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GOVERNMENT INVOLVEMENT IN ACADEMIC RESEARCH: NAZARBAYEV UNIVERSITY CASE STUDY

This research is a case study of government involvement in academic research. In the case study, we analyzed what factors influence government involvement in academic research. Specifically, we scrutinized different factors such as language, citizenship, networking, age, and gender that could, to some extent, facilitate or complicate research cooperation between academia and government bodies.

Though there are other universities with foreign professors, including KIMEP, SDU, KBTU, the number of foreigners in those universities is insignificant in comparison with NU, and the location of NU provides better access than others.

We conducted an online survey among NU faculty, as well as several face-to-face interviews. The survey involved 47 respondents. The findings revealed that the most significant factors influencing government involvement in academic research are lack of proficiency in Russian and Kazakh, networking. The implications of this research suggest it is essential to establish particular intermediary institutions between academics and the government in order to facilitate the cooperation and omit unnecessary bureaucratic processes.

Key words: academic research; Nazarbayev University faculty; government involvement; Kazakhstan; case study.

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Академиялық зерттеулерге мемлекеттің қатысуы: Назарбаев Университетінің кейс-стадиі

Бұл зерттеу – академиялық зерттеулерге үкіметтің қатысуы туралы кейс-стади. Кейс-стадиде біз үкіметтің академиялық зерттеулерге қатысуына қандай факторлар әсер ететінін талдадық. Нақтырақ айтқанда, біз академия мен мемлекеттік органдар арасындағы ғылыми ынтымақтастықты белгілі бір дәрежеде жеңілдететін немесе қиындата алатын тіл, азаматтық, желі, жас және жыныс сияқты әртүрлі факторларды мұқият қарастырдық.

Шетелдік профессорлары бар басқа университеттер, оның ішінде КИМЭП, СДУ, ҚБТУ, бұл университеттердегі шетелдіктердің саны НУ-мен салыстырғанда мардымсыз, ал НУ-дың орналасуы басқаларға қарағанда жақсы қол жетімділікті қамтамасыз етеді. НУ жағдайы ерекше және оны жалпылау мүмкін емес.

Біз Назарбаев Университетінің оқытушылары арасында онлайн-сауалнама, сондай-ақ бірнеше бетпе-бет сұхбаттар өткіздік. Сауалнамаға 47 респондент қатысты. Зерттеулер мемлекеттік академиялық зерттеулерге қатысуға әсер ететін факторлардың ең маңыздысы орыс және қазақ тілдері мен желілерді жетік білмеуі болып табылатындығын анықтады. Осы зерттеудің нәтижелері ынтымақтастықты жеңілдету және қажетсіз бюрократиялық процестерді жіберіп алу үшін академиктер мен үкімет арасында белгілі бір делдалдық институттарды құру өте маңызды екенін көрсетеді.

Түйін сөздер: академиялық зерттеулер, Назарбаев Университетінің профессор-оқытушылар құрамы, үкіметтің қатысуы, Қазақстан, жағдайлық зерттеу.

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Участие государства в академических исследованиях: пример Назарбаев Университета

Это исследование представляет собой пример участия государства в академических исследованиях. В тематическом исследовании мы проанализировали, какие факторы влияют на участие государства в академических исследованиях. В частности, мы тщательно изучили различные факторы, такие как язык, гражданство, наличие сетей, возраст и пол, которые могут в некоторой степени облегчить или усложнить исследовательское сотрудничество между академическими кругами и государственными органами.

Хотя есть и другие университеты с иностранными профессорами, в том числе КИМЭП, СДУ, КБТУ, количество иностранцев в этих университетах незначительно по сравнению с НУ, а расположение НУ обеспечивает лучший доступ, чем другие. Случай НУ уникален и вряд ли может быть обобщен.

Мы провели онлайн-опрос среди преподавателей Назарбаев Университета, а также несколько очных интервью. В опросе участвовало 47 преподавателей. Результаты показали, что наиболее значимыми факторами, влияющими на участие государства в академических исследованиях, являются незнание русского и казахского языков, нетворкинг. Выводы этого исследования показывают, что важно создать определенные посреднические институты между учеными и правительством, чтобы облегчить сотрудничество и исключить ненужные бюрократические процессы.

Ключевые слова: академическое исследование, факультет Назарбаев Университета, участие правительства, Казахстан, тематическое исследование.

Introduction

In non-English speaking countries, like Kazakhstan, knowledge of the official state languages might be a benefit for international researchers in initiating research in cooperation with the government. The extent to which the knowledge of Kazakh or Russian facilitates conducting research that involves the government remains unclear. Apart from that, citizenship and networking can also be factors determining successful cooperation between academia and the government. In this study, we examine whether knowledge of Kazakh and/or Russian, citizenship, and networking influence government involvement in academic research through a case study at Nazarbayev University.

In our study, we define government involvement as the willingness of government officials to participate in academic surveys and interviews, the desire to share data and legal documents, hiring scholars to conduct research for government bodies. Government involvement in academic research has played and still does one of the critical roles in achieving academic success for scholars. Many times, researchers find themselves stumbled upon the indifference or unwillingness of the government to collaborate and aid their research, which further can affect its overall success (Janenova, 2019). Wall et al. argue that there are numerous methodological and systematic problems with researching countries as Kyrgyzstan, Uzbekistan, Indonesia, and African countries (Wall, Wall, & Mollinga, 2008). Kazakhstan possesses many similarities to these countries in terms of academia and governance, making itself a very interesting and relevant country to look at. Research in Kazakhstan got more active and commenced to make publications not a long time ago, starting in 2010, when the new Law on Science was adopted. It was a part of "The strategic plan for the development of the Republic of Kazakhstan until the year 2020" approved by the Decree of the President of the Republic of Kazakhstan No. 922 on February 1st, 2010. The law aims to encourage local scholars to work more and take after academically developed countries in order not to lag behind.

Since 2010, Kazakhstan has invested more in the development of science and academia, yet the research output did not seem to show much improvement (Kassen, 2017). Other existing research focuses primarily on access to information requests or access to specific data, confidential and non-confidential (Walby & Larsen, 2012). Less recognized

and not studied, however, are the relationships between government involvement and research outcome and the languages a researcher speaks. In an attempt to address this gap, this paper examines how factors such as citizenship, knowledge of Russian and/or Kazakh, and a field of research correlate with more/less government involvement in academic research, and, in turn, how government involvement influences the research output. Focusing on the case study of Nazarbayev University, we explore the involvement of the government in the research pertaining to distinct fields and the difficulties/ advantages of (not)speaking locally used languages.

A Scopus-Based Analysis of Publication Activity in Kazakhstan from 2010 to 2015 demonstrated that even though there is an increasing trend in the quality and quantity of publications done by Kazakhstani scholars, "the number of articles published in 'predatory' journals remains sizable, and there are concerns over authors' negligence and plagiarism." (Yessirkepov, Nurmashev, & Anartayeva, 2015). In fact, by 2015, Kazakhstan had published 9652 documents in total and was a prominent leader compared to Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan. However, its leading position remained alongside some problems with local scholarly journals in Kazakhstan, limiting their development and international outreach (Yessirkepov, Nurmashev, & Anartayeva, 2015). For this particular reason, the research project we carried out is par excellence riveting because it might potentially reveal whether low government involvement in research is a causal factor for people's misconduct in research.

