

# Indian Students in Russia: Sociological and Statistical Profile

Alexander Leonardovich Aref'ev<sup>1,2\*</sup> and Nikolay Mikhailovich Dmitriev<sup>2</sup>

<sup>1</sup>Center for Sociological Research of the Ministry of Education and the Science of the Russian Federation, Moscow, Russia; alexander.arefiev@gmail.com

<sup>2</sup>National Research Nuclear University MEPhI, Moscow, Russia; NMDmitriev@mephi.ru

## Abstract

**Background/Objectives:** The article considers the main trends in the training of specialists for India at the higher schools of Russia since the 1950's to the present day. **Method:** The authors used statistical and sociological methods in their research. The statistical method included the systematization and analysis of departmental statistics concerning the training of Indian students at the Soviet and Russian universities in the past 70 years. The sociological method included questionnaire survey of 306 Indian students. **Findings:** The authors cover such topics as the geography of study, studied special fields, academic programs of the Indian students and the dynamics of their numbers at the Soviet and Russian higher educational institutions and their preferences for some universities. The article also contains information on the socio-demographic composition of the Indian students in Russia, tuition fees and daily expenses, level of satisfaction with the quality of the obtained occupational training. The revenues brought by the Indian students to the Russian economy have been determined. The article was written based on the archival data of the Ministry of Higher Education of the USSR, the statistics of the Ministry of Education and Science of the Russian Federation and the results of the pilot sociological study (N = 306), conducted by the author in May 2015. The conclusion is made on certain stagnation in the interest of the Indian youth to study in Russia. **Improvements:** In this regard, a list of measures aimed at strengthening and expanding the Russian-Indian cooperation in education and increasing the flow of Indian students to Russian universities is proposed.

**Keywords:** India, Indian Students, Russia, Study, The USSR, Universities

## 1. Introduction

The Soviet-Indian cooperation in the field of education and in other areas began a few years after the end of the Second World War and gained India's independence from Great Britain (1947). In 1953, the agreements on trade and the provision of the Soviet technical assistance were signed between the USSR and India. The Bombay Technical Institute was built in 1958 as a gift from the Soviet Union. On the basis of Soviet loans and with the participation of Soviet specialists the foundations of the Indian ferrous metal industry and heavy industry were laid; the Soviet Union was of great help in the development of the Indian oil and gas industry, in the development of the Indian pharmaceutical industry, in the area of

basic sciences and space exploration. Highly qualified national cadres were prepared for India in the Soviet/Russian educational establishments, too. The relations of the Soviet Union with India were the most successful among non-socialist states. In 1971, the USSR and India signed the Treaty of Peace, Friendship and Cooperation, which further strengthened the bilateral contacts. In the 1984/1985 financial year, the share of the USSR in the Indian imports reached 10.4%, while the share of exports to the USSR was 18.4%, which became a record in the history of the relations between the two countries<sup>1</sup>. According to the estimate of the famous Indologist<sup>2</sup> in the last years of existence of the Soviet Union India became its strategic partner. The Soviet-Indian relations in the humanitarian sphere were very fruitful as well. After

\* Author for correspondence

the failure of perestroika and the collapse of the Soviet Union a marked slowdown happened in the relations between Russia and India, including trade and economic relations, which it was possible to overcome only in recent years to a certain extent (but not completely). Thus, in 2014, the total commodity turnover between India and Russia amounted to USD 9.5 billion, while the share of Russian exports to India amounted to 1.3% and imports amounted to 1.1%<sup>3</sup>. In 2015 the volume of the Russian-Indian trade contracted to USD 7.8 bln<sup>4</sup>. To which extent was the evolution of the Russian-Indian relations reflected in the cooperation between two countries in the field of education and above all in the dynamics of the number of Indian students at Russian universities? How has Russia's role changed in training highly qualified specialists for India? What are the challenges and the prospects in this area? The article deals with finding the answers to these questions.

## 2. Literature Review

The topic of the Russian-Indian cooperation in the field of education is covered fragmentarily in the scientific literature. Most of the data on the training of the citizens of the Republic of India at Soviet universities is contained in two monographs by<sup>5,6</sup>. The author also described the experience of their training at the University of Peoples' Friendship named after Patrice Lumumba (abbr. UPF) – the main “source of manpower” for India in the USSR period. The role of Indian graduates of the Soviet and Russian universities in strengthening of Russian-Indian relations is dealt with in the report by Professor Devendra Kaushik, Secretary-General of the National Federation of the Indian graduates of the Soviet and Russian universities<sup>7</sup>. The great importance of India as one of the world's leading providers of its students to study abroad as well as the problems of recruitment of Indian students for training at Russian universities in the 1990s are mentioned in<sup>8</sup>. The experience of training foreign students in India itself is outlined in the monograph by<sup>9</sup>. The detailed information on the Indian education system, training standards in secondary and higher schools, including medical and pharmaceutical professions is contained in the collected articles<sup>10</sup>. An interesting analysis of the Indian reforms in education in the 1990s is given by<sup>11</sup>. At the departments of Indology of a number of Russian universities the lectures on the history, economy, politics and culture of India are

given to the Russian students. The experience of one of these courses is referred to in the article by lecturer of the Far Eastern Federal University<sup>12</sup>. The information on the scientific and educational cooperation between Russian and Indian universities and research institutes as of 2005, as well as on the contacts between Russian and Indian teachers (they are confined mainly to meetings at conferences) is contained in the monograph “Interaction of Russian universities with international foundations and organizations”, wherein the authors point out the extremely small volume of this cooperation<sup>13</sup>. Specific information on the Indian students in Russia for the academic year 2004/2005, as well as on the program of exchanges in the field of culture, science and education between the Russian Federation and the Republic of India of 2000 is contained in the multi-authored monograph<sup>14</sup>. The only study that gives the system information on the Indian students in Russia is a chapter devoted to India in the monograph<sup>15</sup> but it refers to 2005-2006.

The most comprehensive statistical data on Indian students, trainees, post-graduate students, students of preparatory departments at the Russian universities since the early 2000s to the present day are contained in the collections published by the Center of Sociological Studies of the Russian Ministry of Education and Science<sup>16,17</sup>. At the same time, until now, the research, summarizing the available statistics and identifying major trends in the training of the Indian citizens in the various programs at the Russian universities since the period of the Soviet Union up to the present time, including the use of the sociology methods had hardly been conducted.

