REPORT OF

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IN RELATION TO THE PROCEEDINGS IN THE CASE CONCERNING APPLICATION OF THE INTERNATIONAL CONVENTION FOR THE SUPPRESSION OF THE FINANCING OF TERRORISM AND OF THE INTERNATIONAL CONVENTION ON THE ELIMINATION OF ALL FORMS OF RACIAL DISCRIMINATION (*UKRAINE v. RUSSIAN FEDERATION*)

1. This Report has been jointly prepared by the following specialists:

(a) Alexey Borisovich Artyushenko. In 2002, he graduated from the Moscow Academy of Economics and Law with a degree in Civil Law and was awarded the qualification of a lawyer. In 2011, he defended his thesis entitled "Interaction between internal affairs agencies of the Russian Federation and law enforcement agencies of the CIS member states in combating drug trafficking" for the degree of candidate of legal sciences (PhD) on a speciality 12.00.09, "Criminal Procedure, Forensic Science; Investigative Activities". Since 1993, he has been an official of the Ministry of Internal Affairs of the Russian Federation. He has 25 years of experience working at the operational subdivisions of the Ministry of Internal Affairs of the Russian Federation. Currently, he is serving as a Deputy Head, Chief of Division No. 1 of the Research Centre No. 2 (for the study of issues of intelligence counteraction to conventional crimes, extremism and terrorism) of the All-Russian Research Institute of the Ministry of Internal Affairs of the Russian Federation. He is the author and co-author of more than 67 publications on countering the drug trafficking, extremism and conventional crimes (Section C);

(b) Olga Anatolyevna Zolotareva. In 2002, she graduated from the Moscow State University of Economics, Statistics and Informatics (MSUESI) majoring in Statistics and was awarded the qualification of economist. In 2005, she defended her thesis entitled "Statistical Study of the Status of Women in the Labour Market in the Russian Federation" for the degree of candidate of economic sciences (PhD), on speciality 08.00.12, "Accounting. Statistics". She is currently the Director of the Centre for Demography and Statistics at the Institute for Economic Strategies; a lead researcher at the Research Institute for Social and Economic Statistics Problems of the Federal State Statistics Service (Statistics Research Institute of Rosstat) and an associate professor at the Financial Management Department of Lomonosov Moscow State University. She has participated in more than 25 research and development projects, including: "Development of a set of measures to integrate the system of specialised tourism education of the Republic of Crimea into the general system of tourism education of the Russian Federation, including on the basis of statistical research" (Rostourism, 2014); "Improving the methodology and organisation of the system of sociodemographic analysis to accumulate official statistical information on the situation of the disabled, taking into account the obligations of the Russian

Federation in connection with the ratification of the Convention on the Rights of Persons with Disabilities" (Rosstat, 2015); "Development of a methodology for the statistical assessment of demographic expansion and the transformation of socio-demographic structures under its influence" (Russian Humanitarian Research Foundation, 2016); "Employment of graduates of higher and secondary professional education institutions with disabilities: increasing effective interaction between employers, employment services, training organisations and job seekers; the reasons for failure to be employed" (Autonomous Non-profit Organisation "Governance and Development Council", 2018); "Statistical study of gender segregation in the employment of graduates of professional education organisations with disabilities in Moscow" (Plekhanov Russian University of Economics, 2019); "Analysis of international approaches to the methodology for calculating 'ratings of ratings'" (Rosstat, 2021), and other. She is the author and co-author of more than 200 publications, including 17 academic publications and 13 monographs. (Sections A and B);

(c) Viktor Viktorovich Merkuryev. He graduated from Nizhny Novgorod Higher School of the Ministry of Internal Affairs of the Russian Federation in 1993 (was awarded the qualification of a lawyer). In 1998, he defended his thesis entitled "Justifiable Defence: Criminal Law and Criminological Aspects" for the candidate's degree (PhD). In 2007, he defended his doctoral thesis entitled "Theoretical and methodological problems of criminal law enforcement of the human right to civil self-defence". Since 2018, he has been the head of the Department for Scientific Support of Prosecutorial Oversight and Strengthening the Rule of Law in the Sphere of Federal Security, Interethnic Relations and Countering Extremism at the Research Institute of University of the Prosecutor's Office of the Russian Federation. He has published over 250 scientific works, including 10 monographs, 5 course books, 10 textbooks, and 4 commentaries to the Criminal Code and the Penal Code of the Russian Federation (some of them have been co-authored) (Section C).