Although precise determinants of successful collaboration between the government and academia are mainly unclear in the existing literature, one apparent phenomenon is that well-established communication and cooperation between the government and academia lead to the higher production of good quality research output (Landry, Lamari, & Amara, 2003). By exploring the extent of government involvement in the field of academic research and the factors affecting government involvement, we will be able to develop narrower strategies as to how to improve and aid young and still developing fields of academic research emphasizing specific fields or topics, as well as create tools to facilitating ways of approaching and communicating with the government.

The first section of this paper begins briefly by introducing a particular case we are looking at – case study at Nazarbayev University. The second section presents a review of the existing literature on the topic of government involvement and research outcomes worldwide, emphasizing countries in transition that have a similar context to that of Kazakhstan. The next section provides a detailed explanation of the methodology utilized in our case study, which comprises both a qualitative online survey and face-to-face interviews of the NU faculty. The final section analyzes the findings and discusses key conclusions and possible recommendations.

Literature Review

The existing literature has delineated various factors that can impact academic research output and contribute to greater/ lesser involvement of the government bodies. Bernier et al. found that measures of quality, including the number of citations, number of PhDs graduated, funds, and peer evaluations of researcher quality positively correlate with publication volume and research outcomes (Bernier, Gill, & Hunt, 1975). Their main finding demonstrated that quantity has a major effect on the quality of research. Cole found that age might also affect the quality and quantity of scientific and scholarly productivity (Cole, 1979). However, this statement is highly opposed by those who advocate for 'cohort effects'. Stephan stated that old studies on research and age are limited due to the usage of cross-sectional data, making it very quickly confronted by the cohort effect (Stephan, 1996). There are several types of cohort effects – the ones who are more educated have better outcomes than others; cumulative advantage effect, i.e., past publications facilitate the development of new research, etc. (Merton, 1968) (Merton, 1988) (Levin & Stephan, 1991). Other authors argue that it is also crucial to take into account how willing a particular government body is to be involved in academic research, i.e., not only to share data but also to participate in the interviews and surveys (Jiwani & Krawchenko, 2014).

Even though the research and data clearly demonstrate that governmental organizations tend to 'protect' information and choose what the public is entitled or not entitled to know, the factors influencing willingness or unwillingness to share are still unclear (Jarvis & Bakvis, 2012). As historical evidence showed, "traditional norms of impartial loyalty have been displaced by partisanship on the part of civil servants" (Jarvis & Bakvis, 2012). Even the widespread dissemination of technological advancement and immediacy of communication does not prevent the government from intended partisanship (Aucoin, 2006). Countries as Kazakhstan go through even more challenging situations in terms

of accessing governmental data or government officials. Stringent control of information does not allow for government officials to take part in the interviews on social media nor share certain information. Evidence of this extends to the field of scientific research as well. Very few government organizations are willing to be involved in academic research, for the processes by which they interact (both inward and outward engagement) have changed significantly. As Mäher suggested, the reasons for the aforementioned could be manifold, including cultural and managerial nuances, there is a notorious presence of reinforcement of conservative ideology that government bodies should make as few outward interactions as possible (Mäher, 2011).

Existing literature by Mairesse et al. says that there is a strong connection between the amounts and size of research grants and the quality and quantity of the research outcomes (Mairesse, Pezzoni, Stephan, & Lane, 2018). Their study has confirmed that there is a positive correlation between the number of research grants and the quantity of the research works done. While the quality of research papers tends to decrease, and overall the amount of medium level research works is increasing. However, there is a lack of focus on the relationship between government bodies and government grants with academics. Another research states that government bodies use university research more broadly than it is generally expected (Landry, Lamari & Amara, 2003). The government bodies' utilization of university research depends on scholars' adaptation of research products, the intensity of the links between scholars and users rather than on the characteristics of research products or focus on the advancement of scholarly knowledge. Thus, it is essential for research to pay attention to linking mechanisms with users and to make clear how scholars would use and adopt provided resources. Those factors only are discussed, while other factors we need for our research are missing.

Moreover, international researchers are in an advantageous position in terms of research networking and have more chances to collaborate with other researchers (Scellato, Franzoni, & Stephan, 2014). Local researchers without international experience have smaller networks, even within their own country. Another critical component is how influential scholars' background is; in the case of Kazakhstan, the research base is only developing, and local researchers have fewer networks and almost no background compared to those of foreign scientists. The literature tells us about networking between researchers both internationally and locally, while there is nothing about government and networks within government bodies.

In the case of Kazakhstan, not the data reliability or restrictions but government workers' unwillingness and fear to take part in academic research activity can create obstacles. The arrest of Canadian scholar Alexander Sodiqov in Tajikistan and other similar unvoiced cases illustrate the limitations, impediments, and even safety implications for both researchers and research participants in Central Asian countries (The Guardian, 2014). There are many problems related to research in 'closed contexts' such as poor state governance, lack of collaboration between ministries and departments, and access to reliable data and information (Janenova, 2019). Closed contexts here are referred to as 'authoritarian', 'illiberal', or 'tightly-controlled' (Koch, 2013a; p. 390). Kazakhstan belongs to this category, and therefore researchers working in Kazakhstan face numerous problems and restrictions. Some civil servants, especially those in low ranks, can feel unsafe to fill out a survey or do an interview or can provide partial and untrue responses in order to avoid persecution or punishment. Investigating the relationship between academic research and government involvement could reveal the riskiest and fragile fields of research for scholars. Global research experience reveals that research on the military, criminal justice, corruption, etc. entails more obstacles than research on other fields like medicine, education, etc. Government involvement in academic research is thereby necessary to ensure the stable and robust growth of Kazakh academia.

At the moment, the support of and collaboration with governmental organizations are only present on paper and financially, not always creating favorable conditions, government bodies and officials are not eager to establish cooperation with academics, yet they have to act so due to the regulations. Making an appropriate climate for research is required to provide information and data easily accessible for the researchers as they contribute to further development of the country. Hence, if the data and information required for the research are unduly classified, this might generate a problem for further development of one area or another. In Kazakhstan, two vital legal documents regulate public access to government documents. The first one is Article 18 of the Constitution of the Republic of Kazakhstan, which guarantees the general public's access to government documents (Akorda, n.d.). The second one is in Article 10 of the Law on the Freedom of Information, requiring government entities to share their data on special digital depositaries (Akorda, n.d.).

Compared to other countries, Kazakhstan raised the issue of open data quite late, and only in 2015 adopted the Law on Access to Information (Adilet, 2015). Notwithstanding the existing legislation, "statistical data can be unreliable as the government officials tend to portray "a better picture" to suit the political leadership and international community," says Janenova (Janenova, 2019). There have been cases where secondary data provided by authorities of Kyrgyzstan, Kazakhstan, and Uzbekistan demonstrated alternating content compared to those by international organizations, e.g. World Bank (Janenova, 2019) (Jonbekova, 2018).

Although considerable research has been devoted to the investigation of reasons that influence research productivity, rather less attention has been paid to the role of language and geopolitics and its impact on research output. A few studies have focused on the role of 'lingua franca' or the most commonly used languages (French, Spanish, Chinese, German, English, Russian, etc.) or solely English in the production of research. However, none paid sufficient attention to the knowledge of local languages as a facilitating tool to produce research, especially that involving the government. An increasing number of foreign researchers are seeking to publish in academic journals (Plume & Wan Weijen, 2014). Undoubtedly, researchers writing in English are likely to find it easier to produce research and get it published, yet it might not always be the case for non-English speaking countries (Curry & Lillis, 2010). In transitional countries like Kazakhstan, only a small stake of the population possesses high English language proficiency, and Russian is the predominant language for scientific communication (Yessirkepov, Nurmashev, & Anartayeva, 2015). The overall approach here might be taken from the existing literature on English as a lingua franca for scholarly communications and publications to deal with the issue of publications in Kazakhstan as a whole (Montgomery, 2013). However, unfortunately, the 'one size fits all' approach does not relate to the case of Nazarbayev University that this study has examined.