## 3. Methodology

The subject of this article is the statistical and sociological analysis of training of the Indian students, interns, post-graduate students in the USSR and the Russian Federation in the period since the 1950s to the present day. The objectives of the study were:

- The analysis of the dynamics of the total number of Indian students at higher educational institutions of the USSR and Russia for the last 70 years;
- Comparative analysis of the most sought-after specialties for the Indians at the universities of the USSR and Russia;
- Geography of the Indian citizens studying at higher educational institutions of the national republics of

the USSR and RSFSR and the higher educational institutions most popular among Indian students;

- Study of the major problems of adaptation, degree of satisfaction with the quality of obtained training and living conditions of the Indian boys and girls studying at Russian universities at the moment;
- Identification of the Indian students' opinions on the employment prospects with Russian diplomas in the homeland;
- Assessment of the Russian economy income from training of Indian students.

This article is prepared on the basis of the archival and current data of departmental statistics of the USSR Ministry of Higher Education and the Ministry of Education and Science of the Russian Federation (abbr. Ministry of Education and Science of Russia).

To solve the research issues, the authors used two methods: Statistical and sociological.

The statistical method included the systematization and analysis of departmental statistics concerning the training of Indian students at the Soviet and Russian universities in the past 70 years. The relevant historical data of the USSR Ministry of Higher Education (for the 1950-1980-ies) and the data of the Russian Ministry of Education for 1990-2000 were selected and unified.

For more information on the topic of the study the sociological survey of 306 Indian students was held in April and May 2015 with the participation of the authors. The sample was representative and amounted to 5.7% of the total number of Indian boys and girls studying at Russian universities by the programs of tertiary education level (Bachelor's program, Specialist program, Master's program, totally 5,390 persons).

## 4. Results and Discussion

### 4.1 Indian Students in the USSR Higher Educational Institutions

The first Indian students appeared in Soviet universities in the early 1950s. The largest group (about 20 persons) entered the Moscow State University named after M. V. Lomonosov (abbr. MSU); several more persons were enrolled to the Moscow Machine Tool Design Institute, Odessa Institute of Low-Temperature Machines and Kharkov Polytechnic Institute. By the end of the 1950s 36 Indian citizens took various forms of training at the Soviet universities. From 1961 to 1970, the number of

Indians at the Soviet higher schools increased by almost 20 times: Totally 667 people were accepted for training, more than 400 persons graduated with the diplomas of higher education. Indian students and post-graduate students studied in the 1960s at more than 33 Soviet universities, mainly in Moscow and Leningrad (3/4 of the entire cohort), as well as at the universities of Ukraine (including Kiev State University, Kiev and Odessa Polytechnic Institutes and others), Azerbaijan (Azerbaijan Institute of Oil and Chemistry), Uzbekistan and Belarus. Most of all Indian citizens studied at the University of Peoples' Friendship and in the MSU (see Table 1).

**Table 1.** Soviet higher educational institutions, the leaders in terms of the number of the Indian graduates in 1961-1970

University	University location (cities)	Number of graduates, persons
1. University of Peoples' Friendship named after Patrice Lumumba	Moscow	164
2. MSU named after M. V. Lomonosov	Moscow	102
3. Leningrad State University	Leningrad	16
4. Moscow Institute of Chemical Engineering	Moscow	16
5. Leningrad Electro-technical Institute named after V. I. Ulyanov (Lenin)	Leningrad	9
6. Moscow Oil Institute named after N. I. Gubkin	Moscow	9
7. State Institute of Physical Culture and Sports	Moscow	8
8. Tashkent Institute of Agriculture	Tashkent	8
9. Kiev Institute of Physical Education	Kiev	7
10. Moscow Higher School of Industrial Art	Moscow	7
11-33. Other universities of the USSR	Kiev, Leningrad, Minsk, Moscow, Odessa, Rostov-on-Don, Sasovo, Kharkov	60
<b>Total:</b>	<b>33 universities</b>	<b>406</b>

Since 1971 to 1980, the number of Indian students has increased by more than 2-fold: 1,375 persons were accepted for studying, 970 persons graduated from the

Soviet universities. And about 80% of Indian citizens were the graduates of higher educational institutions of the RSFSR, including the University of People’s Friendship (406 persons), Moscow State University (190 persons) and 14% were the graduates of universities in Ukraine. On the whole the Indians studied at 29 higher educational establishments of the RSFSR, at 17 universities of Ukraine (in Zaporozhye, Kiev, Kremenchug, Mariupol, Odessa, Khmelnytsky), at two agricultural universities of Uzbekistan, at Azerbaijan Institute of Oil and Chemistry, at Minsk Institute of National Economy and State University of Moldova.

Indian citizens underwent training at the educational institutions of secondary vocational education as well (about 200 persons in the period from 1971 to 1980). The largest contingent from India was trained in Ukraine at Kremenchug Flight School of Civil Aviation (107 persons graduated from it). Indian students studied also at Sasovo flight school (Ryazan region), Khmelnytsky Medical School and several other schools and colleges.

The trend of growth in the number of Indian students in the Soviet Union continued in the 1980-s as well: Over the period from 1981 to 1992 2.8 thousand citizens of India were accepted to higher schools for training by the programs lasting more than 6 months and about two thousand persons graduated from these establishments. Indian citizens were educated at 135 universities of 10 republics of the USSR and first of all at the universities of the RSFSR, mainly in Moscow, as well as in Leningrad (see Table 2) and at the higher schools of Ukraine (see Table 3).

**Table 2.** Distribution of Indian graduates of the Soviet universities located in different cities of the RSFSR in 1981-1992

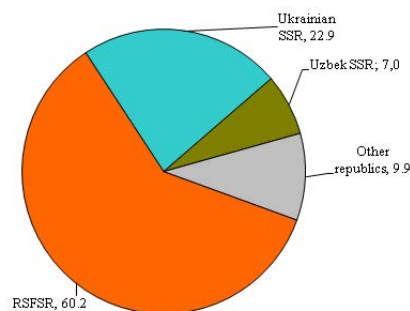
University location (cities)	Number of universities	Number of graduates, persons
1. Moscow	35	795
2. Leningrad	15	148
3. Nalchik	1	56
4. Volgograd	2	29
5. Tver	1	24
6. Rostov-on-Don	2	23
7. Krasnodar	3	16
8. Vladivostok	1	11
9. Pyatigorsk	1	10
10-14. Astrakhan, Voronezh, Ivanovo, Irkutsk, Stavropol	5	8
<b>Total</b>	<b>66</b>	<b>1,120</b>

