%), biology – 11 (11.5%), mathematics – 10 (10.4%) and physics – 10 (10.4%).

The results of the study show that out of 96 respondents, 89 (92.7%) have written scholarly publications since 2000: 53 (55%) - in Armenian, 74 (77%) - in Russian and 52 (54%) - in English. In the humanities the percentage of publications in Armenian is the highest – 21 (77.8%) and in English is the lowest – 6 (22.2%) (Table 5). Out of 59 participants (61.5%) who attempted to publish in international journals, 47 (79.7%) succeeded. However, 35(59.3%) participants did not try to publish in another international English-medium journal if their first attempt to publish was not successful (Table 6).

Table 5 shows that 24 (25%) respondents consider Armenian to be the most important language for them to publish in. However, 17 out of the 24 (71%) respondents are from the Branch of the Humanities. The main reasons for publishing in Armenian are *it is related to my field of research* - 10 (41.7%) and *to develop science in Armenia* - 9 (37.5%). Russian is considered the most important according to 35 (36.5%) participants. The reasons are *we have more access to the scientific world of that language* – 17 (48.6%), *it is an international language* – 5 (14.3%) and *it is related to my field of*

research 4 (11.4%). English is considered the most important according to 47 (49%) participants. The main reasons are *the prestigious journals are in that language* – 11 (23.4%), *the audience is large* – 10 (21.3%), *it is an international language* – 7 (14.9%) and *it is the language of science* - 7 (14.9%).

The main difficulties which the participants have faced while trying to publish in English-medium journals are *language proficiency* – 28 (47.5%), *lack of material resources* – 26 (44%) and *academic discourse* - 13 (22.03%). *Language proficiency* was considered the most crucial problem by 24 (40.7%) respondents and *lack of material resources* by 17 (28.8%) respondents (Table 7).

Table 8 shows that most of participants *write an article in Armenian or Russian and have someone else to translate it* – 22 (37.3%), the second most frequent response was *I write in Armenian or Russian and then translate it* – 13 (22%). Only 8 (13.6%) respondents *write in English and submit without help*.

The results of the study also show that 6 (85.7%) junior researchers (22-35 age group) and 21 (80.7%) more experienced researchers (56 and above age group) have published in international journals (Table 9).

Only 9 (9.4%) respondents have made comments for question 9, where they wrote about their experiences in attempting to publish in international journals, and the difficulties connected with it.

Table 4. Background information about the respondents

Background information		Branch of Natural Sciences		Branch of Physical, Mathematical and Technical Sciences		Branch. of the Humanities		Total in NAS	
		N	%	N	%	N	%	N	%
<b>Age:</b>									
	22 – 35	6	14	4	15.4	5	18.5	15	15.6
	36 – 45	5	11.6	2	7.6	6	22.2	13	13.5
	46 – 55	16	37.2	7	26.9	3	11.1	26	27.1
	56 – 65	12	27.9	10	38.5	6	22.2	28	29.2
	66 or above	4	9.3	3	11.5	7	25.9	14	14.6
<b>Highest degree obtained:</b>									
	doctor of science	6	14	8	30.8	8	29.6	22	22.9
	candidate for a doctoral degree	37	86	18	69.2	19	70.4	74	77.1
The field of research	Biology	11	25.6					11	11.5
	Zoology	8	18.6					8	8.3
	Chemistry	14	32.6					14	14.6
	Ecology	4	9.3					4	4.2
	Medicine	12	28					12	12.5
	Physics			8	30.8			8	8.3
	Engineering			5	19.2			5	5.2
	Informatics			5	19.2			5	5.2
	Mathematics			10	38.5			10	10.4
	Geology			1	3.8			1	1.04
	Seismology			1	3.8			1	1.04
	Mechanics			1	3.8			1	1.04
	History					14	51.8	14	14.6
	Archaeology					1	3.7	1	1.04
	Philosophy					2	7.4	2	2.08
	Sociology					2	7.4	2	2.08
	Law					1	3.7	1	1.04
	Linguistics					4	14.8	4	4.2
	Literature					1	3.7	1	1.04
	Art					3	11.1	3	3.1

Table 5. Responses to the questions related to the language of the respondents' publications.