2. We are aware that Ukraine is accusing Russia in the International Court of Justice of a systematic campaign of racial discrimination against Ukrainians and Crimean Tatars.[1] However, the Memorial of Ukraine available at the Court's website, contains no statistical

[1] *Application of the International Convention for the Suppression of the Financing of Terrorism and of the International Convention on the Elimination of All Forms of Racial Discrimination (Ukraine v. Russian Federation)*, Memorial of Ukraine, ¶¶27, 341, 388, 389, 392, 455, 477, 485, 587, and 593.

data in support of this allegation. Therefore, we have decided to review statistical data to see, whether Ukraine's allegations have any merit to them.

3. In this Report we will, first, analyse Ukraine's attempt to substantiate its allegations of "systematic campaign of racial discrimination"[2] with separate and unconnected incidents and, second, review statistical data on education and law enforcement with respect to Crimean Tatars and Ukrainians available to us to make a conclusion whether the statistical data does or does not show a discrimination campaign.

A. ON THE POSSIBILITY OF PROVING A SYSTEMATIC DISPARATE IMPACT ON AN ETHNIC GROUP THROUGH AN ANALYSIS OF SEPARATE AND UNCONNECTED INCIDENTS

4. It appears that Ukraine believes that a systematic campaign of discrimination against a particular social group can be proved without the use of statistics, but only by referring to separate and unconnected cases which allegedly showcase disparate treatment of a particular individual belonging to this social group.

5. We disagree with this point for the following reasons.

6. ***First***, the notion of a "state-sanctioned discrimination campaign" in the theory and practice of sociology and other social sciences refers to a set of activities which are:

   (a) planned (in the case of a state campaign, planned by the state);

   (b) complex, systemic and linked by a common concept and idea;

   (c) interrelated;

   (d) aimed at achieving a specific social or political goal.[3]

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[2] *Ibid.*, ¶¶341, 587, 593.

[3] *See* definition of "campaign": Ozhegov's Dictionary Online, *Definition of word "Campaign"*, available at: https://slovarozhegova ru/word.php?wordid=10560 ("A set of actions to achieve the next major socio-political or economic objective."); Oxford Learner's Dictionary, *Definition of campaign noun*, available at: https://www.oxfordlearnersdictionaries.com/definition/english/campaign_1 ("a series of planned activities that are intended to achieve a particular social, commercial or political aim."); Cambridge Dictionary, *Meaning of campaign in English*, available at: https://dictionary.cambridge.org/dictionary/english/campaign ("a planned group of especially political, business, or military activities that are intended to achieve a particular aim"); Merriam-Webster Dictionary, *Campaign*, available at: https://www merriam-webster.com/dictionary/campaign ("a connected series of operations designed to bring about a particular result").

7. Ukraine's argument adds the definition of "systematic" – according to dictionaries, occurring "according to an agreed set of methods or organised plan",[4] "strictly planned"[5] – to the notion of "campaign".

8. By pointing to instances of discrimination against particular individuals one cannot prove either of these criteria, since, properly speaking, each of the campaign criteria involves examining not a specific instance of impact on the campaign target, but rather the planned carrying out of certain actions, each of which is taken according to the same algorithm and with the same purpose to a wide range of targets. Mere disparity of conditions of certain ethnic groups would not necessarily amount to discrimination, much less a "systematic campaign of discrimination".

9. ***Second***, from a scientific point of view, the study of objectively existing relationships between attributes and phenomena is based on the law of large numbers, that is the general principle according to which quantitative patterns inherent in mass phenomena appear clearly only when the number of observations is sufficiently large.[6] Isolated cases can be characterised by random deviations (affected by certain factors, including latent ones), which are levelled out when large amounts of information are assessed. As a result of random deviations being mutually cancelled out, generalising indicators calculated for values of the same kind become typical and reflect the action of constant and significant factors at the given place and time. Mass phenomena, or sets of data, are the subject matter of statistics.[7] In view of this, in order to prove the existence of disparity, not to mention a "systematic campaign of racial/ethnic discrimination", one should rely not on isolated / single facts which are not connected and not comparable with each other, but on large datasets. A study conducted on the basis of "small numbers", *i.e.* based on an incomplete data sample, will not lead to an objective result.[8] Ukraine's position seems to lack this "big data analysis". This does seem an example of "cherry-picking", and a very selective

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[4] Cambridge Dictionary, *Meaning of systematic in English*, available at: https://dictionary.cambridge.org/dictionary/english/systematic.