**Table 3.** Distribution of Indian graduates of the Soviet universities located in different cities of the Ukrainian SSR, in 1981-1992

University location, (cities)	Number of universities	Number of graduates, persons
1. Lvov	2	115
2. Kiev	7	66
3. Odessa	5	49
4. Kharkov	10	45
5. Zaporozhye	2	35
6. Vinnitsa	2	30
7. Simferopol	3	27
8. Donetsk	2	25
9. Mariupol	1	18
10. Lugansk	2	13
11. Kirovograd	1	1
12. Makeevka	1	1
<b>Total</b>	<b>43</b>	<b>425</b>

Compared with the 1970s, the share of the Indian student contingent at Ukrainian universities in the 1980s increased from 17.6% to 22.4% and respectively, there was some decline in the share of Indian students at higher educational institutions of the RSFSR (from 84.5% to 59.7%).

In addition to higher education institutions of the RSFSR and the Ukrainian SSR, the persons of Indian descent in 1965-1992 received higher education at seven universities of Uzbekistan (131 persons), two universities of Georgia (69 persons), six universities of Belarus (55 persons), three universities of Azerbaijan (32 persons), two universities of Kazakhstan (10 persons), two universities of Moldova (5 persons), one university of Latvia (7 persons), one university of Armenia (6 persons) and one university in Tajikistan (1 person). Almost all of these institutions were located in the capitals of national republics of the USSR (see Figure 1).



**Figure 1.** The distribution of Indian alumni of 1981-1992 in different republics of the USSR, %.

The data on the professions which were studied by the Indian citizens at the higher schools of the USSR are of great interest (See Table 4). First of all, it should be noted that most of the Indians were trained as students of 5-6 year programs of graduates (80.8% of all who came for training to the USSR) and almost 20% were the post-graduate students or passing the scientific internship. The category of foreign trainees appeared in the Soviet Union in 1962<sup>18</sup>. This form of training provided improving the academic qualification. Each trainee had a scientific adviser, approved plan of study and research activities. The duration of the internship was 3 years. At the end of it each foreign trainee received a certificate, which stated the theme of the internship, its location and the evaluation of the work done by the trainee.

Let us primarily analyze the student specializations (see Table 4).

The priority of technical specialties is obvious among the persons who were educated by the graduate programs. Most Indian students studied mechanical engineering technology (almost 400 graduates from this specialization), computing (243 persons), as well as geology, exploration and development of mineral resources (143 certified graduates) and aircraft engineering (technical maintenance of aircrafts and engines – 73 persons). 63 more Indian graduates received training in the field of power engineering and 50 persons in construction and architecture. Among those who

decided to become an economist, almost half specialized in the field of economic and social planning, the rest mostly on engineering and economic fields (economics and management in the variety of industries – machine-building, metallurgy, etc.) and received diplomas of engineers-economists. Thus, almost every second Indian student underwent training in the USSR related to the engineering profile.

Indian medical students (the second largest mass specialization) almost all were engaged in the medical faculties, that is became general practitioners (there were almost no persons from India specializing in dentistry, pediatrics, pharmacy, etc).

Among those who studied natural sciences and the exact sciences (the third place), there were the most of the future physicists (71 persons), chemists (41 persons) and mathematicians (21 persons); among those who studied agriculture (the fifth place), the priority was given to agricultural chemistry (80 persons). The Russian language took the 4 place by the number of students.

Indian post-graduate students and trainees had some other priorities. In the first place they had the natural sciences and the exact sciences and the earth sciences. Every third Indian post-graduate student and trainee specialized in these areas. The second place was taken by engineering science (16% studied them), the third place was taken by the Russian language and literature (or 82 persons), the fourth place was taken by medical sciences

**Table 4.** Specialties studied by the Indian graduates of the Soviet universities in 1965-1992\*

Special fields	The number of Indian students who studied these professions	The number of Indian postgraduates and trainees who studied these professions	The total number of Indian citizens who studied these professions	Share in %
Engineering	1,266	107	1,373	41.8
Medical	584	72	656	20.0
Natural and exact sciences	183	203	386	11.8
Russian language	221	82	303	9.2
Agriculture and veterinary medicine	106	50	156	4.8
Humanitarian and social	88	63	151	4.6
Economy and branch management	51	27	78	2.4
Culture and Art	35	1	36	1.1
Pedagogics	12	14	36	1.1
Law (international)	19	6	25	0.7
Other	82	0	82	2.5
<b>Total</b>	<b>2,644</b>	<b>622</b>	<b>3,282</b>	<b>100.0</b>

Note: Compiled from the database of the FRIS program "International students and graduates" (only graduates who studied for long-term programs (from 6 months or more) were considered).

(11.5% or 72 persons), the fifth place was taken by humanitarian and social specialties (63 persons). At this, in the field of medicine the Indian post-graduate students and medical interns, in contrast to the students, had a fairly wide range of specialties (especially in obstetrics, surgery and internal medicine).

The majority of highly qualified specialists for India were trained in the USSR in the 1980s. In the last decade of the country's existence (1981-1992), the University of People's Friendship and the Moscow State University and a number of higher educational institutions of the Union republics were the leaders in training Indian citizens (see Table 5).

It should also be noted that Indian citizens (mostly interns and graduate students) were trained in the 1980s at 16 academic research institutes as well, which mostly were in Moscow (Institute of Oceanology, Institute of Organic Chemistry, Institute of Earth Physics, Institute of Analytical Chemistry, Institute of Crystallography, All-Russian Scientific Center of Surgery, Institute of Pediatrics, Institute of Cardiovascular Surgery, Institute of General Genetics, Institute of Surgery, All-Union Scientific Research Institute of Experimental Veterinary Medicine, Institute of Oriental Studies, the Institute of Russian Language named after A. S. Pushkin, the Computing Center of the Academy of Sciences of the