	Branch of Natural Sciences						Branch of Physical, Mathematical and Technical Sciences						Branch of the Humanities						Total in the NAS					
	Armenian		Russian		English		Armenian		Russian		English		Armenian		Russian		English		Armenian		Russian		English	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In what languages have you published since 2000?	23	53.5	38	88.4	27	62.8	9	34.6	23	88.5	19	73	21	77.8	13	48.1	6	22.2	53	55.2	74	77.1	52	54.2
What language do you consider most important for you to publish in?	4	9.3	11	25.6	30	69.8	3	11.5	10	38.5	13	50	17	69.9	14	51.9	4	14.8	24	25	35	36.5	47	48.9
to develop science in Armenia	4	100					3	100					2	11.8					9	9.4				
it is related to my field of research													10	58.8	4	14.8			10	10.4	4	4.2		
it is an international language			3	27.3	4	13.3			2	20	3	23.1											5	5.2
we have more access to the scientific world of that language			8	72.7					6	60					3	11.1							17	17.7
it is a language of science																							7	7.3
the audience is large					5	16.7					2	15.4											2	2.1
to get recognition in the international scientific world					7	23.3			2	20	3	23.1											10	10.4
the prestigious journals are in that language					3	10					2	15.4											5	5.2
to have access to international scientific world					6	20					1	7.6						4	14.8				11	11.5
					5	16.7					2	15.4											7	7.3

Table 6. Responses to the questions about the respondents' publication experiences.

Yes/No questions	Branch of Natural Sciences				Branch of Physical, Mathematical and Technical Sciences				Branch of the Humanities				Total in NAS			
	Yes		No		Yes		No		Yes		No		Yes		No	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Have you written any scholarly publications (books, journal articles etc.) since 2000?	39	90.7	4	9.3	26	100	-	-	24	88.9	3	11.1	89	92.7	7	7.3
Have you attempted to publish in any international English-medium journals or edited books?	32	74.4	11	25.6	21	80.8	5	19.2	6	22.2	21	77.8	59	61.5	37	38.5
Have you succeeded in publishing any articles in international English-medium journals or edited books?	27	84.4	5	15.6	16	76.2	5	23.8	4	66.7	2	33.3	47	79.7	12	20.3
If your attempt to publish in an international English-medium journal has not been successful do you try to publish																
a. in another English-medium journal?	13	40.6	19	59.4	11	52.4	10	47.6	-	-	6	100	24	40.7	35	59.3
b. in another non-English-medium journal?	27	84.4	5	15.6	12	57.1	9	42.9	3	50	3	50	42	71.2	17	28.8

Table 7. Responses to the questions related to the difficulties which faced the respondents while trying to publish in international journals and the way of writing articles for international journals.

questions	Responses	Branch of Natural Sciences			Branch of Physical, Mathematical and Technical Sciences			Branch of the Humanities			Total in the NAS		
		N	% of total respondents	% out of who attempted to publish (32)	N	% of total respondents	% out of who attempted to publish (21)	N	% of total respondents	% out of who attempted to publish (6)	N	% of total respondents	% out of who attempted to publish (59)
What difficulties have you faced while trying to publish in English-medium journals?	language proficiency	12	27.9	37.5	13	50	61.9	3	11.1	50	28	29.2	47.5
	academic discourse	7	16.3	21.9	5	19.2	23.8	1	3.8	16.7	13	13.5	22.03
	lack of material resources	14	32.6	43.8	10	38.5	47.6	2	7.4	33.3	26	27.1	44.07
	access to the recent research in the field	5	11.6	15.6	2	7.6	9.5	-	-	-	7	7.3	11.9
	difficulties in corresponding with editors and reviewers	3	6.9	9.4	2	7.6	9.5	-	-	-	5	5.2	8.5
	interpreting comments and suggestions made by the referees and the editors	1	2.3	3.1	3	11.5	14.3	-	-	-	4	4.2	6.8
	no difficulties	2	4.6	6.3	-	-	-	1	3.8	16.7	3	3.1	5.08
	language proficiency	11	25.6	34.4	10	38.6	47.6	1	3.8	16.7	24	25	40.7
	academic discourse	6	13.95	18.8	2	7.6	9.5	1	3.8	16.7	8	8.3	13.6
	lack of material resources	10	23.3	31.3	6	23	28.6	2	7.4	33.3	17	17.7	28.8
access to the recent research in the field	5	11.6	15.6	2	7.6	9.5	-	-	-	7	7.3	11.9	
difficulties in corresponding with editors and reviewers	-	-	-	1	3.8	4.8	-	-	-	2	2.08	3.4	
interpreting comments and suggestions made by the referees and the editors	-	-	-	-	-	-	-	-	-	1	1.04	1.7	
Which of the above do you consider the most crucial?													

