

COVID-19 and Distance Learning: International Doctoral Students' Satisfaction With the General Quality of Learning and Aspects of University Support in Russia

Nurudeen Abdul-Rahaman¹ · Evgeniy Terentev¹ · Vincent Ekow Arkorful²

Accepted: 5 March 2022 / Published online: 25 April 2022 © The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

Abstract

Since this catastrophic crisis began, learning at universities has changed to distance mode to reduce person-to-person transmission of the virus. Using a survey, the article compares the experiences of international doctoral students in this COVID crisis with the general quality of learning and their experiences with various aspects of university support. The descriptive results suggest that the overall satisfaction with the general quality of learning was quite high among both Russian-speaking and English-speaking students. There were no statistically significant differences between English-speaking and Russian-speaking doctoral students. However, there was a statistically significant difference in fields of study, with international doctoral students in medical sciences being the most dissatisfied with the general quality of learning. After comparing international doctoral students' experiences with various aspects of university support, the results further reveal that English-speaking international doctoral students were dissatisfied with access to laboratory equipment, software for working on a dissertation, and library services the most. The article advocates that universities provide and improve their support systems, especially by making laboratory equipment, software for working on dissertations, and library services more accessible to English-speaking international doctoral students during this pandemic, to give them a positive learning experience.

Keywords COVID-19 \cdot Completion \cdot Distance learning \cdot International doctoral students \cdot Satisfaction \cdot University support

Department of Government and International Studies, Hong Kong Baptist University, Kowloon Tong, Kowloon, Hong Kong



Nurudeen Abdul-Rahaman nurudeenkuberke@gmail.com

Doctoral School of Education, The National Research University Higher School of Economics, Moscow, Russia

Introduction

Since this catastrophic crisis of COVID-19 began in early 2020, nations, through their Ministries of Education, have implemented distance learning to replace the usual method of learning. On March 25, 2020, Russian President Vladimir Putin gave an order through the Ministry of Science and Higher Education for universities to adopt distance learning to prevent a surge in the numbers of COVID-19 infections among students and the country's population as a whole (Valeeva & Kalimullin, 2021). Since then, universities in the country have adhered to the decree of the President and have implemented distance learning, where school management, teaching and learning, and all other aspects of university education are given in a distance learning mode for students who are physically present or absent at their universities. This urgent change to distance learning could negatively affect the academic and social lives of students since it was implemented urgently (Valeeva & Kalimullin, 2021). In this article, the plight of international doctoral students at Russian universities is our main concern. The article defines international doctoral students as those who do not have Russian citizenship and are studying PhD programs at Russian universities. The goal of every university around the world is to provide better services to their international doctoral students in order to enhance their learning, support them in conducting and writing dissertations, and improve their happiness and wellbeing through distance learning by making better technological infrastructure, providing students with guidance on how to use these technologies to make learning effective during this pandemic time (Armstrong-Mensah et al., 2020). Scholars indicated that there had been an improvement in international doctoral student populations at Russian universities, characterized by a low completion rate and high attrition (Terentev et al. 2018). These low completion rates and high attrition among international doctoral students are due to problems such as poor supervision because of low incentives for supervisors, the absence of funding for doctoral students, and tougher graduation criteria (Terentev et al., 2021). An earlier study found the increase in work in doctoral programs as a challenge (Bekova & Dzhafarova, 2019) and the absence of a standard protocol for recruiting doctoral students (Maloshanok & Terentev, 2019). According to the national coronavirus information center, Russia had 9,182,538 confirmed cases of COVID illnesses as of November 20, 2021, with 259,084 deaths (Times, Coronavirus in Russia: The Latest News | Nov. 20, 2021-The Moscow Times, 2021), and that means distance learning will persist for a longer time in Russia. Given the pre-existing issues and the terrible effect of the COVID-19 crisis on universities, as well as the shift from the usual teaching and learning approach to distance learning, it becomes more pressing to assess how international doctoral students feel about the quality of learning through distance learning at their universities during these hard times in Russia. The survey offers universities in Russia the feedback to improve the quality of learning and to churn out suitable models and practices in distance learning for international doctoral students' success, happiness, and wellbeing, as well as to give international doctoral students different positive learning experiences in distance learning during