**Table 5.** Soviet universities leading in the number of Indian graduates in 1981-1992, persons

University	University location	Number of graduates, persons
1. University of People's Friendship named after Patrice Lumumba	the RSFSR, Moscow	399
2. Moscow State University named after M. V. Lomonosov	the RSFSR, Moscow	102
3. Lvov Polytechnic Institute	Ukrainian SSR, Lvov	76
4. Georgian State Polytechnic Institute named after V. I. Lenin	Georgian SSR, Tbilisi	60
5. Kabardino-Balkarian State University	the RSFSR, Nalchik	56
6. Tashkent Polytechnic Institute	Uzbek SSR, Tashkent	50
7. First Moscow Medical Institute	the RSFSR, Moscow	48
8. Second Tashkent State Medical Institute	Uzbek SSR, Tashkent	47
9-10. Leningrad Polytechnic Institute	the RSFSR, Leningrad	39
9-10. Lvov Medical Institute	Ukrainian SSR, Lvov	39
11. Leningrad Electro-technical Institute named after M.V. V. I. Ulyanov (Lenin)	the RSFSR, Leningrad	36
12. First Leningrad Medical Institute named after I.P. Pavlov	the RSFSR, Leningrad	32
13. Zaporozhye Machine-Building Institute	Ukrainian SSR, Zaporozhye	30
14. Moscow Power Engineering Institute	the RSFSR, Moscow	29
15. Volgograd Polytechnic Institute	the RSFSR, Volgograd	26
16. Kalinin State Medical Institute	the RSFSR, Kalinin (Tver)	24
17. Azerbaijan Oil and Chemistry Institute named after M. Azizbekov	Azerbaijan SSR, Baku	22
18. Belarusian State Polytechnic Institute	Byelorussian SSR, Minsk	21
19. Donetsk Polytechnic Institute	Ukrainian SSR, Donetsk	21
20. Moscow Oil Institute named after N. I. Gubkin	the RSFSR, Moscow	21
21. Donetsk Polytechnic Institute	Ukrainian SSR, Donetsk	20
22. Kiev State University	Ukrainian SSR, Kiev	20
23. Moscow automotive Institute	the RSFSR, Moscow	19
24. Kharkov Polytechnic Institute	Ukrainian SSR, Kharkov	19
25. Mariupol Metallurgical Institute	Ukrainian SSR, Mariupol	18
26. Rostov Institute of Agricultural Engineering	the RSFSR, Rostov-on-Don	18
27. Tashkent Institute of Agriculture	Uzbek SSR, Tashkent	18
28. Crimean Medical Institute	Ukrainian SSR, Simferopol	17
29. Second Moscow State Medical Institute named after N. N. Pirogov	the RSFSR, Moscow	17
30. Vinnitsa Medical Institute	Ukrainian SSR, Vinnitsa	16

USSR), as well as in Kiev (Institute of Physics and Advanced Medical Research Institute). The number of Indian post-graduate students and trainees at the above mentioned institutions was insignificant (at the same time from one to two representatives of India were studying there for an average of 3 years majoring mostly in the natural sciences and medical).

## 4.2 Indian Students at the Universities of the Russian Federation

After the collapse of the USSR the number of citizens of the Republic of India, coming to study at Russian universities initially dropped from 696 in 1992 to 349 persons in 1993 and to 305 people in 1994, but then began to grow – 734 persons in 1995, 842 persons in 1996, about a thousand people in 2000 and this figure is generally maintained in the subsequent 15 years. As a result, in the period between 1992 and 2015, about 15 thousand Indian citizens graduated from the Russian higher schools and the total number of Indian graduates of the Soviet and Russian higher schools amounted to 18 thousand. If we consider that since the country's independence about 1.5 million Indians are estimated to receive higher education abroad, the contribution of Russian higher school in training of highly qualified specialists for India cannot be considered significant.

What are the fundamental differences in terms of training the cadres for the Republic of India at the Soviet

and Russian universities? First of all the priorities in the professions changed. Currently, more than 9/10 of students from India study medicine in Russia, including 76.5% of general medicine. Surgery and traumatology, pharmacology and pharmacy, pediatrics, dentistry, cardiology, gastroenterology, dermatology, infectious diseases, etc. are among other specialties (see Table 6).

The share of persons studying Russian was cut by half in comparison with the period of the USSR. And only 2 persons out of 260 Indian boys and girls, who studied the Russian language, were studying it by a long-term program at post-graduate school, while the rest were students of preparatory departments, as well as trainees (10 persons) who studied under short-term programs. While the engineering professions in the USSR period were studied by almost half of the students from India and 1/5 of post-graduate students are currently studied only by 1.0% (59 students and one post-graduate student). The interest in the specializations of agriculture, natural sciences and physical and mathematical sciences reduced even more.

Noticeable changes occurred in the levels of training. First of all, the number of post-graduate students dramatically reduced: Their number in the 2014/2015 academic year was only 29 persons. The number of masters (43 persons) cannot be considered as significant. At the same time such form of post-graduate training as residency is more in demand (see Table 7).

**Table 6.** Main groups of specialties in which the Indian citizens were trained at Russian universities in the 2014/2015 academic year

Special field	Studied intramural, persons	Studied extramural, persons	Total, persons	Share in %
Medical	5,425	5	5,430	91.6
Russian language	255	5	260	4.4
Humanitarian and social sciences	69	0	69	1.2
Engineering	59	1	60	1.0
Economy and management	28	31	59	1.0
Natural and physical and mathematical sciences	27	1	28	0.5
Pedagogics	4	2	6	0.1
Culture and Art	1	1	2	0.03
Law	0	1	1	0.02
Agriculture and veterinary medicine	1	0	1	0.02
Other	9	0	9	0.2
<b>Total</b>	<b>5,878</b>	<b>47</b>	<b>5,925</b>	<b>100.0</b>

**Table 7.** Levels of training (training programs) of citizens of the Republic of India in the Russian universities in 2014/2015 academic year (full-time)

Levels of training/training programs	Number of students, persons	Share in %
Preparatory departments	282	4.8
Baccalaureate	56	1.0
Specialist program	5,238	89.1
Master's program	43	0.7
Traineeship	109	1.9
Internship	18	0.3
Residency	103	1.8
Postgraduate training program	29	0.5
<b>Total</b>	<b>5,878</b>	<b>100.0</b>

Most of the citizens of the Republic of India study under the long-term medical programs of certified specialists (study duration is an average of 6.5 years, excluding the one-year preparatory departments).

Whereas in the Soviet period all students, post-graduate students and trainees from India without exceptions received higher education solely in the intramural form of study, currently about 50 Indian students chose the extramural form of training (mostly they are economists).