Table 8. Responses to the questions related to the way of writing articles for international journals.

questions	Branch of Natural Sciences		Branch of Physical, Mathematical and Technical Sciences		Branch of the Humanities		Total in the NAS		
	N	% of total respondents	% of total respondents	% out of who attempted to publish (21)	N	% of total respondents	% out of who attempted to publish (6)	N	% of total respondents
If you have tried to publish in English how do you write your articles in English?	7	16.3	5	19.2	1	3.7	13	13.5	22
	I write in Armenian or Russian and then translate it			23.8					
	12	27.9	7	26.9	3	11.1	22	22.9	37.3
	I write in Armenian or Russian and have smb. else to translate it			33.3					
	7	16.3	2	7.6	-	-	9	9.4	15.2
I write in English and have smb. check the language before submitting				9.5					
1	2.3	5	19.2	23.8	2	7.4	8	8.3	13.6
I write in English and submit without help				23.8					
5	11.6	2	7.6	9.5	-	-	7	7.3	11.9
I rely on collaborators who can write in English				9.5					

Table 9. The comparison of senior researchers' and junior researchers' publishing experiences.

Age group	Researchers who have not tried to publish		Researchers who have tried to publish		Researchers who tried but did not get published		Researchers who got published	
	N	%	N	%	N	%	N	%
22-35	8	53.3	7	46.7	1	14.3	6	85.7
36-55	13	33.3	26	66.7	6	23.1	20	76.9
56 and above	16	38.1	26	61.9	5	19.2	21	80.7

#### 4.2. Interviews

The findings of the interviews are presented in Appendix D and the interviewees' sorted responses in table 10. Researchers from all three branches of the NAS were interviewed – 2 people from each branch. Four interviewees considered English as the most important language for them to publish in, one interviewee considered it to be Armenian and one interviewee - Russian.

*Language proficiency, financial problems and lack of familiarity with recent research in the field* were considered as the main difficulties for Armenian researchers when they try to publish in international journals. *Language proficiency* was identified by 4 interviewees, *financial problems* by 3 and *lack of familiarity with recent research in the field* by 2 (Table 10). One of the researchers made the following comment:

Interviewee 4: "If you don't have language and financial problems, it is not hard to get published in international journals."



Table 10. *Sorted responses to the core interview questions.*

Questions	Responses		
<i>What do you think are the main problems that Armenian researchers face when they try to publish in international journals?</i>	Language (4)	Financial problems (3)	Unfamiliarity with recent research (2)
<i>Some participants of this study think that language is not a problem if the research is significant. What do you think?</i>	Agree but in humanities language is a problem (2)	It is possible but hard (1)	Language is important (3)
<i>Do you think that senior researchers have more chances to get published in international journals?</i>	There is no difference (5)	Junior researchers have more chances (1)	-

Three interviewees highlighted language as a problem for getting published even if the research is significant. One of the researchers stated that it is possible but hard to publish significant research written in poor English.

Interviewee 2: "It is possible to publish significant research which is written in poor English but if your significant research is presented in an appropriate way it is easier to publish it."

Two respondents did not consider language a problem for getting published if the research is really significant. However, both of them mentioned that in the humanities it is important to have a high level of language proficiency. One of the interviewees highlighted that it is also important to publish in Armenian and our researchers should publish not only for the international community but also for the Armenian community. At the same time he emphasized that publishing in Armenian journals is more subjective than publishing in international journals:

Interviewee 1: "Armenia is a small country and people know each other. If you are in good relationships with journal editors, it is easy to get published. That's why publishing in Armenia is a subjective process. In international journals this process is more objective because editors don't know you and they consider only your research."

All of the interviewees pointed out that there is no difference between senior and junior researchers when they try to publish in international journals. One of them even stated that junior researchers have more chances to get published:

Interviewee 5: "For junior researchers it is easier to learn international standards. They are not familiar with Soviet standards of writing. That's why it is easier for them to get published in international journals. Our senior researchers used to write following Soviet standards and it is hard for them to write according to new standards. I know some senior researchers who are very important people here but they can't get published there. Our young researchers get published more in international journals now."

## Chapter Five: Discussion

The results of the study show that 54 (56.3%) participants belong to the 46-65 age group. This fact suggests that the scientists in Armenia are really 'getting older', which is also emphasized by Sargsian et al. (2003). The younger generation does not seem interested in developing a scientific career. Only 15 (15.6%) participants are of 22-35 years of age.