this COVID-19 era. The article's position is that there is a direct tie between international doctoral students' satisfaction with distance learning, happiness, wellbeing, and completion. Students' satisfaction improves retention, decreases dropouts, and improves the completion rate (Douglass et al., 2006). The article used survey data collected on international doctoral students at Russian universities to compare their perspectives on the general quality of learning and on various aspects of the support given to them by their universities in distance learning during this COVID crisis. In the survey, both Russian and English-speaking as well as international doctoral students in diverse study fields were collected, analyzed, and compared.

Literature Review

Distance learning is "learning by means of telecommunications, in which the subjects of training (students, teachers, tutors, etc.), having a spatial or temporal distance, carry out a general educational process aimed at creating external educational products and corresponding internal changes (increments) in the subjects of education" (Khutorskoy, 2004). Distance learning was first introduced in Russia during the nineteenth century and was given to any form of learning or training that was done by correspondence (Belyakova & Dzhafarova, 2019). In a simple term, the article explains distance learning as the form of education that brings teaching and learning to the doorstep of participants. The introduction of distance learning in Russian higher education has kept the country in the competition of attracting more international students to achieve the 5-100 projects, which were initiated in 2012 and aimed at making five universities among the world's top 100 universities by 2020 (Pardini, Russia's Higher Education System During the Coronavirus Pandemic: Fault Lines Exposed Even as Classes Begin | Wilson Center 2021). The nature of distance learning has made it suitable for most universities to adopt since the physical presence of participants is not required, and this is in line with one of the dictates of the World Health Organization, which is social distancing. Social distance entails spending as much time as possible at home and away from others, and the technique promotes the use of online video and phone communication (Coronavirus, Social and Physical Distancing, and Self-Quarantine | Johns Hopkins Medicine 2021). The distance learning mode may not be the best, but it served as the right alternative to the traditional method of teaching and offered flexible times for classes, increasing the speed of learning and making it easy for huge participants to attend classes since they could join the online classes without grouping in one location (Olentsova, 2020). This distance learning mode, implemented instantaneously, has offered some challenges to universities that are not well equipped with adequate technological facilities and poor students who cannot afford to purchase the devices to support this distance learning (Olentsova, 2020).



Students' Learning Experiences During the COVID-19 Crisis

The quality of learning at universities globally has been affected for the past two years due to the switch to distance learning mode in the COVID-19 pandemic, giving international students varied experiences at their universities. For instance, in the United Kingdom and Ireland, international students' satisfaction with their overall learning experience was 76%, with 93% of international students satisfied with online lectures. 93% of international students were satisfied with the university's library services. Furthermore, 82% of international students in Europe said they were satisfied with the overall quality of education. 93% of international students were satisfied with the online lessons they were given. According to the study results, 94% of respondents were satisfied with library support, and 92% were satisfied with IT support. Additionally, in Asia, the overall satisfaction rate for the quality of learning was found to be 83% and 94% of the respondents were pleased with the online lectures. Also, in North America, 87% were satisfied with their overall quality of learning and 96% were satisfied with online tutoring. In Australia, international students reported an overall satisfaction rate of 80% with the quality of their learning experiences. 92% were satisfied with online teaching, and 92% were extremely satisfied with their studying facilities, such as a library. Finally, 88% of international students at participating New Zealand universities reported being satisfied or very satisfied with their overall learning experience (https://www.i-graduate.org/international-student-barometer).