The case of Nazarbayev University is unique since the situation with academic capital and knowledge of lingua franca there is quite the opposite of what the standard literature describes. On the initiative of the First President of the Republic of Kazakhstan, Nursultan Nazarbayev, the country's global level research university has been established. NU was the first academic institution in Kazakhstan, guided by the principles of autonomy and academic freedom (Strategy 2019-2030, n.d.). It gathered more than 500 foreign faculty and staff to improve the country's research potential. All of the invited foreign faculty members had both high English proficiency and experience of publishing in the world's best ranking academic journals. NU's publication output had increased from 464 in 2010 to 1020 in 2019, and most of the work was published in the fields of hard sciences and IT. The most urgent topics of research for the country, however, are, in many cases, related to the public sector or governmental organizations and industry. 'Hollowing out' of these particular fields left us with speculation that there might be issues with accessing those fields (in most cases, governmental organizations or state-owned ventures).

Methodology

Limitations

The case of NU is unique and is unlikely to be generalizable. Due to time and budget constraints, we have studied only the NU case; however, other universities could be studied as well in order to have a clear illustration of the situation in the country. Therefore, there is a selection bias in our study, as we have chosen one university to represent research cases with the government. Within the NU, we have also chosen schools to address our survey and interviews and excluded the Center for Preparatory Studies as that faculty is not research oriented.

The sample size is small, as we targeted only NU as a case study. We have collected 47 online-survey responses of faculty members and interviewed seven professors. Thus, our results could vary if there were more respondents, and the situation could be either different or similar. Three hundred thirty professors left out of the survey, and there could be different reasons for this. Firstly, they could be busy with their work and had no time to fill it out. Secondly, this topic could be sensitive for specific people as it considers the government of Kazakhstan. Some people could be pleased with the government, while others could be unhappy and had no desire to share their views. The minimal amount of initiations for collaboration could say that academics could find it difficult and never try to do the kind of research that requires collaboration with government representatives. There is a need for further research in this area.

Research tool

We have surveyed 47 faculty members of Nazarbayev University and conducted 7 face-to-face interviews with volunteer professors that were happy to contribute to our research. The nature of our research project required us to perform a case study

of Nazarbayev University faculty utilizing an online survey and a face-to-face qualitative interview to find out whether and how the knowledge of Russian or Kazakh language affects government involvement. Initially, the survey was the sole research tool for the project; however, as about 10% of respondents were unwilling to give expanded answers in the survey or even skipped open-ended questions, we introduced an additional research tool – qualitative face-to-face interviews – to get a clearer picture of what factors affect government involvement and see if the language is one of those. We have chosen this method of research, as it is cost-effective and relatively fast in terms of data collection. There is no need to go to other universities, cities, no paper waste for printing, mailing, and postage. It is also convenient for survey respondents to answer them at any time during the day without any pressure.

We used online-survey as a primary building block of the study. An online survey was the most appropriate research method, for it was convenient both for us as investigators and the respondents in terms of simplicity of filling out and the amount of time for completion. Translated into three languages – Russian, Kazakh, and English, the survey consisted of 27 questions, including five demographic questions, that were either 'yes/no' questions or questions with several options to pick from. We were asking the participants what factors affected government involvement in their research, their field of study, interests, how necessary it was for them to work with government agencies, as well as how easy/difficult it was for them to involve the government in their studies. The list of questions in the survey was universal for each respondent.

As a result, we have qualitative research consisting of the online survey and interviews to make an illustration of the results found in the case study at NU. Interviews allowed us to investigate the issue in an in-depth way and added a human dimension to the impersonal data of the project collected through online surveys. As for the typology, semi-structured interviews were performed. This specific type was the most convenient as it allowed for flexibility of both having a prepared list of questions that would help to directly address the core interest of the research and leaving a space for follow-up questions in relation to given answers. The interview had three main questions asking if 1) knowledge of Russian or Kazakh, 2) citizenship, and 3) networking affected government involvement in academic research, as well as some additional questions taken from the survey about faculty members' area of research, the experience of joint projects with the government, and the way of approaching the government. The rest of the questions were follow-up questions, which enabled us to reveal some additional variables that influenced government involvement as we proceeded with the project. We have finalized all the questions both for online-survey, and face-to-face interviews after the consultation and approval of the GSPP Ethics Committee prior to the surveys and interviews.

The research revealed various phenomena in terms of the relationship between the variables mentioned above, along with some 'side' relationships and findings (gender or citizenship factor as a determinant of government openness).

Case Study at NU

Nazarbayev University is a unique case in terms of research and innovations in comparison with other universities. According to its official web page, since its establishment in 2010, it became the leading research university in the country. That could be true for several reasons, such as international faculty, a high level of support from the government of the Republic of Kazakhstan, and local and international organizations. About 75% of the faculty are foreigners working at NU have international diplomas and various research experiences throughout the world. Such composition allows us to examine whether the nationality of a researcher affects the attitude of government officials to cooperate for research purposes or not. Moreover, although Kazakhstan is attracting international specialists to contribute to its development, local government representatives could show xenophobic sentiments, especially in terms of data accessibility. Therefore, this case should be studied well in order to try to improve the research outcome and increase the likelihood of collaboration between academics and government officials.

Though there are other universities with foreign professors, including KIMEP, SDU, KBTU, the number of foreigners in those universities is insignificant in comparison with NU, and the location of NU provides better access than others. Additionally, such a unique case of having a high ratio of international faculty not speaking local languages could be disadvantageous because of language barriers between foreigners and local government. The language is significant in factor in our research and is crucial in academic research as a whole. English is a lingua franca in the academic world being a universal language, as more non-natives speak English than natives (Mauranen, Hynninen, & Ranta, 2010). Nazarbayev University is privileged to have such a share of English-speaking academics who can make publications accessible for a considerable popula-

tion. However, due to most of the faculty not knowing local languages and most local's government representatives' ignorance of English, the number of publications is not as high as it potentially could be. At the same time, other states have qualified researchers not knowing English, which prevents them from making publications (Mauranen, Hynninen, & Ranta, 2010).

For our case study, we considered professors of all the schools of the university except the faculty of the Center for Preparatory Studies (CPS) as they do not engage much in the research activity. We have observed the School of Medicine, Graduate School of Business, Graduate School of Public Policy, School of Engineering and Digital Sciences, and School of Sciences and Humanities.

Based on our knowledge and experience, on literature that was reviewed, and on the cultural and political characteristics of the country, we have developed the following hypotheses to be tested:

H1.: Knowledge of Russian and Kazakh makes researchers more likely to establish collaboration with the Kazakhstan government.

H2.: Kazakh government is more prone to collaborate with local citizens rather than with foreigners.

H3.: Networking increases the likelihood of collaboration with the government.