As the majority of publications are in Russian - 74 (77%), there is probably still a significant link between Russian and Armenian scientific fields. Thirty five participants (36.5%) considered Russian as the most important language for them to publish in and one of the main reasons, given by 17 respondents (48.6%), was *we have more access to the scientific world of that language*. This indicates that being a part of the Soviet scientific system is still influencing our scholars. Interestingly, age is also a factor here. No young scholar mentioned Russian as an important language to publish in. All the researchers who highlighted the importance of Russian belong to the older generation of scholars. Five of them (14.3%) pointed out that Russian *is an international language*. In the interview one of the researchers also considered Russian the most important language for him to publish in because it was easier for him to get published in this language. He emphasized that many Armenian researchers desire to publish in English, and they have forgotten that Russian was also a language of science. This interviewee belongs to the 66 and above age group and he had studied in Moscow. Probably being accustomed to publishing in Russian, to reading in Russian and to following Russian research standards during Soviet times influenced his attitude towards Russian. One of the interviewees pointed out:

Interviewee 1: "English is important but Russian is also a language of science."

In the questionnaire, the respondents were asked to choose one language as the most important for them to publish in. Nevertheless, 10 respondents (10.4%) ticked both Russian and English as the most important. It seems that for them both languages are equally important. This fact again shows that some researchers still consider Russian a dominant language for Armenian scholars.

The percentages of publications in Armenian and English are very close to each other - 55.2% and 54.2% respectively. In the humanities the percentage of publications in Armenian is the highest – 77.8% and in English it is the lowest – 22.2%. This supports Swales' statement (2004) that the field of research influences the choice of language for publication. He points out that in the humanities the number of publications in the mother tongue is the highest. Interestingly, 2 interviewees who emphasized that language proficiency is not a problem if research is significant also highlighted that in the humanities language proficiency might be a problem. According to these interviewees, in the humanities research is not based on formulas or graphs and every word is significant.

The main reason identified with the importance of publishing in Armenian was *it is related to my field of research* – 10 (41.7%). Some of the participants explained that Armenian history, literature, linguistics were significant mainly for Armenians and thus research in these areas should be published in Armenian. Nine researchers (37.5%) mentioned that publishing in Armenian was important for *developing science in Armenia*. One of the interviewees pointed out that Armenian scholars should publish not only for the international scientific community but also for the local community. This may suggest that nowadays there is a tendency to publish in other languages and publishing in Armenian is not considered important. For this reason some researchers may think that publishing in the native language will help develop science in Armenia.

English is considered the most important language to publish in according to 47 (48.96%) participants. This shows that English is changing its role in scientific Armenia. In spite of close connections with the Russian scientific community, Armenian researchers are trying to publish in English in order to gain recognition in the international scientific community. The reasons identified in the questionnaire were *the prestigious journals are in that language* - 11 (23.4%), *the audience is large* - 10 (21.3%), *it is an international language* - 7 (14.9%), *it is the language of science* - 7 (14.9%), *to have access to international scientific world* - 7 (14.9%) and *to get recognition in the international scientific world* - 5 (10.6%). All these explanations show that Armenian scholars are also trying to become a part of the international scientific community and to be recognized by the center scholars.

Interestingly, a large number of the participants who had attempted to publish in international journals succeeded - 47 (79.7%). In this sense the researchers of the Branch of Natural Sciences have the highest percentage - 27 (84.4%). However, according to the results of the study, out of 59 (61.5%) participants who attempted to publish in international English-medium journals, 35 (59.3%) did not try to publish in another international English-medium journal if their first attempt to publish was not successful. It is possible that being rejected creates the assumption that it is impossible for periphery scholars to publish in international journals. The fact that many non-Anglophone researchers do not try to publish in another international journal after being rejected is also mentioned by Canagarajah (2002).

In the questionnaire the respondents identified all the difficulties which periphery scholars face when they try to publish in English-medium journals as was discussed by Canagarajah (2002): *language proficiency* - 28 (47.5%), *lack of material resources* - 26

(44.07%), *academic discourse* – 13 (22.03%), *access to the recent research* – 7 (11.9%), *difficulties with corresponding with editors and reviewers* – 5 (8.5%) and *interpreting comments and suggestions made by the referees and the editors* – 4 (6.8%). However, *language proficiency* was considered the most crucial problem – 24 (40.7%). Language proficiency was also emphasized as one of the main problems of Armenian scholars by the majority of interviewees (4 out of 6). The interviewees highlighted:

Interviewee 3: “We need to know English in order to present our significant research. If I give my article to someone for translation, it will not be a valid translation because translators are not familiar with my field of research. They just do word by word translation without understanding the article.”

Interviewee 4: “Language is a difficulty because if you don’t know English, you even can’t use the Internet”.

Interviewee 6: “I think language is a problem because if you present your significant ideas in poor English, people may misunderstand them”.

This fact contradicts the opinion of some experts who consider that language proficiency is not so important for being published in international journals (Hyland 2004, Swales 2004, Wood 2001). Probably researchers from different countries consider various factors crucial when they try to publish in international journals but according to the results of this study, language proficiency is the most frequently identified problem for Armenian scholars.