In the United Arab Emirates, students were reported to be satisfied with the quality of learning their universities gave them during the pandemic. They expressed strong satisfaction with how secure and safe it was on campus, the availability of distance learning facilities, online teaching, and university assistance to enhance their distance learning experience (El Refae et al., 2021). Moreover, a study on undergraduate students at a United Arab Emirate University found no statistical difference in satisfaction on gender, living place location, GPA, and university support, but a significant difference in satisfaction level was seen in the students' level of studies in the distance learning mode (Malkawi et al., 2020). In the Philippines, students were found to be quite pleased with distance learning (Baloran & Hernan, 2021). However, an earlier study by Serhan (2020) found less satisfaction with online Zoom lessons among students. In Saudi Arabia, students were more satisfied with learning on the Google Hangout platform (Almusharraf & Khahro, 2020). Demuyakor (2020) conducted a study among international Ghanaian students in China, and the outcome was that students, in general, were satisfied with the switch to distance learning, but students outside China complained of spending more on the internet, and others expressed their disappointment with poor internet connectivity at their university dormitories. A study in India on the effect of distance learning among Bachelor of Business Administration and Master of Business Administration students revealed that teaching quality, course design, and timely feedback had positively impacted students' satisfaction, resulting in improved performance (Gopal et al., 2021).



The preceding discussion demonstrates that there is no single study in the Russian context on the topic. The I-graduate International Student Barometer (ISB) (2021) survey did not include international students in Russia, and most studies in this field focus on students in other countries. The study of Demuyakor targeted only Ghanaian students in China. This article covers international doctoral students in Russia and compares their experiences with the general quality of learning and various aspects of university support based on their field of study and their language of proficiency (Russian-speaking and English-speaking students) in this COVID-19 time.

Method and Data

According to the available literature, research on international students' experiences with the general quality of learning through distance learning in this crisis of COVID-19 has been conducted in other regions or countries but not in Russia. The article was written based on an online survey conducted on international doctoral students who are not Russians and are studying at Russian universities. The article's main goal was to provide useful feedback to universities in Russia that offer doctoral programs on students' satisfaction with the general quality of learning and some aspects of their university support in distance learning mode during this COVID-19 crisis. The aspects of university support that international doctoral students' views were sought are academic support, distance learning conditions, availability of library resources, availability of laboratory equipment, and access to the software required to work on a dissertation (Plagiarism checkers, software for analysing data). International doctoral students from different universities, different years of study, different fields of study, different modes of study, and both Russian-speaking and English-speaking students were included in the sample of the study. 394 international doctoral students were covered in the survey and were asked to rate their satisfaction with the general quality of learning in distance mode and various aspects of university support on a scale of 1 to 5, where "1" is "absolutely dissatisfied" and "5" is "fully satisfied". International students could choose not to take part in the survey. 77.4% of international doctoral students filled out the questionnaire in the Russian language; the remaining 23% filled it out in the English language. The sample information in detail is seen in Table 1.

Results

The Overall Satisfaction with General Quality of Learning By Language of Proficiency and Field of Study

The descriptive statistics analysis was performed. Generally, satisfaction with quality of learning was quite high: 87.5% of surveyed international doctoral students were "quite satisfied" or "extremely satisfied" with the quality of learning they received during this difficult period of the pandemic, which can be clearly



Table 1 Sample information (N=394)

Sample descriptions	Percentages %
Mode of study	
Full time	91
Part time	7
Blended mode	2
Year of study	
First year	38
Second year	29
Third year	19
Fourth year	9
Fifth year	2
Other	3
Language	
Russian-speaking	77
English-speaking	23
Field of study	
Natural sciences	17
Engineering and technology	19
Medical sciences	10
Agricultural sciences	4
Social sciences	24
Humanities	15
Others	10

seen in Table 2. There were no statistically significant differences between English-speaking and Russian-speaking doctoral students. However, there were differences in fields of study, with international doctoral students in medical sciences being the most dissatisfied (30.8%), and it's seen in Table 3.