In 2014/2015 academic year the Indian citizens studied at 117 Russian higher educational institutions, including 63 higher schools of the Ministry of Education and Science and 27 higher schools of the Ministry of Health Care, as well as at 16 higher schools of other ministries and departments and at 11 non-state higher schools. They were distributed among Russian higher schools of different departmental subordination (form of ownership) as follows: 24.5% (1,451 persons) studied at universities of the Ministry of Education of Russia; 73.7% (4,365 persons) being trained at the higher education institutions of Ministry of Health and Social Development of the Russian Federation; 0.4% (25 people) at the higher schools of the other departmental subordination (Ministry of Transport, the Government of the Russian Federation, Russian Federal Agency for Physical Culture, Sports and Tourism, Ministry of Agriculture, Ministry of communication, Russian Federal Fisheries Agency) and 1.4% (84 persons) at private universities.

As a comment it can be noted that at the higher schools of the Ministry of Education and Science of Russia the Indian citizens preferably study at the medical faculties. St. Petersburg Non-State Medical and Social Institute is highly popular among Indian students who wish to obtain

doctor's diploma (44 persons studied there in 2014/2015). At other non-state universities the natives of India study economics, finance and management and prefer to do it by extramural form of study (as, for example, 26 persons at the International University in Moscow).

The largest contingents of Indian students, interns, post-graduate students and students of preparatory departments (numbering over 100) were concentrated, naturally, at the universities of medical profile (see Table 8).

**Table 8.** Russian universities leading in the contingent of students from the Republic of India in 2014/2015 academic year, person

University	Number of students
1. Smolensk State Medical Academy	1031
2. Tver State Medical Academy	644
3. Crimean Federal University named after V. I. Vernadsky (Simferopol)	523
4. Kursk State Medical University	
5. Volgograd State Medical University	407
6. Kazan State Medical University	360
7. Stavropol State Medical University	351
8. Northern State Medical University (Arkhangelsk)	250
9. Belgorod State University – National Research University	224
10. Orenburg State Medical Academy	194
11. Penza State University	165
12. Voronezh State Medical Academy named after N. N. Burdenko	144
13. Tambov State University named after G. R. Derzhavin	138
14. Nizhny Novgorod State Medical Academy	116

The geography of study of the citizens of the Republic of India in Russia is of interest. They studied on the whole at the universities of 38 cities, located mainly in the European part of Russia. Only a few studied in the Far East and Siberia. Unlike the majority of foreign students seeking to obtain diplomas of Moscow and St. Petersburg universities, the Indians prefer to study at the provincial universities (medical academies and universities), training in which (as well as accommodation) costs them much cheaper and the quality of knowledge, in their opinion, is not worse than at the capital's universities (see Table 9). And over the past 10 years, the number of Indian students, interns and post-graduate students



declined more than by 3 times in St. Petersburg, and twice in Moscow. And, despite the fact that there are a lot of medical schools in two Russian capital metropolitan areas, very few representatives of India study there (for example, they make 12 persons at the First Moscow State Medical University named after I. M. Sechenov).

**Table 9.** Geography of training of India's citizens in the intramural form of study at the Russian higher schools in 2014/2015 academic year

City	The number of higher education institutions in which the citizens of India were trained	The number of Indian citizens enrolled in universities
Smolensk	1	1,031
Tver	1	647
Simferopol	1	523
Kursk	1	484
Volgograd	3	409
Kazan	3	365
Stavropol	1	351
Arkhangelsk	1	250
Belgorod	2	227
Orenburg	1	193
Moscow	38	192
St. Petersburg	19	170
Penza	1	165
Voronezh	2	146
Tambov	1	138
Nizhny Novgorod	3	127
Orel	1	98

Ufa	3	65
Ryazan	1	61
Rostov-on-Don	2	59
Other cities*	31	224
<b>Total</b>	<b>117</b>	<b>5,925</b>

Note:\* Astrakhan, Blagoveshchensk, Barnaul, Vladivostok, Vladimir, Ivanovo, Izhevsk, Irkutsk, Kirov, Krasnodar, Krasnoyarsk, Makhachkala, Novosibirsk, Omsk, Perm, Petrozavodsk, Samara, Saransk, Saratov, Tomsk, Tula, Tyumen, Cherkizovo (Moscow region), Elista, Yaroslavl

For the last 10 years the dynamics of the share of persons of Indian descent in the total contingent of foreign students of Russian higher schools is negative. This means that the growth rate of Indian students at the Russian higher school is far behind the average growth rate of students from other countries; especially former Soviet republics (see Table 10).

### 4.3. The Results of the Sociological Survey

To identify the main problems in the training of citizens of the Republic of India at the higher educational establishments of the Russian Federation a sociological survey of 306 Indian students was conducted in April-May 2015. The questioning was conducted at 19 universities with the largest contingents of Indian students located in 16 Russian cities: Smolensk, Tver, Kursk, Volgograd, Stavropol, Belgorod, Moscow, St. Petersburg, Voronezh, Tambov, Nizhny Novgorod, Ryazan, Rostov-on-Don, Petrozavodsk, Tomsk and Tula. In the course of the survey the reasons for obtaining higher education in Russia, satisfaction with the conditions of living and studying at

**Table 10.** Dynamics of numbers of Indian citizens enrolled intramural and extramural at the Soviet and Russian higher schools in 1960/1961-2014/2015 academic years and the change in their share in the total contingent of foreign students

Years of study	Total number of foreign students at higher schools of the USSR/RSFSR, thousands of persons	Number of Indian students at higher schools of the USSR, thousands of persons	Number of Indian students at higher schools of the RSFSR/RF, thousands of persons	The share of Indian citizens in the composition of the entire contingent of foreign students, %
1960/1961	13.5	0.1	0.1	0.7
1970/1971	26.2	0.5	0.4	1.5
1980/1981	88.3	0.9	0.7	0.8
1990/1991	126.5	1.6	1.0	0.8
1995/1996	66.9		2.9	4.2
2000/2001	72.4		4.2	5.8
2005/2006	113.9		4.5	4.0
2010/2011	128.3		5.1	4.0
2014/2015	282.9		5.9	2.1

Russian universities, as well as the quality of the education obtaining, etc. were revealed.

The average age of respondents was 22.5. In terms of gender distribution, 62.7% of them were men, 37.3% were women. According to self-assessments the absolute majority were from families with middle income (81.7%) or low income (9.2%). There were not many those (6.5%) who came to study to Russia from the families with high income.