Analyzing the data we have collected, we put each piece of data in a separate table regarding their research initiations and the factors such as language, citizenship, networking, age, and gender that supposedly could affect the success of the collaboration with the government. According to our research question, we have one dependent variable, which is government involvement in academic research. This involvement could vary according to the context of each researcher. For example, a person's knowledge of the local language, networking, and citizenship, as well as some other factors discovered during the study. Meanwhile, we concentrate on independent variables such as language that professors speak, or they use towards the public officials or organizations. Another one is whether professors have any acquaintances among public officials, which could positively affect the likelihood of cooperation with the government. And the third one is their citizenship, which could cause some bias from the government representatives. Those are the three main independent variables that we will use in our survey, and the results could give some clearances regarding the effect of them on research outcome. However, in the process of the data collection, we have obtained more independent variables that could be included as factors influencing the research outcome, such as age and gender, due to the cultural features of the region.

Table 1 – NU faculty by schools (excluding CPS)

School	Number of faculty
Graduate School of Public Policy	18
Graduate School of Business	9
School of Sciences and Humanities	153
Graduate School of Education	32
School of Mining and Geosciences	15
School of Engineering and Digital Sciences	97
School of Medicine	53
Total	377

Research Findings

Online Survey

We conducted a survey of 47 and the interview of 7 faculty members of Nazarbayev University. 32 out of 47 surveyed confirmed their research necessitates cooperation with the government (see Appendix A-1). Overall, it is clear that the majority of the participants do need cooperation with the government to a different extent. Among all the respondents who necessitated cooperation with the government, twelve people needed cooperation for the joint projects (initiated by either the government or researcher); five required access to public data and four to confidential data; five were involved in paid projects by the government; and only seven responded cooperation was optional (see Appendix A-1). Such responses demonstrate that researchers require cooperation with the government or accessing governmental data.

Twenty-two professors had experience initiating any form of collaboration with government representatives, which is half of the professors who answered the question; another twenty-two respondents answered 'no' (see Appendix A-2). Sixteen of those who contested the initiation of collaboration with the government were contacted back. In contrast, six professors contested they received no response at all (see Appendix A-3). Ten professors had positive responses for their requests for research initiation, while six requests were rejected (see Appendix A-3). So, just above a fifth (21%) of the surveyed had successfully negotiated collaboration

with government representatives for their research. However, it would be too optimistic to say that all of them were successfully developed. As the survey had limitations, the responses could not have stated whether there was any kind of further development or research output after the negotiation.

When the participants were asked if there was an instance when the government approached them to initiate a project, the vast majority (62.5%) responded with a 'no' as opposed to only 31.3% of positive responses (see Appendix A-4). Almost all the participants who were contacted by the government body to commence research responded positively (see Appendix A-5). This is an important finding in the understanding of the government's willingness to be involved in academic research, which is quite low.

An open-ended question designed to estimate how necessary government involvement is for the scholars asked participants how many times they have tried to contact the government to initiate research. 55% of professors have made more than one attempt to contact governmental bodies to start a research project; some of them did not mention a certain number but stated "many times, "multiple times", "more than five", which, once again, confirmed researchers' necessity of government involvement in their scholarly work. A similar open-ended question constructed to reveal how often the government has approached researchers demonstrated that the government tends to request research initiation very seldom. In essence, only eight out of forty-seven professors were asked to start a project with the government one or more than one time. From these responses, it is clear that government involvement is an inalienable part of conducting research, yet the government does not show much interest in cooperating.

In most cases (40%), communication about research initiation took place personally, i.e., face-to-face. In other instances, communication took place via email or phone, or through a third party. As the majority of survey participants held non-Kazakh citizenship (38 out of 47), they had difficulty communicating with the government in locally used languages. The lion's share of professors showed no knowledge of Russian and Kazakh languages. Only 36.2% and 15.9% knew Russian and Kazakh, respectively. Consequently, 74.5% of professors are certain that language has an impact on initiating research and involving the government in it. These results now provide evidence to confirm our first hypothesis that language does affect government involvement in academic research.

We have retained our second hypothesis also by the responses collected in the survey. In regard to the influence of citizenship on government involvement, 26 believe it does, while 18 think otherwise. However, it would be erroneous to conclude that citizenship has a direct influence on the government's willingness to participate in the research, for, as it was revealed in the interviews, faculty members associate citizenship mostly with language and do not believe that one's passport per se can become an obstacle to establishing collaboration with the government.

Another promising finding was that 72.7% of respondents believe networking with the government has a direct impact on government involvement. This finding is crucial because it confirms our third hypothesis and can give important insights into the study of research development.

The survey covered professors of distinct age (63% above 40 y.o. and 37% below 40 y.o.) and gender (82% males and 18% females), conducting research in various fields ranging from Humanities and Social Sciences to Engineering and Mining, from Computational Science and IT to Medicine. Slightly more than half of them opined that their field or topic of study might influence government involvement. Together, findings of age, gender, and field of study did not show any significance in the survey; however, during qualitative interviews, a few interviewees highlighted these factors as influential.

The last cluster of questions of the survey focused on the problems of participants' accessing governmental data and workers for research purposes. 50% of professors confirmed they have problems accessing data for their research; meanwhile, the rest 50% stated they have no obstacles with access to data.

To get a more rigorous grasp of why NU faculty had problems, and the nature of those problems or, inversely, why they had no issues accessing the data, we let the respondents answer open-ended questions. Only seven professors responded that the question was not applicable to them; five stated they had no issue accessing the data referring to the availability of data online on governmental portals; and 35 reported that getting access to data is extremely difficult, stating that some of the data is 'hidden', unavailable in English, hard-to-understand, and even if available bureaucratic processes make the wait to access it way too long. One respondent reported that his or her research does not require collaboration with the Kazakhstani government but other governments. Despite the fact that some of NU

faculty might not require access to the Kazakhstani government or its data, almost 48% of them stated they do use governmental data unavailable in English for their research.

In order to better understand the Kazakh government's openness to academia, we asked survey participants if they had had any problems accessing the data in countries other than Kazakhstan. The answers revealed that a higher percentage (66%) of professors had no problems with access to governmental data in other countries, and only a small stake (11%) reported they had to terminate their research projects due to restrictions by the government.

Lastly, to get respondents' overall perception of government involvement and willingness to share data, we asked them to rate Kazakh government's eagerness/ reluctance to participate in the research and accessibility in terms of obtaining data, as well as faculty's need to access governmental data in their research, on the scale of 1-5. Results revealed that most of the surveyed faculty believes that the government is more or less reluctant to take part in academic research. The question about the government's accessibility showed a similar tendency: around 47% of professors rated the Kazakhstani government as inaccessible (4 & 5), 34% as neither accessible nor inaccessible, and around 20% as easily accessible.

Face-to-Face Interviews

Data that we collected from an online survey was quite useful and had already identified major factors affecting government involvement in academic research and retained all three hypotheses of the study. Yet, because of some discrepancies in responses, especially in the open-ended ones, we decided to conduct face-to-face interviews on a voluntary basis. We conducted seven interviews with NU faculty members. The interviews helped us to better understand the problems associated with access to government officials and governmental data, as well as to reveal new variables influencing government involvement such as age, gender, the field of study, and political management in the country.

First and foremost, all seven interviewees confirmed our primary hypothesis that language is a major determinant of government involvement or access to data. As the interviewees reported, the absence of knowledge of the local language appears to pose numerous obstacles: researchers are unable to approach government bodies, understand available data, and make networking connections with the locals. Two interviewees also noted that the language barrier extends not only do Russian or Kazakh documents but also to the English ones because the quality of translation leaves much to be desired. The same applies to the conduction of interviews or surveys with government officials, as even those who have some English proficiency are unable to deliver their thoughts accurately. 7 out of 7 interview participants mentioned the need for some 'intermediary' or 'connector' who would assist academics with approaching the Kazakh government, facilitate their access to data, and provide translation assistance if needed.