The second most crucial problem considered is *lack of material resources* – 17 (28.8%). Half of the interviewees also indicated this problem (3 out of 6). They highlighted that Armenian scholars need financial support in order to do research. One of the interviewees explained:

Interviewee 5: “The state does not pay us money. Our salary is miserable. I am a candidate for a doctoral degree and my salary is 25000 drams [□60\$]. If I did not receive any grants, I could not even survive. In this case I couldn’t think about any research. It is hard to be a researcher in Armenia.”

Having insufficient funds and out-of-date equipment are obstacles for doing publishable research. One of the researchers highlighted that the biggest difficulty for our scientists is old equipment, which decreases the quality of their research and they cannot compete with scientists from developed countries.

The next finding of this study contradicts Swales' opinion (2004) that SRs have more chances to get published in international journals than JRs. The results of the present study show that there is no real difference between SRs and JRs in Armenia: 6 (85.5%) junior researchers (22-35 age group) and 21 (80.7%) more experienced senior researchers (56 and above age group) have published in international journals. Out of 6 interviewees, 5 pointed out that SRs in Armenia do not have more chances to get published in international journals in comparison with JRs. They stated that Armenian SRs are not familiar with the international academic community and thus they are not at an advantage in comparison with JRs. One of these 5 researchers added that there might be a slight difference. The editor might consider the degree and experience of the senior researcher but the significance of research is primary.

One of the interviewees stated that JRs might even have more chances to get published in international journals because they were not accustomed to writing according to Russian standards, and it is easier for them to adopt international standards of writing a research article.

At the end of the questionnaire the participants were encouraged to write their comments. In this part some of them additionally emphasized that in order to get published in international journals it was very important to know English, to be really proficient in the field and to have modern equipment.

Thus, the results of the study show that Armenian scholars face many problems when they try to publish in international English-medium journals. The participants of the study consider *language proficiency* and *lack of material resources* most crucial for them. In spite of the increasing number of publications in English, the majority of publications are still in Russian which shows the on-going link between Russian and Armenian academic communities. However, it is mainly the older generation of scholars who considered publishing in Russian important. No young scholar mentioned Russian as an important language to publish in. The majority of these participants considered English the most important language for publications. The results of the study also show that Armenian SRs are not at an advantage in comparison with JRs when they try to publish in international journals.



## **Chapter Six: Conclusion**

This study investigated the problems that Armenian scholars and researchers have when they try to publish in international journals. The participants of the study were 96 researchers and scholars of the National Academy of Sciences of the Republic of Armenia who either had a doctorate or were doctoral candidates. The researchers of the three branches of the National Academy of Sciences participated in the study: the Branch of Natural Sciences, the Branch of Physical, Mathematical and Technical Sciences and the Branch of the Humanities. The participants' ages ranged from 22 to 66 and above. Questionnaires and interviews were used as instruments for data collection.

The results of the study suggest that the main difficulties of Armenian scholars are language proficiency and lack of material resources (e.g. computers, access to the Internet, printers, photocopiers, etc.). The majority of publications reported are still in Russian, which shows that Armenian researchers are still connected with the Russian academic community. However, age is a factor here since mainly the older generation of scholars considered publishing in Russian to be important. No young scholar mentioned Russian as an important language to publish in. The results of the study also show that there is no real difference between SRs and JRs in Armenia when they try to publish in international journals.

### **5.1 Limitations of the study**

The study was conducted in Yerevan at the NAS and the findings relate only to researchers in Armenia. The involvement of researchers from different CIS countries and other countries where researchers are on the periphery would increase the validity of this research and the findings could be generalized.

The second limitation is that this study does not reflect the whole range of research fields existing in the NAS. Including all the fields in the study might influence the findings.

## **5.2 Suggestions for further study**

In order to generalize the findings, a larger study may be conducted in the future. The inclusion of researchers from different countries could provide a clearer picture of the problems that scholars and researchers have when they attempt to publish in international journals. It is important to include researchers from countries which belong to different circles (Kachru, 1985) since depending on the status of English in their country, they might have different kinds of problems. Having reliable information about the difficulties of researchers will help to develop reasonable steps for their support.

## **5.3 Contribution of the study**

As no prior research has been done aimed to investigate the problems of Armenian researchers who try to publish their results, this study presents some important information about the difficulties encountered by our scholars. It provides interesting data and shows that the major obstacle our scholars face in attempting to publish in international journals is language proficiency. During this study many researchers, especially young ones, emphasized that they need courses where they can learn how to write scientific papers. Armenian scholars have great potential and very often they conduct significant research. We, English language teachers, should help them present their research to the international academic community.