[5] Historical Dictionary of Gallicisms of the Russian Language, *Definition of systematic*, available at: https://gallicismes.academic.ru/35761/систематический.

[6] K. Sedor, THE LAW OF LARGE NUMBERS AND ITS APPLICATIONS (Lakehead University Thunder Bay, 2015), available at: https://www.lakeheadu.ca/sites/default/files/uploads/77/images/Sedor%20Kelly.pdf.

[7] M. Kendall, THE ADVANCED THEORY OF STATISTICS (Charles Griffin & Company Limited, 1945), ¶¶1.1-1.4.

[8] J. Larson-Hall, A GUIDE TO DOING STATISTICS IN SECOND LANGUAGE RESEARCH USING SPSS (Taylor-Francis, 2010), pp. 125-126, ¶4.5.1.

presentation of information to the Court, which is not trustworthy or representative from a sociological or statistical perspective.[9]

10. ***Third***, the statistical provability of a racial or ethnic discrimination "campaign" must be based on actual statistics and be comparative and contrastive in nature (in particular, over time), as well as scientifically and methodologically sound.

11. On the basis of the aforementioned, the studies that focus on ethnic discrimination have traditionally relied on bulk data, mainly statistics. Separate and unconnected incidents can in no way underpin a claim of disparity in treatment between different groups, much less of a systematic campaign of discrimination against a particular group; they may represent anomalous observations that do not characterise the general point.

B. THE STATISTICS ON STATE ACTIVITIES IN THE SPHERE OF EDUCATION SHOWS THE ABSENCE OF DISPARATE IMPACT ON UKRAINIANS AND CRIMEAN TATARS AND OF A DISCRIMINATORY CAMPAIGN AGAINST THEM

1. Methodological basis of the research[10]

12. In evaluating the alleged disparate impact on Ukrainians and Crimean Tatars in the sphere of education, as a result of an alleged "systematic campaign of racial / ethnic discrimination", we consider the results of the analysis of the Population Censuses' data as the only reliable source of information on the size, ethnic composition, level of education of the population[11] of the Russian Federation and its constituent entities.

13. According to the results of the 2014 Population Census presented by the Federal State Statistics Service (Rosstat) 2,293.7 thousand people were counted in the Crimean Federal District (as of 14 October 2014), of which 8.9 thousand people were temporarily staying in

[9] R. Tractenberg, ETHICAL PRACTICE OF STATISTICS AND DATA SCIENCE: ETHICAL PRACTICE OF STATISTICS AND DATA SCIENCE (Ethics International Press Limited, 2022), p. 50.

[10] *See* for additional information on methodology S. Aivazyan, V. Mkhitaryan, APPLIED STATISTICS AND FUNDAMENTALS OF ECONOMETRICS. TEXTBOOK FOR UNIVERSITIES (Yunity, Moscow, 1998); R. Shmoylova (ed.), THEORY OF STATISTICS: TEXTBOOK FOR STUDENTS OF UNIVERSITIES' ECONOMIC SPECIALITIES (Finance and Statistics, Moscow, 2007); O. Kuchmaeva, O. Zolotareva, SOCIAL STATISTICS: A TEXTBOOK (Eurasian Open Institute, Moscow, 2012).

[11] Federal State Statistics Service, 2020 All-Russian Population Census, available at: https://rosstat.gov.ru/folder/56580?print=1#.

the Crimean Federal District.[12] The Federal State Statistics Service also produced the 2020 Population Census (as of 1 October 2021).[13]

14. Population censuses in the Russian Federation are conducted in accordance with international standards, in particular the Conference of European Statisticians Recommendations for the 2020 Censuses of Population and Housing.[14]

15. The methodology for identifying disparate impact that the alleged "systematic campaign of racial / ethnic discrimination" has on Ukrainians and Crimean Tatars in the sphere of education on the basis of Population Censuses' data consists of an analysis of statistical cross-tables (contingency tables), variation indicators, hypothesis testing using the chi-square statistic[15] – χ^2, assessment of the closeness of the relationship by Pearson and Chuprov contingency ratios, as well as by Spearman rank correlation coefficient. The assessment of differences in structures by ethnicity is based on the calculation and comparison of specific weights and a generalised / integral indicator of structural shifts / differences, *i.e.* the V. Ryabtsev Index.[16]

16. The chi-square criterion is widely recognised and used as a standard statistical method of analysing data not only at the national level (*e.g.*, in the UK[17] and Canada[18]) but also by international organisations, such as the UN,[19] in a multitude of areas.