Secondly, interviews revealed a novel finding that citizenship does not affect government involvement. As it turned out, respondents associated citizenship with language, but concerning other aspects, 7 out of 7 claimed there is no citizenship bias in Kazakhstan. When we asked if there were any 'unwelcome' ethnicities or citizenships to conduct research, the answer was 'no'. The implication of this finding suggests that our second hypothesis about the influence of citizenship on government involvement should be rejected.

Thirdly, face-to-face interviews once again highlighted that networking is one of the key factors impacting government involvement in academic studies. Participants opined that without networking, it is difficult to get access to government documents and government officials. Most of the interviewees viewed Kazakh society as one based on kinship and acquaintance relationships, e.g., in order to obtain something, a person would need to know someone whom to approach. One respondent commented that "establishing connections and networking is crucial to research a state like Kazakhstan, especially when it comes to the government. Front-line workers have numerous reasons to reject a person. To them, that person is a stranger from a different country interrupting their professional space." Other participants also confirmed that having zero networks or acquaintance with government officials, especially those holding senior positions, constraints research opportunities.

Aside from our three independent variables, face-to-face interviews cast a light on a few new ones. The first new factor that the majority of interviewed people noted is the political management. Participants claimed that the authoritarian management and post-Soviet legacy make up for poor collaboration between academia and the government in Kazakhstan. Some respondents stated that government officials are simply unaware of research procedures and therefore refuse from getting involved in them. Other interviewees mentioned that the fear of whistleblowing or sharing something government workers are not supposed to share also contributes

to low government involvement in the research. In other words, low-level government workers will not share any data or opinions unless instructed so by their bosses. Another reason for considering the political management as an influencing factor was bureaucracy, according to the respondents. 5 out of 7 respondents mentioned high levels of bureaucracy in Kazakhstan, stating that it is merely impossible to quickly issue formal letters and invitations to government agencies and get a fast response. By the time bureaucratic procedures are done, scheduled interviews or surveys, or requested documents are not anymore relevant to the researcher.

Summary of the Results and Discussion

Our research objective investigated the extent to which factors such as knowledge of Russian and/or Kazakh, citizenship, and networking influence government involvement in academic research.

A number of conclusions can be drawn from the findings presented in the Findings Chapter. First of all, research findings support our initial hypotheses H1 and H3 – knowledge of Russian and/or Kazakh and networking affect government involvement in academic research. More than 70% of those who undertook the online survey reported that language and networking have a substantial influence on establishing collaboration with the government for research purposes; 7 out of 7 faculty who were interviewed personally confirmed that they also opine language and networking are an important influencing factor on government involvement. Second of all, the results obtained to support our hypothesis H2 – the influence of citizenship on government involvement – only in part. There was a discrepancy in responses we collected from an online survey and face-to-face interviews: only around 55% of survey participants indicated citizenship as a significant factor, and all seven interviewees contested that citizenship does not intrinsically have an effect yet it can have one if associated with the language (and not one's ethnic origin). In addition, the results indicate that apart from the factors included in our hypotheses, there are complementary variables such as age, gender, and political management that also influence government involvement.

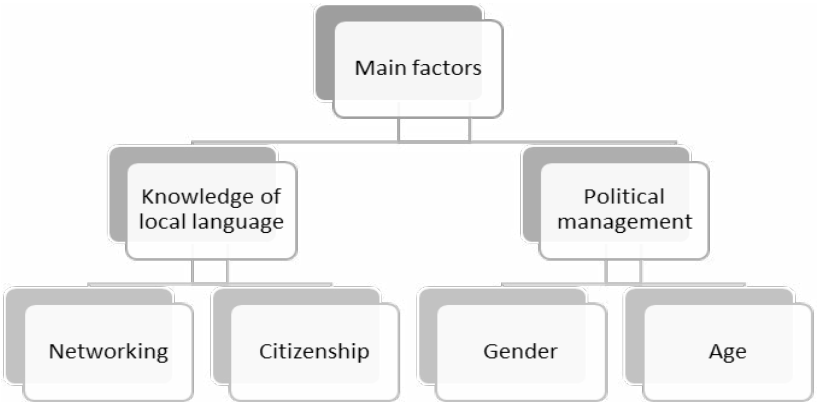

Figure 1 – Main factors affecting government involvement in research

NU Faculty members noted in both online surveys and interviews that language appears to be a major obstacle for many foreign researchers who necessitate collaboration with the government in any way. They particularly emphasized the absence of translation for governmental documents, reports, and statistics, as well as the inability to conduct interviews or surveys with the majority of government workers due to the language barrier. Contrary to the problem of ELF (English as a lingua franca) in academia discussed by Montgomery (Montgomery, 2013), Nazarbayev University faculty faces a language barrier of locally used languages – Russian and Kazakh. Meneghini and Packer brought up a similar issue and stated that many local scholars, including policymakers, government workers and other users of scientific information use languages other than English for their basic communication, which, in turn, prevents the community from transferring knowledge and producing scientific output, especially on topics urgent for the inner community of a specific country (Meneghini & Packer, 2007). The existing literature has paid little attention to the issue of languages other than English in academia,

and this study has demonstrated that in conditions like that of NU, it is not the ELF that prevents scholars from conducting research but the knowledge of the languages used in the country. The results of this research have also shown that even more problems arise when it comes to any type of research that necessitates the involvement of the local government, which is why it is important to pay attention to the barrier that lack of Russian and/or Kazakh proficiency creates for international researchers.

In line with one of the hypotheses, this research has confirmed that networking is another crucial factor that affects government involvement. Our findings suggest that almost all interview and survey respondents consider networking a necessary component to building successful cooperation with government bodies. One of our interviewees, who conducts research in the field of political science, reflected that "Government officials in Kazakhstan can simply reject you because they do not know you. They are likely to cooperate if they know you or if there is a common acquaintance. Kazakhstan itself is a country of connections and nepotism, in extreme cases, of course. Therefore, networking is an essential part of establishing research collaboration." Existing literature does not cover informal networking in academia, yet authors like Nishimura and Okamuro, while arguing about the importance of formal networking, also highlight the benefits of approaching government bodies personally (Nishimura & Okamuro, 2011). They note that both formal and informal networking increase the researcher's ability to gather all the necessary data and involve participants, as well as receive subsidies from the support programs (Nishimura & Okamuro, 2011). Other similar studies on the significance of networking suggest that it is vital for the governments to establish a government-research network to maintain successful collaborative research activity involving academics, practitioners, and government bodies (Winter, Smith, Cooke-Davies, & Cicmild, 2006). In our case study, researchers' inability to build necessary networks also stemmed from the inability to speak local languages. Two interviewees mentioned that they found it extremely challenging to approach any government organization as expats; despite the fact that there were frontline workers who possessed some knowledge of English, it was merely impossible to communicate or get acquainted with senior officials directly. One of them noted that he attempted to build networking through his students who were undertaking internships in industrial companies, as students were able to communicate both in Russian and Kazakh. So, we can speculate that the issue of networking is, for the most part, associated with the language variable, i.e., in Kazakhstan, knowledge of Kazakh and/ or Russian is indispensable to build networking with the government.