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## Appendix A

### Armenian version of the questionnaire

Հարգելի պարոն/տիկին,

Ես Թագուհի Սահակյանն եմ Հայաստանի Ամերիկյան Համալսարանի Անգլերենի ծրագրերի բաժնի ուսանողուհի: Ես կատարում եմ հետազոտություն դոկտոր Բիլլ Սնայդերի ղեկավարությամբ և ուսումնասիրում եմ, թե ինչ դժվարություններ են ունենում հայ գիտնականները, երբ փորձում են տպագրվել միջազգային ամսագրերում: Այս պրոբլեմներին ժանոթանալը կօգնի Հայաստանի անգլերեն լեզվի մասնագետներին գտնել ավելի արդյունավետ ճանապարհներ այդ դժվարությունները հաղթահարելու համար:

Եթե դուք ցանկանում եք, կարող եք լրացնել այս հարցաշարը անանուն կերպով: Սա թեսթ չէ, և այդ պատճառով այստեղ չկա ճիշտ կամ սխալ պատասխան: Ինձ հետաքրքրում է ձեր անձնական կարծիքը և փորձը:  
Շնորհակալություն աջակցության համար:

Հարգանքներով՝

Թագուհի Սահակյան

e\_mail: [taguhi\\_sahakyan@mail.ru](mailto:taguhi_sahakyan@mail.ru)

## Հարցաշար

Խնդրում եմ նշել ձեր տարիքային խումբը:

\_\_\_\_\_ 22-35                      \_\_\_\_\_ 56-65  
\_\_\_\_\_ 36-45                      \_\_\_\_\_ 66 և ավելի  
\_\_\_\_\_ 46-55

Խնդրում եմ նշել ձեր գիտական աստիճանը:

\_\_\_\_\_ դոկտոր  
\_\_\_\_\_ գիտությունների թեկնածու  
\_\_\_\_\_ մագիստր  
\_\_\_\_\_ բակալավր  
\_\_\_\_\_ այլ աստիճան (խնդրում եմ նշել) \_\_\_\_\_

Խնդրում եմ նշել ձեր բաժանմունքը:

\_\_\_\_\_ ֆիզիկամաթեմատիկական և  
տեխնիկական գիտություններ  
\_\_\_\_\_ բնական գիտություններ  
\_\_\_\_\_ հումանիտար գիտություններ

Խնդրում եմ նշել ձեր հետազատությունների բնագավառը:

_____ ֆիզիկա	_____ բժշկություն
_____ աստղագիտություն	_____ հոգեբանություն
_____ ինֆորմատիկա	_____ հնագիտություն
_____ ճարտարագիտություն	_____ փիլիսոփայություն
_____ մաթեմատիկա	_____ սոցիոլոգիա
_____ երկրաբանություն	_____ իրավագիտություն
_____ կենսաբանություն	_____ տնտեսագիտություն
_____ կենդանաբանություն	_____ լեզվաբանություն
_____ քիմիա	_____ գրականություն
_____ պատմություն	_____ արվեստ
_____ երկրաշարժագիտություն	_____ այլ ոլորտ (խնդրում եմ նշել)
_____ բնապահպանություն	

1. Դուք տպագրե՞լ եք գիտական աշխատանքներ (գրքեր, հոդվածներ և այլն) 2000 թվականից առ այսօր:

\_\_\_\_\_ Այո                      \_\_\_\_\_ Ոչ

2. Ի՞նչ լեզուներով եք տպագրել ձեր գիտական աշխատանքները 2000 թվականից առ այսօր (խնդրում եմ նշել բոլոր համապատասխան լեզուները):

\_\_\_\_\_ հայերեն  
\_\_\_\_\_ ռուսերեն  
\_\_\_\_\_ անգլերեն  
\_\_\_\_\_ այլ լեզվով (խնդրում եմ նշել) \_\_\_\_\_

Շարունակությունը մյուս էջում է ...