Overall Satisfaction with Aspects of University Support

International doctoral students in Russia were mostly dissatisfied with their universities' research support services; nearly one in five respondents (18.7%) were dissatisfied with the lack of laboratory equipment required to work on a dissertation

Table 2 Overall satisfaction with the quality of learning

		Frequency	%	Valid %	Cumulative %
Valid	Satisfied	330	83.8	87.5	87.5
	Dissatisfied	47	11.9	12.5	100
	Total	377	95.7	100	
Missing	System	17	4.3		
Total		394	100		



Table 3 Overall satisfaction with the quality of learning by field of study

Field of study	satisfied	dissatisfied		
	Percentages			
Natural sciences	87.5	12.5		
Engineering and technology	90.4	9.6		
Medical sciences	69.2	30.8		
Agricultural sciences	86.7	13.3		
Social sciences	89.4	10.6		
Humanities	94.7	5.3		
Other	85.7	14.3		

or study; nearly one in six (12%) were not satisfied with access to software to work on a dissertation; and one in ten (11.1%) were not satisfied with library resources. These can be seen in Table 4.

Satisfaction with Aspects of University Support by Language of Proficiency

English-speaking international doctoral students were more critical of the assessment of aspects related to the university support systems: they were twice as likely as Russian-speaking international doctoral students to be dissatisfied with academic support (17.4%) of English-speaking international doctoral students surveyed versus 7.4% of Russian-speaking international doctoral students); conditions for online learning (11.6% against 5.1%); the level of information support (16.3% against 6.4%), and almost three times more likely to complain about not having access to software for dissertation (22.4% against 8.8%). These facts can be clearly sighted in Table 5.

Discussion

The satisfaction level of international doctoral students who speak Russian and English, as well as different fields of study, is analyzed and compared based on the general quality of learning and various other aspects of university support. The findings revealed that overall satisfaction with the general quality of learning was quite high for both Russian-speaking and English-speaking international doctoral students, despite the fact that all aspects of their education were delivered via distance learning. Considering the urgent manner in which the distance learning method was implemented and this finding, we could confidently state that Russian doctoral education has experienced substantial progress.

After comparing the satisfaction level with the general quality of learning by field of study, the finding suggested that international doctoral students in medical sciences



Table 4 Overall Satisfaction with aspects of university support

Academi	c support				
		Frequency	%	Valid %	Cumulative %
Valid	Dissatisfied	36	9.1	9.7	9.7
	in between	56	14.2	15.1	24.9
	Satisfied	278	70.6	75.1	100
	Total	370	93.9	100	
Missing	System	24	6.1		
Total		394	100		
Condition	ns for online le	earning			
		Frequency	%	Valid %	Cumulative %
Valid	Dissatisfied	25	6.3	6.5	6.5
	in between	42	10.7	11	17.5
	Satisfied	315	79.9	82,5	100
	Total	382	97	100	
Missing	System	12	3		
Total		394	100		
Availabil	ity of library f	acilities			
		Frequency	%	Valid %	Cumulative %
Valid	Dissatisfied	41	10.4	11.1	11.1
	in between	51	12.9	13.8	24.9
	Satisfied	277	70.3	75.1	100
	Total	369	93.7	100	
Missing	System	25	6.3		
Total		394	100		
Availabil	ity of laborato	ry equipment	t		
		Frequency	%	Valid %	Cumulative %
Valid	Dissatisfied	59	15	18.7	18.7
	in between	47	11.9	14.9	33.5
	Satisfied	210	53.3	66.5	100
	Total	316	80.2	100	
Missing	System	78	19.8		
Total		394	100		
Access to	software requ	ired to work	on a di	ssertation	
		Frequency	%	Valid %	Cumulative %
Valid	Dissatisfied	43	10.9	12	12
	in between	45	11.4	12.6	24.6
	Satisfied	269	68.3	75.4	100
	Total	357	90.6	100	
Missing	System	37	9.4		
Total		394	100		