Social origin of Indian boys and girls, who came to study in Russia, is not uniform. The persons from the families of intellectuals among the respondents amount to more than 45%, including those whose fathers 27.5% and mothers 15.0% were doctors. The tenth of them were from families of peasants and workers descent, 12.8% were from the families of employees. Almost every fifth of them had a father who was an entrepreneur, a businessman and 7.8% were the managers. Mothers of the majority of respondents (53.6%) were housewives who were not employed.

According to the replies received, more than half of the Indian students surveyed (63.4%) learned about the Russian higher school from those who had studied there before. The second most important source of information (mentioned by 34.1%) was the Internet (especially the web-sites of the relevant Russian universities) and the third was their parents and relatives (32.7%).

The decisive arguments (motives) for choosing this or that Russian university for the majority of the respondents were good reviews from those who had studied there before (32.0%), high quality of training in the chosen profession (24.2%), low cost of training (compared with universities in India, Europe, the USA).

Why did the Indian students who came to Russia not begin to study in the homeland? As it follows from the responses, the majority (60.4%) basically wanted to study abroad (trying to see the world, get new experiences, go away from parents), almost one in three indicated higher tuition fees at the Indian higher schools, every fifth had a recommendation from relatives to study in Russia, every seventh indicated higher quality of training in Russia than at the national higher schools. In addition, more than 10% indicated that they had come to study in Russia under the referral of the Ministry of Education of India, national higher school (in the framework of academic exchanges), national companies or organizations.

The main difficulties faced by Indian citizens in the

period of adaptation in the first days and months of their stay in Russia (and they were noted by 57.5% of respondents) are primarily a language barrier (42.5%) and climate (30.1%) and domestic problems, including unusual food, accommodation, etc. (26.8% overall). At the same time it is typical that only in a year the share of those who continued experiencing such difficulties decreased significantly: Only 15.0% of respondents continued complaining on the domestic problems, 11.1% - on the unusual (cold) climate, 5.8% - on poor knowledge of the Russian language, which made it difficult to study and made everyday communication difficult.

When asked what the most pleasant was in the Russian university, the respondents answered: "The organization and the quality of the learning process" (28.1%), "high level of professionalism of teachers" (23.5%), "friendly students, all helping each other, acquiring new friends" (17.6%). Among disadvantages of the learning process, which it was desirable to eliminate in their opinion, they noted the existence of a number of extra items and not enough hours in the core subjects and the constraints in retaking the exams (overall 15.0%). There were requests of wider use of English in the training process as well (12.4%).

The share of students who were fully satisfied with relations with the dean and the university administration amounted to 44.4%, the relationship with the teachers - 48.4%, the relationship (psychological climate) among students - 54.9%. Relatively few students were completely dissatisfied with these relations (from 3.9 to 9.8%).

More than 4/5 of respondents were partially or fully satisfied with the possibility of participation in scientific work carried out at higher school (13.1% were not satisfied). Similar assessment concerned the organization of educational and industrial practice as well.

The work of the university libraries was fully satisfactory for half of the respondents, partially satisfactory for about 40%, not satisfactory for 8.5%; the state of classrooms and laboratories, availability of the necessary equipment in the latter is assessed approximately in the same proportion.

Almost 2/3 of the respondents of Indian students (66.7%) live in the dorms, 30.7% rent an apartment or a room, 2.6% live with relatives or friends. Among persons living in dorms 17.6% and 26.1%, respectively, are fully or partially satisfied with the living conditions and the work of local public services, 15.0% and 34.0% are fully or partially satisfied with the work of the catering facilities

(canteens, cafes, buttries), 29.4% and 39.9% are fully or partially satisfied with medical service, 26.8% and 22.9% are fully or partially satisfied with sports facilities.

The majority of respondents (64.1%, mainly living in the dorms) noted that Russian universities helped them in meaningful leisure activities: First of all, it is the organization of various concerts (62.2%), evenings of leisure, dating, meetings with representatives of other countries, associations of fellow-countrymen (overall 27.6%), visits to museums, exhibitions, tours, including to other cities, were pointed out as well.

The key issue was the assessment of quality of professional training obtained at the Russian higher school. It was fully in line with expectations of the majority (54.2%) of respondents, 1/3 more (34.0%) stated that the quality of training corresponded partially and only one in ten (11.8%) indicated that training did not correspond to their expectations or they found it difficult to assess its quality.

Who finances the training of Indian students? Parents pay for 82.5% of respondents, 1% pay for their own study, an organization which sent 7.3% of them to study as well as their sponsor pay for their education, 3.3% received a study grant and 5.9% were trained for free, on the basis of intergovernmental agreement or interuniversity exchange.

The average cost of training in intramural form of study at Russian universities was RUR 153,100, or USD 3.1 thousand (based on the average exchange rate of USD 1 = RUR 50 during 2014/2015 academic year). The majority of respondents (65.7%) considered the amount of payment as quite acceptable (normal), 7% considered it even low, while the rest rated the payment as excessively high.

Household expenses of Indian students (food, accommodation, transportation, books and study supplies, leisure, etc. amounted to RUR 16.2 thousand per month or RUR 162 thousand per academic year (10 calendar months), which was equivalent to USD 3,240. At this 4.6% of respondents had a permanent job, 8.5% had a temporary job, 7.2% occasionally had a job (that job brought them an average of RUR 7.6 thousand per month), while 41.2% did not have any part-time job. The remaining respondents said that they did not have any part-time work and did not need it.

What are the future professional plans of the Indian students studying at Russian universities? According to

the replies received, almost half of them, after receiving a diploma of higher education wished to pursue further education (master's degree, internship, residency, graduate school, etc.), and 50.7% of them intended to do that in India, 33.3% - in Russia and the rest chose other countries (especially in the US, as well as Australia, Canada and Western Europe).

After the completion of their study 77.1% of the respondents planned to work in India, 8.5% - in Russia, 10.5% - in other countries (especially in the USA and Western Europe); another 8.5% did not decide on a place of the future work.

The Indian students evaluated the prospects of their employment with the Russian diploma at homeland as follows: Easy to get a job - 22.9%, it can be difficult - 44.3%, it will be difficult to find a job - 14.3%, had difficulty in answering - 18.6%.

The main reason why it would be difficult to get a job in India with the Russian diploma is the need to validate it and pass a special exam.

Total revenues, obtained by the Russian economy from intramural training of the Indian students, trainees, interns, residents and graduate students as well as students of preparatory departments in 2014/2015 amounted to RUR 1.85 billion or USD 34.0 million, of which 48.2% were the tuition fees and 51.8% were the everyday household expenses. In other words, one Indian student of intramural form of study brought on average USD 6,245 to the Russian economy in 2014/2015.