Contrary to the hypothesized association about the influence of citizenship on government involvement, results yielded that citizenship per se does not have any impact on government involvement. As both survey and interview participants explained, citizenship can only make a difference if it is associated with the language an individual speaks; in other instances, there is no bias towards one's ethnicity or citizenship when it comes to establishing collaboration with the government for research purposes. If comparing this result to those of older studies, it remains unclear whether citizenship is an important factor for government involvement.

Apart from the hypothesized factors, this study has provided new insight into the additional variables that do affect government involvement. The first one is the authoritarian management in the country. In the answers to an open-ended question regarding the reasons for having problems with accessing governmental data, half of the faculty members gave elaborated answers and shared their personal experiences about how bureaucracy and top-down political rule prevents the government from collaboration with academia. Some respondents even provided names of the institutions that were either ignoring/ delaying their promises to participate in the research or share data or refusing to respond until they receive official order from above. We saw a similar trend through the responses collected during face-to-face interviews. Six out of seven interviewees claimed that government agencies are pre-determined to not collaborate with researchers, especially from NU, owing to outdated foundations left from the Soviet era: hiding information from the public, being secretive or ambiguous in responses, being fearful of the punishment from the top administration. As one of the interviewees urged, "they tend to hide everything from us (scholars) because they cannot afford to be transparent, even when it comes to non-classified data". These findings are in accordance with findings reported by Kassen, Janenova & Knox, O'Connor, Janenova & Knox and King & Horrocks (3) (Janenova & Knox, 2019) (O'Connor, Janenova, & Knox, 2019) (King & Horrocks, 2016). Similar studies demonstrate that the issue of conducting research in an authoritarian state is quite pervasive. Notwithstanding the fact that the Kazakhstani government has made numerous attempts to build transparency via egov.kz portal, where there is a whole section on open data and statistics, the reality shows

it only remains "half-open" (O'Connor, Janenova, & Knox, 2019).

Consistent with the finding of the effect of an authoritarian management, two more findings suggest that age and gender are also important components of building cooperation with the government. Partly, these two findings are attributed to the country's political management discussed in the previous paragraph due to the fact that, for the most part, authoritarian states nurture patriarchy and societal stereotypes. The case of Kazakhstan is no exception. In spite of the fact that survey results have not yielded any significance of gender and gender, face-to-face interviews have illustrated the opposite. Six out of seven respondents confirmed that gender and age do play a role when it comes to building relations with government organizations. One female interviewee in a personal anecdote shared how women are affected by the patriarchal foundations and general skeptical attitude of government officials towards academic research. "Government workers will treat you with arrogance if you tell them you came for research, and if you are a woman in science, they will treat you twice as worse. They seem to show bias instantly, especially when you are young. They can call you "devochka" ("little girl") or "karyndas" (younger sister) and refuse to cooperate just because you are a young female scientist." While the problem of gender bias seems to be universal, there is also an issue with age. In Kazakhstan, there are many stereotypes associated with one's age – the older is the person, the smarter, and the more powerful he or she is. Interview participants highlighted this factor as well, referring to the difficulty in approaching government officials who are older than they are. Even though existing literature does not emphasize the importance of age in building academia-government relations, a similar conclusion regarding the effect of gender was reached by the following scholars: Tiyambe Zeleza, Bian et al. and Lerback & Hanson (Tiyambe Zeleza, 2003) (Bian, Leslie, Cimpian, 2017) (Lerback & Hanson, 2017). They have also stated that female researchers face multiple stereotypes about their research capability and other aspects.

Results demonstrate that overall there are two principle factors affecting government involvement in academic research – knowledge of the local language and state policy. The rest four independent variables stem from the first two. Citizenship and networking are associated with the lack of knowledge of Russian and/or Kazakh, while the authoritarian rule causes gender and age. The extent to which all of the factors above impact the government's willingness to share data or participate in research is unclear, yet we can speculate that if those factors are tackled accordingly, there is a high possibility of enhancing cooperation between the government and academia.

Conclusion

Using qualitative online-surveys and face-to-face interviews, we analyzed government involvement in academic research and several factors that could affect it. Our research brings out for the reader the existence of the problem in collaboration between government bodies and scholars. The case study of Nazarbayev University and faculty members survey helped us to support our hypotheses that knowledge of local languages and networking are likely to increase the probability of research collaboration with government representatives and facilitate the process. While it rejected the assumption that citizenship is also significant. As this study has several limitations, certain suggestions will be presented after the recommendations that came out as research implications.

Recommendations

Reflecting upon the results this research has brought, we claim to present our recommendations in the way of solving the problem of government involvement.

Firstly, in the process of information gathering and interviewing, we found out that European Union has the system of directorate-generals of individual departments or in particular areas such as "Education, Youth, Sport and Culture", "Joint Research Centre", "Research and Innovation", etc. Any researcher or any other person can get data and contact information on the web page of the EU (European Commission, 2020). Although the EAEU (Eurasian Economic Union) has its own portal *de jure*, *de facto,* either this portal has a lack of information or the information is not up to date. Kazakh government also has its portals like "e-gov" and "zakon.kz"; however, those are not always up to date or even miss important contact information. Thus, in the way of entering 30 developed countries, Kazakhstan should improve and establish well-functioning information access.

Secondly, in the way of officially contacting the government officials, many professors go through various bureaucratic processes, which are very time-consuming and cause the feeling of uncertainty. Therefore, there is a need for a special institution

that will connect the researchers and the government for any type of collaboration. Establishing the particular intermediary could save the time of directly contacting the government representatives and facilitate the organization of meetings and cooperation. For example, there is a Career and Advising Center at Nazarbayev University, which is a so-called intermediary between the job-seeking students and graduates and potential employers. It organizes meetings, workshops, directs the applications, and provides contacts of companies and organizations. As our interviewees confirmed, it is crucial to have such an institution for the sake of research development.

The next suggestion is the requirement of knowledge of English for government officials in order to facilitate communication with English speaking researchers. This could be solved by time as the Kazakhstani government encourages and tries to provide trilingual education, including Kazakh, Russian, and English languages. Many of the high ranked young specialists working in the government bodies have foreign education, and the ratio is increasing. More young specialists know English and in the future by the change of generations, supposedly, more and more government workers will be English speaking.

Further research suggestions

As there is a significant gap in the literature on government involvement in academic research, this issue should be studied further. NU case is an exceptional case within Kazakhstan in terms of research opportunities and support levels. Therefore, there is a need to study the whole situation in the country and find out what is the status quo outside the Nazarbayev University. We suggest making a comparative study of Kazakhstan and other developing countries, comparing them in terms of management, funding, and research outcome.