Table 5 Satisfaction with university support services by language of proficiency

Support Satisfaction level		Language proficiency		
		Russian-speaking students	English- speaking students	
		Percentages		
Academic support	dissatisfied	isfied 7.4	17.4	
	in between	14.4	17.4	
	satisfied	78.2	65.1	
Conditions for distance learning	dissatisfied	5.1	11.6	
	in between	9.5	16.3	
	satisfied	85.5	72.1	
Informational support	dissatisfied	6.4	16.3	
	in between	8.1	9.3	
	satisfied	85.5	74.4	
Availability of library resources	dissatisfied	8.8	18.6	
	in between	12.4	18.6	
	satisfied	78.8	62.8	
Availability of laboratory equipment	dissatisfied	16.8	24.4	
	in between	14.3	16.7	
	satisfied	68.9	59.0	
Access to software required to work on a	dissatisfied	8.8	22.4	
dissertation	in between	12.1	14.1	
	satisfied	79.0	63.5	

were more dissatisfied with the overall level quality of learning. This finding seemed to suggest that the inability of international doctoral students in medical sciences to make themselves physically present in their science laboratories and conduct experiments has resulted in their dissatisfaction with the general quality of learning. Even though our study participants were only international doctoral students, the findings are somehow consistent with the findings of i-research graduates in the 2021 International Student Barometer report, which found that international students (undergraduate and graduate) satisfaction with general quality of learning (undergraduate and graduate) in the UK to be (76%), Europe (82%), Asia (83%), North America (87%), Australia (80%), and New Zealand (88%) were all pleased with their overall learning experience. Per this regional comparison, we can again state confidently that the Russian universities did a good job of establishing a positive learning experience for international doctoral students in distance learning mode during this pandemic by providing a supportive learning system for international doctoral students. The outcome is similarly consistent with the findings of El Refae et al. (2021), Baloran and Hernan (2021), Almusharraf and Khahro (2020), Demuyakor (2020), Gopal et al. (2021). In contrast, Serhan (2020) reported student unhappiness with Zoom instruction in a particular university in the US, which reduces the level of satisfaction with the quality of learning.



The results further revealed that international doctoral students reported a high level of dissatisfaction with the availability of laboratory equipment to work on their dissertation, access to software to work on their dissertation, and access to library resources to work on their dissertation. This means that international doctoral students' research processes are mostly affected during the pandemic. However, when the satisfaction levels of Russian-speaking and English-speaking international doctoral students were compared; the English-speaking international doctoral students were more dissatisfied with the various aspects of the university support systems. This offers clear evidence that language played a major role in making the various aspects of the university's support inaccessible to English-speaking international doctoral students.

Conclusion and Implications

Since these troubling times of COVID-19 began, the style of learning in universities changed to distance learning to help stop person-to-person transfers of the infection. The article compares the experiences of international doctoral students on the general quality of learning and aspects of university support based on Russian-speaking and English-speaking international doctoral students, as well as by field of study. The article found the overall satisfaction of Russian and English speakers among international doctoral students to be high. However, international doctoral students in the medical sciences reported less satisfaction with the general quality of learning. English-speaking international doctoral students were the most dissatisfied with access to laboratory equipment, access to software, and library resources to work on their dissertations. There is a need for the Russian government's higher education policy to focus on ensuring that all necessary resources are available and made accessible to English speaking international doctoral students to improve the quality of learning in this distance learning modality for students in all fields of study. The Russian government's policy on higher education must also stipulate that all international doctoral students who are not proficient in the Russian language must take up Russian language courses to equip themselves with some basic knowledge of the Russian language. This will enable non-Russian-speaking international doctoral students to interact with the various aspects of their education effectively.

Declarations

Ethical Approval All procedures performed in this study were reconcilable with the ethical standards of the institutional and/or national research committee and the 1964 Helsinki declaration and its later amendments or comparable ethical standards. In line with this declaration, which was amended in 2008, study participants were informed about the study purpose.

Informed Consent None.

Conflict of Interest None.