The Russian-Indian cooperation in the field of education is based on the intergovernmental agreement on cultural and scientific co-operation dated 28 January 1993, providing for the exchange of students, teachers and academic staff of higher schools. On the part of Russia the support of the Russian language study in India is performed (now it is studied by about one thousand school children at 14 schools and 2,650 students at more than 40 universities, including the Jawaharlal Nehru University of Delhi, the University of Dzhamiya Miliya Islamiya and at a number of regional universities (Calcutta, Shimla, Pune, Mumbai, Chennai, etc. and their number has increased somewhat in recent years<sup>19</sup>. In the Russian language courses at the Russian Center of Science and Culture (abbr. – RCSC) in 2015 the Russian language was studied totally by more than 1.3 thousand persons (including 605 persons in New Delhi, 150 persons – in Mumbai, 68 persons – in Calcutta, 270 – in Chennai). However, this

contingent has not increased for the last 3 years<sup>16</sup>. The Russian language teachers are sent to work in India on a contract basis, developing cooperation between the State Russian Language Institute named after A. S. Pushkin and Delhi university, the University named after J. Nehru, University of Kerala (Trivandrum city), Central Institute of Foreign Languages (Hyderabad). It is no coincidence that among the surveyed Indian students of Russian universities there were many of those who learned Russian at homeland, including 8.5% at schools, 28.8% in the language courses and 4.6% indicated that they knew the Russian language since childhood, i.e., came from mixed families (in which one of the parents, usually the mother, is an immigrant from the former Soviet Union and Russia). However, one of the most serious problems related to teaching Russian at schools and universities in India is the lack of modern educational literature on the Russian language. The books published back in the USSR are mainly used. There are also problems with regular retraining and advanced training of the Indian specialists in Russian philology in Russia.

The fairs of the Russian education system are regularly conducted in India. The recent one (17th) took place in May 2016. Chennai, Mumbai, Kolkata, Trivandrum, Madurai, Ahmedabad and New Delhi hosted the 17th Russian Educational Fair "Education in Russia - 2016"<sup>20</sup>. It was attended by 15 Russian higher educational institutions (mainly medical universities) as well as the Indian educational companies RusEducation India Pvt. Ltd. and Study Abroad Consultants, which for almost 20 years have helped Indian citizens enter Russian universities. In recent years the interuniversity cooperation has intensified. Thus, in June 2013 on the basis of the Kabardino-Balkarian State University in Nalchik the First Russian-Indian Summer School on High Performance Computing and their use in geophysical problems was held. In May 2015 at the Moscow State University named after M. V. Lomonosov a round table of rectors of the leading universities in Russia and India took place and a similar event was held in New Delhi with the participation of President of the Republic of India P. Mukherjee and Minister of Education and Science of Russia D.V. Livanov; nine bilateral partnership agreements were signed, as well as the declaration on the establishment of the Russian-Indian Association of Universities, which included 11 leading Indian institutes and 9 Russian universities. The first meeting of the association was held in February 2016 in Mumbai on the

basis of the local Indian Institute of Technology, which was the Indian coordinator of the Association. On the Russian part the co-organizer of the event was the Tomsk State University. One of the conclusions reached by the participants: It is first necessary to implement joint educational programs in which the undergraduate and post-graduate students could not only pass training in a number of courses at the partner university, but also to get their diplomas.

The National Federation of Indian Alumni Associations of Soviet and Russian Academic Institutions, established in 1986 and having 700 members and the Indian Association of Teachers of the Russian Language and Literature (founded in 1975 and having 220 members) operate in India<sup>21</sup>. The Indian doctors, who obtained their education in Russia, coordinate their activities. Thus, in November 2015, the Forum of Indian Medical Graduates in Russia and CIS countries was held in the Russian Center of Science and Culture in Chennai. The event was organized by the All India Foreign Medical Graduates Association (AIFMGA) in the framework of celebrating the Day of Foreign Medical Graduates.

In Russia Indian culture is very popular: To explore it, more than 100 thousand Russian tourists visit India annually (the number of Indian citizens who visited Russia amounted to 94 thousand persons in 2014)<sup>22</sup>. The Center of Indian Culture named after J. Nehru actively works in Moscow performing the educational functions as well (people can study the Hindi language in the language courses over there, train in Indian dances, classical singing, yoga, etc). The Indology centers operate at 7 universities in Russia and at 5 Institutes of the Russian Academy of Sciences. In most of them Hindi, Bengali and Sanskrit are studied. Russian school children learn Hindi as well at the secondary school No. 653 named after Rabindranath Tagore in St. Petersburg and at school No. 19 in Moscow (totally more than 500 persons), as well as in a number of centers of supplementary education and language courses.

At the same time, the number of citizens of the Russian Federation enrolled in universities of the Republic of India (about 6 thousand persons) is only 3% of the total contingent of Indian boys and girls studying abroad (182 thousand persons in 2014, more than half of whom are trained at the US colleges and universities<sup>23,24</sup>). There are even fewer Russian students, interns and post-graduate students in India: About 50 persons or 0.1% of all Russian

students, trainees and post-graduate students studying abroad (79 thousand persons in 2014/2015).

## 5. Conclusion

Limited nature of Russian educational services provided to the citizens of India today, mainly in the field of medicine, is quite an alarming symptom. Despite the individual approach to the training of specialists in Russia, which is appealing to the Indian students, the presence of joint Indo-Russian enterprises, which are potentially ready to hire graduates of Russian universities, the activation of inter-institutional relations, a number of factors prevent significant increase in the number of Indian citizens studying at Russian higher educational institutions. They include the language of study (it is easier for the Indian students knowing English to study in the US, Great Britain, Australia, Canada, etc.) and non-recognition of Russian diplomas, including of medical profile. According to some reports, the Medical Council of India, carrying out the expertise of the higher medical education diplomas obtained abroad (the diploma allows for carrying out private medical practice, which is sufficiently profitable in India) consists mainly of graduates of western medical schools who are not interested in strengthening competition on the part of the Russian medical school. This forces their owners to take quite complicated qualifying exams or complete their education in master's program of the Indian or Western universities to obtain internationally recognized diplomas.