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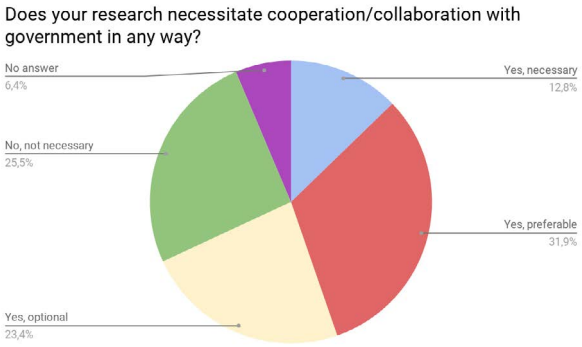
APPENDIX

Appendix A. Descriptive Statistics

Appendix A-1



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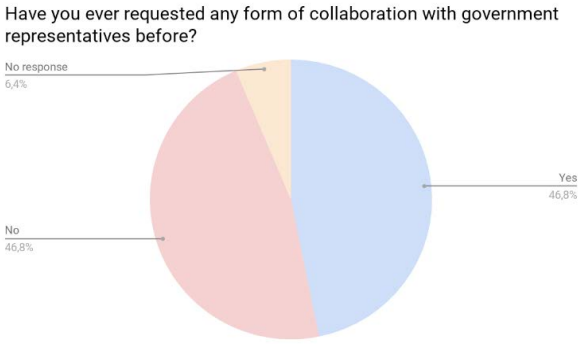

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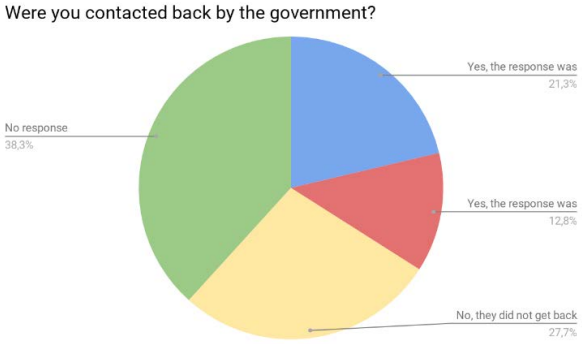

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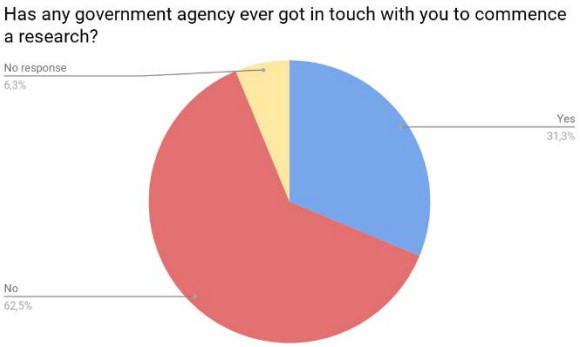

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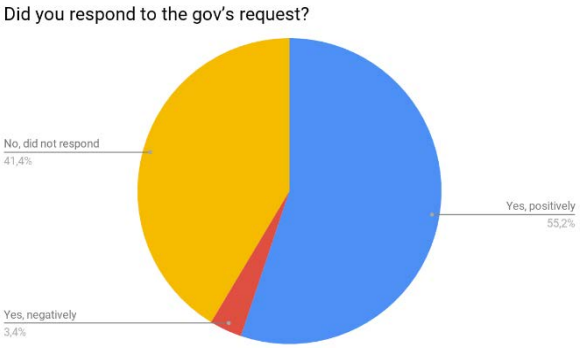

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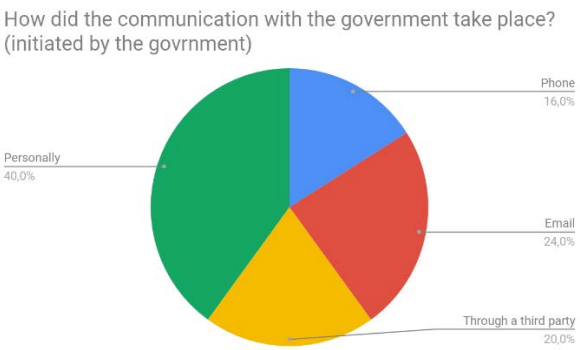

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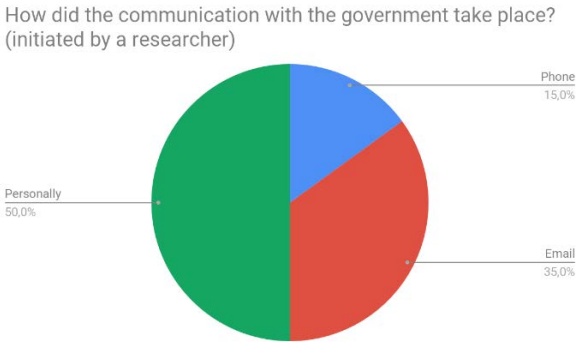

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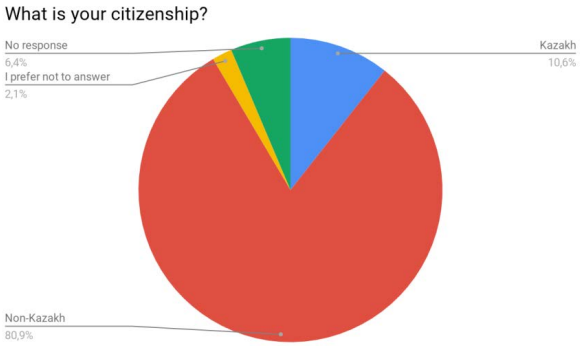

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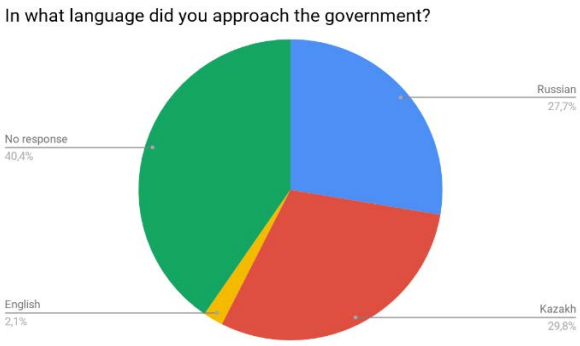

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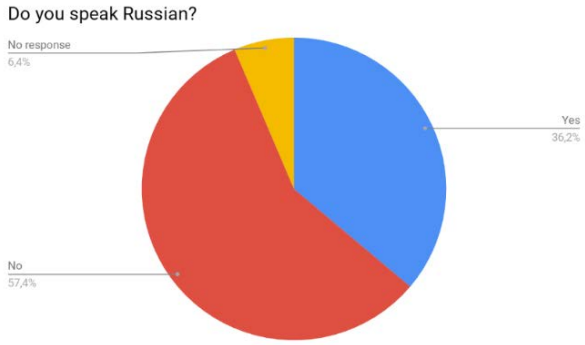

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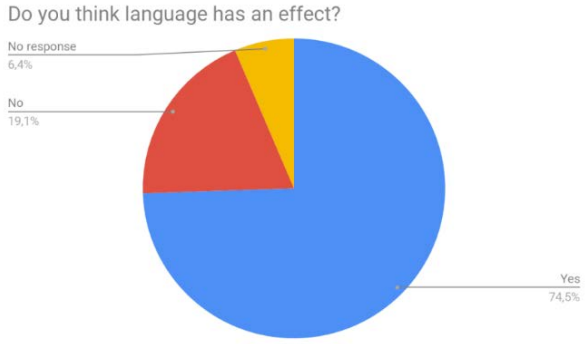

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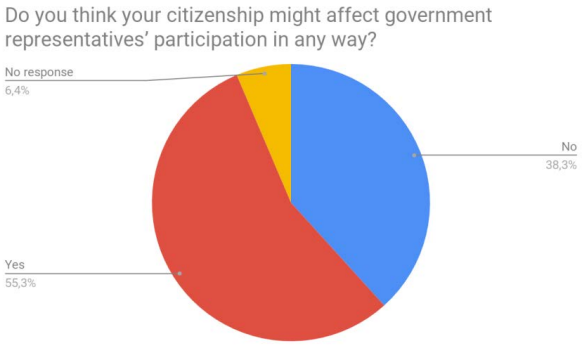