References

- Almusharraf, N., & Khahro, S. (2020). Students satisfaction with online learning experiences during the COVID-19 pandemic. *International Journal of Emerging Technologies in Learning (IJET)*, 15(21), 246–267.
- Armstrong-Mensah, E., Ramsey-White, K., Yankey, B., & Self-Brown, S. (2020). COVID-19 and distance learning: Effects on Georgia State University school of public health students. Frontiers in Public Health, 8, 547.
- Baloran, E. T., & Hernan, J. T. (2021). Course satisfaction and student engagement in online learning amid COVID-19 pandemic: A structural equation model. *Turkish Online Journal of Distance Education*, 22(4), 1–12.
- Bekova, S., & Dzhafarova, Z. (2019). Who is Happy in Doctoral Programs: The Connection between Employment and Learning Outcomes of PhD Students. *Вопросы образования*, (1 (eng)).
- Coronavirus, Social And Physical Distancing And Self-Quarantine | Johns Hopkins Medicine. (2021). Coronavirus, Social and Physical Distancing and Self-Quarantine | Johns Hopkins Medicine.https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-social-distancing-and-self-quarantine.
- Demuyakor, J. (2020). Coronavirus (COVID-19) and online learning in higher institutions of education: A survey of the perceptions of Ghanaian international students in China. *Online Journal of Communication and Media Technologies*, 10(3), e202018.
- Douglas, J., Douglas, A., & Barnes, B. (2006). Measuring student satisfaction at a UK university. *Quality assurance in education*.
- El Refae, G. A., Kaba, A., & Eletter, S. (2021). Distance learning during COVID-19 pandemic: Satisfaction, opportunities and challenges as perceived by faculty members and students. *Interactive Technology and Smart Education*.
- Gopal, R., Singh, V., & Aggarwal, A. (2021). Impact of online classes on the satisfaction and performance of students during the pandemic period of COVID 19. Education and Information Technologies, 1–25.
- International Student Barometer report (2021). https://www.i-graduate.org/international-student-barometer.
- Khutorskoy, A. V. (2004). Distance learning technologies (Moscow; center for distance education "Eidos")
- Malkawi, E., Bawaneh, A. K., & Bawa'aneh, M. S. (2020). Campus Off, Education On: UAEU Students' Satisfaction and Attitudes Towards E-Learning and Virtual Classes During COVID-19 Pandemic. Contemporary Educational Technology, 13(1), ep283.
- Maloshonok, T., & Terentev, E. (2019). Towards the New Model of Doctoral Education: The Experience of Enhancing Doctoral Programs in Russian Universities. *Вопросы образования*, (3 (eng)).
- Olentsova, J. A. (2020). Distance learning in Russia during the coronavirus pandemic. In *Journal of Physics: Conference Series* (Vol. 1691, No. 1, p. 012219). IOP Publishing.
- Pardini, V. (2021). Russia's Higher Education System During the Coronavirus Pandemic: Fault Lines Exposed Even As Classes Begin | Wilson Center. Wilson Center. https://www.wilsoncenter.org/blog-post/russias-higher-education-system-during-coronavirus-pandemic-fault-lines-exposed-even.
- Serhan, D. (2020). Transitioning from face-to-face to remote learning: Students' attitudes and perceptions of using Zoom during COVID-19 pandemic. *International Journal of Technology in Education and Science*, 4(4), 335–342.
- Terentev, E., Bekova, S., & Maloshonok, N. (2021). Three challenges to Russian system of doctoral education: Why only one out of ten doctoral students defends thesis? *International Journal of Chinese Education*, 10(1), 22125868211007016.
- Terentiev, E. A., Bekova, S. K., & Maloshonok, N. G. (2018). The crisis of postgraduate studies in Russia: What bears problems and how to overcome them? *University Management: Practice and Analysis*, 22(5), 54–66.
- Times, T. M. (2021). Coronavirus In Russia: The Latest News | Nov. 20 The Moscow Times. The Moscow Times. https://www.themoscowtimes.com/2021/11/20/coronavirus-in-russia-the-latest-news-nov-20-a69117.
- Valeeva, R., & Kalimullin, A. (2021). Adapting or changing: The covid-19 pandemic and teacher education in Russia. *Education Sciences*, 11(8), 408.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