3. Ո՞ր լեզվով տպագրվելը ավելի կարևոր եք համարում ձեր համար (խնդրում են ընտրել ՄԵԿ տարբերակ):

\_\_\_\_\_ հայերեն

\_\_\_\_\_ ռուսերեն

\_\_\_\_\_ անգլերեն

\_\_\_\_\_ այլ լեզվով (խնդրում են նշել) \_\_\_\_\_

Ինչու՞ է կարևոր տպագրվել հենց այդ լեզվով:

\_\_\_\_\_  
\_\_\_\_\_

4. Երբևիցե փորձե՞լ եք տպագրվել միջազգային անգլերեն լեզվով տպագրվող ամսագրերում կամ խմբագրված գրքերում:

\_\_\_\_\_ Այո

\_\_\_\_\_ Ոչ

5. Միջազգային անգլերեն լեզվով տպագրվող ամսագրերում կամ խմբագրված գրքերում ձեր տպագրվելու այդ փորձը հաջո՞ղ է ավարտվել:

\_\_\_\_\_ Այո

\_\_\_\_\_ Ոչ

\_\_\_\_\_ այս հարցը կիրառելի չէ ինձ համար

6. Եթե միջազգային անգլերեն լեզվով տպագրվող ամսագրում տպագրվելու ձեր փորձը անհաջող է ավարտվում, դուք փորձու՞մ եք տպագրվել

ա) այլ միջազգային անգլերեն լեզվով ամսագրում

\_\_\_\_\_ Այո

\_\_\_\_\_ Ոչ

\_\_\_\_\_ այս հարցը կիրառելի չէ ինձ համար

Եթե ՈՉ, ինչու՞

\_\_\_\_\_  
\_\_\_\_\_

բ) այլ ոչ անգլերեն լեզվով տպագրվող ամսագրում

\_\_\_\_\_ Այո

\_\_\_\_\_ Ոչ

\_\_\_\_\_ այս հարցը կիրառելի չէ ինձ համար

7. Ի՞նչ դժվարություններ եք ունեցել, երբ փորձել եք տպագրվել անգլերեն լեզվով

միջազգային ամսագրերում (կարող եք ընտրել մեկից ավելի պատասխան):

\_\_\_\_\_ լեզվի հետ կապված  
դժվարություններ

\_\_\_\_\_ անգլերենի գիտական ոճի  
հետ կապված դժվարություններ

\_\_\_\_\_ նյութական ռեսուրսների  
հետ կապված դժվարություններ

\_\_\_\_\_ սովյալ ոլորտում կատարված  
վերջին հետազոտություններից  
անտեղյակությունը

\_\_\_\_\_ խմբագրի և ռեցենզենտների հետ  
հաղորդակցվելը

\_\_\_\_\_ խմբագրի և ռեցենզենտների կողմից  
կատարված նկատողությունները

\_\_\_\_\_ և առաջարկները մեկնաբանելը

\_\_\_\_\_ այլ դժվարություններ (խնդրում  
են նշել)

\_\_\_\_\_  
\_\_\_\_\_

Շարունակությունը մյուս էջում է ...





## Appendix B

### English version of the questionnaire

**Dear respondent,**

**My name is Taguhi Sahakyan. I am a graduate student of the Department of English Programs of the American University of Armenia. I am doing research under the supervision of Dr. Bill Snyder. In my thesis I have decided to explore the difficulties that Armenian researchers face while trying to publish in English-medium journals. Learning about the problems will help English language teachers in Armenia in developing more effective ways to overcome them.**

**This is not a test so there are no “right” or “wrong” answers. If you wish you may fill out the questionnaire anonymously. I am interested in your personal opinions and experiences. Thank you very much for your help.**

**Sincerely,**

**Taguhi Sahakyan**

**e\_mail: [taguhi\\_sahakyan@mail.ru](mailto:taguhi_sahakyan@mail.ru)**

## Questionnaire

Please tick your age group:

- 22-35                       56-65  
 36-45                       66 or above  
 46-55

Please indicate your highest degree obtained:

- doctor of science  
 candidate of science  
 master's degree  
 bachelor  
 other, please specify \_\_\_\_\_

Please indicate your department:

- physical and mathematical, and technical sciences  
 natural sciences  
 humanities

Please indicate your field of research:

- |                                      |  |
|--------------------------------------|--|
| <input type="checkbox"/> physics     | <input type="checkbox"/> medicine                    |
| <input type="checkbox"/> astronomy   | <input type="checkbox"/> psychology                  |
| <input type="checkbox"/> informatics | <input type="checkbox"/> archaeology                 |
| <input type="checkbox"/> engineering | <input type="checkbox"/> philosophy                  |
| <input type="checkbox"/> mathematics | <input type="checkbox"/> sociology                   |
| <input type="checkbox"/> geology     | <input type="checkbox"/> law                         |
| <input type="checkbox"/> biology     | <input type="checkbox"/> economics                   |
| <input type="checkbox"/> zoology     | <input type="checkbox"/> linguistics                 |
| <input type="checkbox"/> chemistry   | <input type="checkbox"/> literature                  |
| <input type="checkbox"/> history     | <input type="checkbox"/> art                         |
| <input type="checkbox"/> seismology  | <input type="checkbox"/> other, please specify _____ |
| <input type="checkbox"/> ecology     |  |

1. Have you written any scholarly publications (books, journal articles etc.) since 2000?

- Yes                       No

2. In what languages have you published since 2000? (Please tick all appropriate answers)

- Armenian  
 Russian  
 English  
 other, please specify \_\_\_\_\_

*Continued on the next page...*

3. What language do you consider most important for you to publish in? (Please choose ONE answer).

- Armenian
- Russian
- English
- other, please specify \_\_\_\_\_

Why is it important to publish in that language?