It seems that the potential of Russian-Indian cooperation in education is far from being used in full. Concerted efforts are required in India to more effectively and widely distribute information on the possibility of obtaining higher education in Russia, especially as nowadays the ruble devaluation significantly reduced the cost of tuition and accommodation for foreign students, which can be one of the most attractive factors. Of course, it is necessary to expand the number of English-language programs, both of medical, engineering and other profiles at Russian universities. The extension of studying the Russian language as a foreign language by the Indian youth, especially at schools, as well as the provision of greater assistance in this area from Russia to the Indian schools is equally important. It seems to be useful to continue the practice of sociological surveys of Indian

students studying at Russian universities and publishing their results for discussion, as well as to perform continuous monitoring of partnerships of the Indian and Russian universities.

## 6. Acknowledgment

This study was carried out as a part of scientific program of the Center for Sociological Research, approved by the Ministry of Education and Science of Russia in 2016, state assignment No. 1.233.2016/NM.

## 7. References

- Galishcheva NV. Indo-Russian economic cooperation: The main problems and prospects. *Asia and Africa Today*. 2015; 5:10–4. <http://www.asiaafrica.ru/en/archive/2015/224-asia-and-africa-today-5-2015.html>
- Lunev SI. Russian-Indian relations: Problems and prospects. *External relations of the Caspian countries in conditions of the global crisis and interests of Russia*. Chufirin G. I. editor. Moscow: Institute of World Economy and International Relations; 2010; p. 117–30. <http://www.imemo.ru/files/File/ru/publ/2010/10021.pdf>
- The overview of trade and economic relations between Russia and India for 2014. *Integrated Foreign Economic Information Portal*. 2016. Available from: [http://www.ved.gov.ru/exportcountries/in/in\\_ru\\_relations/in\\_ru\\_trade/](http://www.ved.gov.ru/exportcountries/in/in_ru_relations/in_ru_trade/)
- Andreev F. Across three seas. *Russian Newspaper*. 2016. Special edition No.7048 (180). Available from: <https://rg.ru/2016/08/15/tovarooborot-indii-i-rossii-dostignet-30-mlrd-dollarov-k-2025-godu.html>
- Belov VA. Training of cadres for foreign countries at Soviet universities. Candidate Thesis in History. Moscow. 2000. <http://www.dissercat.com/content/podgotovka-kadrov-dlya-zarubezhnykh-stran-v-sovetskikh-vuzakh-vtoraya-polovina-60-kh-konets->
- Belov VA. Training of foreign citizens in Russia: Historical experience, problems, prospects. Moscow: People's Friendship University of Russia Press; 2003. ISBN 5-209-02265-x. <http://nauhkniga.ru/nk/index.php?action=book-Info&id=10338>
- Filippov VM. World forum of foreign graduates of Russian (Soviet) higher educational institutions. Moscow: Master-Press Publishing House; 2004. ISBN: 5-89317-200-0.
- Akimov YP, Asmaev KKh, Bogush AI, et al. Training of specialists for foreign countries in Russia: The state and development prospects. Moscow: Radio ISvyaz; 1999.
- Tkach GF, Filippov VM. Organizational and legal and practical mechanisms to ensure the academic mobility and expansion of the export of educational services. Moscow: PFUR Press; 2014. ISBN: 978-5-209-06139-7.
- Koropchenko AA, Markarian AA, Popkov VA. The systems

- of education, qualification levels in Asia, the Middle East and North Africa. Moscow: Universitetskaya Kniga; 2011. ISBN: 978-5-7962-0091-7.
11. Petrenko VN, Filippov VM. Educational reforms: Analytical overview. Moscow: Center for Comparative Educational Policy; 2003. p. 183–90. ISBN: 5-94010-223-9.
  12. Alexandrov AV. The history of Hindustan: On the experience of teaching the students of the “Foreign Regional Studies (India)” field. Sokolovskii A. Ya. Editor. Russia-India. 2013. Cooperation for peace and progress. Vladivostok: Far Eastern University Press, 2014. p. 12–4. ISBN: 978-5-906739-08-7.
  13. Sheregi FE, Konstantinovsky DL, Aref'ev AL. Interaction of Russian universities with international foundations and organizations. Moscow: CSP; 2006. ISBN: 5-89329-593-3.
  14. Dmitriev NM, Pavlikhin GP, Talonov AV, Fedorov IV. International activity of Russian higher schools: Problems and prospects. Moscow: MADI Press; 2008. ISBN: 978-5-91304-174-6.
  15. Aref'ev AL. Russian higher schools at the international market of educational services. Moscow: Social Forecasting Centre; 2007. p. 700. ISBN: 978-5-98201-015-5.
  16. Export of Russian educational services. Statistical Book. Issue 6. Moscow: Centre for Sociological Research; 2016. ISBN: 978-5-906001-41-2.
  17. Training of Foreign Citizens at higher education institutions of the Russian Federation. Statistical Book. Issue 13. Moscow: Centre for Sociological Research; 2016. ISBN: 978-5-906001-41-2.
  18. On measures to further improve the training and recruitment. The Central Committee of the CPSU. The Council of Ministers of the USSR. Decision 1962 May. N 441. Available from: [http://www.ussrdoc.com/ussrdoc\\_communizm/usr\\_5818.htm](http://www.ussrdoc.com/ussrdoc_communizm/usr_5818.htm)
  19. Gorshkov MK. The facets of Russian education. Moscow: Centre for Sociological Research; 2015. ISBN: 978-5-906001-38-2.
  20. Rudakova N. Bright Russian opportunities for Indian higher education aspirants. Russia and India Report. May 17, 2016. Available from: [http://in.rbth.com/society/2016/05/17/bright-russian-opportunities-for-indian-higher-education-aspirants\\_593777](http://in.rbth.com/society/2016/05/17/bright-russian-opportunities-for-indian-higher-education-aspirants_593777)
  21. The International Association of Teachers of the Russian Language and Literature: Reference and information materials. Scientific Editor L. A. Verbitskaya. Granada: MAPRYAL; 2015. ISBN: 978-5-990636-6-4.
  22. Russian statistical annual book. Moscow: Rosstat; 2015. ISBN: 978-5-89476-412-2.
  23. Global flow of tertiary level students. UNESCO Institute for Statistics. 2016. Available from: <http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx>
  24. Open Doors. Report on International Educational Exchange. New York: Institute of International Education; 2015. 2016. Available from: <http://www.iie.org/research-and-publications/open-doors/data#.Waf2gPmL-TIU>