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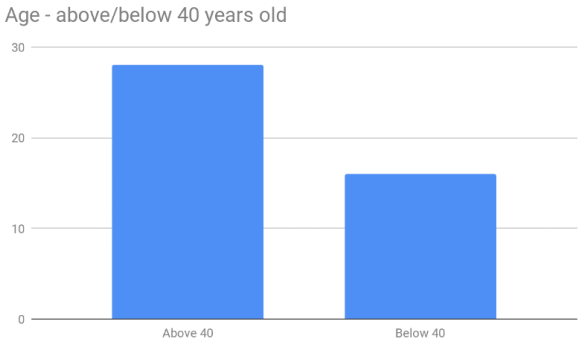

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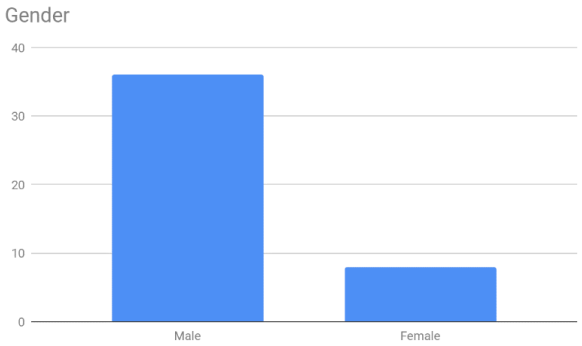

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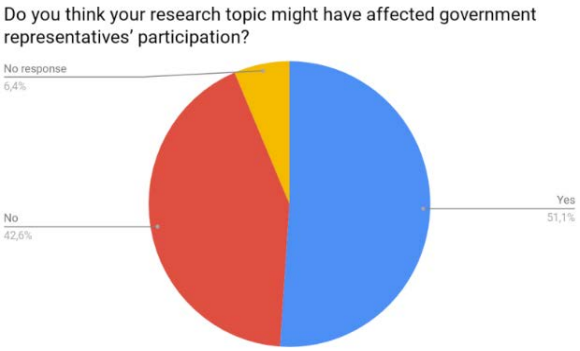

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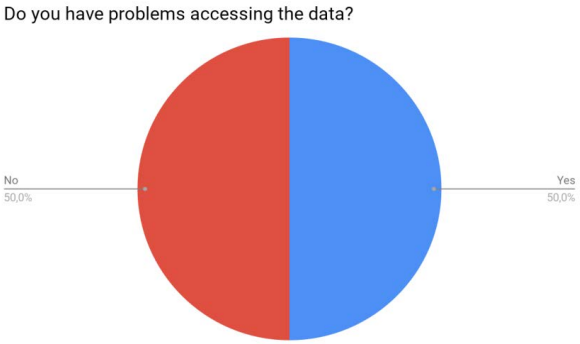

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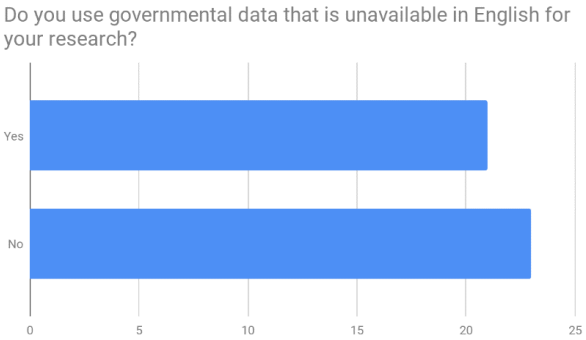

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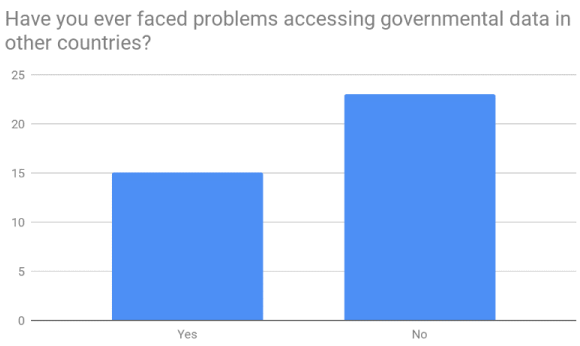

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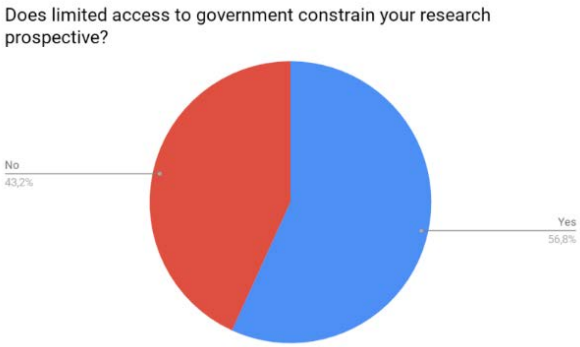

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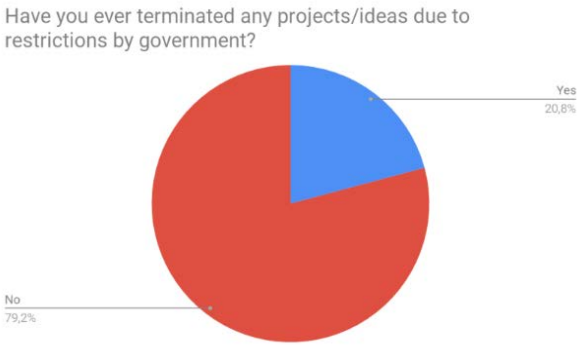

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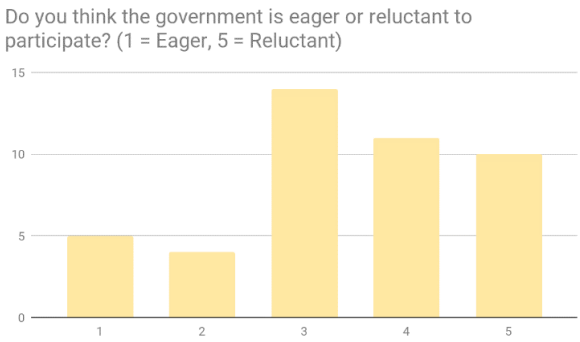

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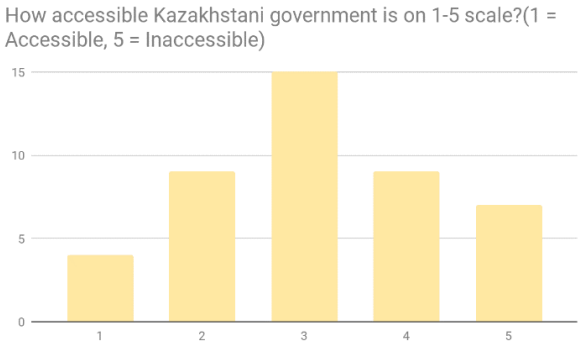
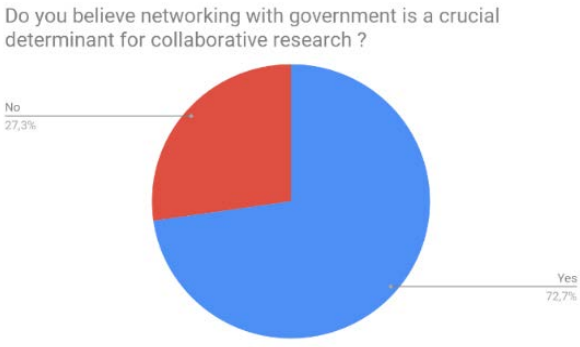
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