\_\_\_\_\_  
\_\_\_\_\_

4. Have you attempted to publish in any international English-medium journals or edited books?

- Yes                       No

5. Have you succeeded in publishing any articles in international English-medium journals or edited books?

- Yes                       No                       Not applicable

6. If your attempt to publish in an international English-medium journal has not been successful do you try to publish

a. in another English-medium journal?

- Yes                       No                       Not applicable

if NO, why \_\_\_\_\_  
\_\_\_\_\_

b. in another non-English-medium journal?

- Yes                       No                       Not applicable

7. What difficulties have you faced while trying to publish in English-medium journals? (You can choose more than one answer).

- |   |   |
|---|---|
| <input type="checkbox"/> language proficiency                                     | <input type="checkbox"/> interpreting comments and suggestions made by the referees and the editors |
| <input type="checkbox"/> academic discourse                                       | <input type="checkbox"/> other, please specify _____  |
| <input type="checkbox"/> lack of material resources                               | _____   |
| <input type="checkbox"/> access to the recent research in the field               | _____   |
| <input type="checkbox"/> difficulties in corresponding with editors and reviewers |   |

*Continued on the next page...*



## Appendix C

### Sample questions for the interview

1. In your questionnaire you wrote that for you Armenian was the most important language to publish in. Your explanation was for *developing our culture and science*. What do you mean here? (Do you think that publishing only in Armenian will develop our country?)
2. You mentioned only language as a difficulty in connection with your attempts to get published in international journals. Does this mean that you haven't faced any other difficulties or that language is the biggest problem for you? Can you explain further?
3. What do you think is the main problem(s) that Armenian researchers face when they try to publish in international journals?
4. Some participants of this study think that language is not a problem if the research is significant. What do you think? Why?
5. Do you think that senior researchers have more chances to get published in international journals? Why? Why not?
6. Do you have any other comments you would like to share with me?

## Appendix D

### Background information about the interviewees and their responses.

		Questions				
Department	Age group	Highest degree obtained	What do you think are the main problems that Armenian researchers face when they try to publish in international journals?	Some participants of this study think that language is not a problem if the research is significant. What do you think? Why?	Do you think that senior researchers have more chances to get published in international journals? Why? Why not?	Do you have any other comments you would like to share with me?
Dep. of Humanities	Interviewee 1	Candidate for a PhD	Language and unfamiliarity with recent research in our field	I agree but not in humanities because in humanities language is very important.	There is no difference because no one there knows who you are in your country	I think it is important research.
	Interviewee 2	PhD	Language	It is possible to publish an article with significant research, which is written in poor English. But if research is presented in an appropriate way it is easier to publish it.	Junior researchers have more chances to get published because they are young and can easily adopt international standards of writing an article.	We need to increase the quality of our research.
Dep. of Natural Sciences	Interviewee 3	Candidate for a PhD	Language and financial problems	We need to know language in order to present our significant research.	I think there is no difference.	We need a center with translators specialized in different fields, e.g. a translator-mathematician.
	Interviewee 4	Candidate for a PhD	Language and financial problems	Language is a problem if you do not know it.	I think a senior researcher in our country doesn't have any advantages in comparison with a junior researcher.	If you don't have language difficulty and financial problems it is not hard to get published.
Dep. of Physical and Math. and Tech. Sciences	Interviewee 5	Candidate for a PhD	Language, lack of familiarity with recent research in the field, financial problems	Language is not important in science. Significant research written in poor English definitely will be published. But in humanities language might be a problem.	There is no difference if our senior researcher is not recognized internationally.	It will be very helpful to take courses where we can learn how to write an article or a grant proposal.
	Interviewee 6	Candidate for PhD	Finances	I think language is a problem because if you present your significant ideas in poor English people may misunderstand you.	There is no difference between senior and junior researchers or there can be a little difference. The editor might consider the degree and experience of senior researchers but anyway in both cases the research should be significant.	I would like our government to pay more attention to sciences because we can have a lot of achievements in science.