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[12] A. Surinov, M. Dianov (eds.), THE RESULTS OF THE POPULATION CENSUS IN THE CRIMEAN FEDERAL DISTRICT. FEDERAL STATE STATISTICS SERVICE (Statistical Institute of Russia, Moscow, 2015), p. 7, available at: https://rosstat.gov.ru/storage/mediabank/KRUM_2015.pdf.

[13] Federal State Statistics Service, 2020 All-Russian Population Census, available at: https://rosstat.gov.ru/folder/56580?print=1#.

[14] UNECE, Conference of European Statisticians Recommendations for the 2020 Censuses of Population and Housing, 2015.

[15] Investopedia, *Chi-Square (χ2) Statistic: What It Is, Examples, How and When to Use the Test* (23 October 2022), available at: https://www.investopedia.com/terms/c/chi-square-statistic.asp.

[16] *See* for the confirmation of the wide application of the Ryabtsev Index in the analysis of statistical data, *e.g*, O. Pizhuk, L. Lazebnyk *et al*., Digitalization's Effect on the Sectoral Structure Change in the Economy: a Comparative Analysis of Ukraine and Selected Countries, *Comparative Economic Research. Central and Eastern Europe*, Vol. 25, 2022, p. 25; K. Brocková, M. Grešš *et al*., Qualitative Changes in China's Foreign Trade in the Era of "New Normal", *Ekonomický časopis*, Vol. 68, 2020, p. 1137; T. Gutium, T. Colesnicova, Indices of structural change – a specific tool for estimating the dynamics of population living standards, *Ştiinţă, educaţie, cultură*, Vol. 1, 2021, p. 37.

[17] Office for National Statistics, London, Guidelines for measuring statistical quality, 2007, p. 67, ¶B7.20, available at: https://unstats.un.org/unsd/dnss/docs-nqaf/UK-Guidelines_Subject.pdf; S. Abeyasekera, *Multivariate methods for index construction* in, HOUSEHOLD SAMPLE SURVEYS IN DEVELOPING AND TRANSITION COUNTRIES: DESIGN, IMPLEMENTATION AND ANALYSIS (United Nations, 2005), p. 371, ¶12, available at: https://unstats.un.org/unsd/hhsurveys/pdf/Chapter_18.pdf.

[18] Statistics Canada, SURVEY METHODS AND PRACTICES (Minister of Industry, 2010), ¶¶11.4.1, 11.5.1.1-11.5.2, available at: https://www150.statcan.gc.ca/n1/en/pub/12-587-x/12-587-x2003001-eng.pdf?st=shGY6dcN.

17. A more detailed description of the method for statistical analysis in the sphere of education is contained in Exhibit A to the present Report.

2. Data analysis

18. According to the 2020 All-Russian Population Census:

(a) the population of the Russian Federation comprises 147,182,123 people;[20]

(b) the population of the Republic of Crimea is 1,934,630 people (1.3 % of the population of the Russian Federation);[21]

(c) the number of Russians residing on the territory of the Republic of Crimea is 1,296,442 people, Ukrainians – 145,852 people, and Crimean Tatars – 250,651 people.[22]

19. When answering questions about language proficiency, the respondents could indicate up to four languages. A total of 95 % of the population of the Republic of Crimea spoke Russian in 2021.

Language proficiency, in persons

Language	2014	2021
Russian	1,836,651	1,836,009
Ukrainian	411,445	176,229
Crimean Tatar	90,869	147,063
English	112,871	68,456
Tatar	50,680	38,402

20. Of the respondents who are proficient in Russian:

(a) 1,428,585 people speak only one language, Russian;

(b) 354,980 people speak two languages (including Russian);

(c) 43,872 people speak three languages (including Russian).

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[19] World Health Organization, *Quality assurance in surveys: Standards, guidelines and procedures* in HOUSEHOLD SURVEYS IN DEVELOPING AND TRANSITION COUNTRIES: DESIGN, IMPLEMENTATION AND ANALYSIS (United Nations, 2005), p. 24, ¶58, available at: https://unstats.un.org/unsd/hhsurveys/FinalPublication/ch10fin3.pdf.

[20] Federal State Statistics Service, Results of the 2020 All-Russian Population Census. Volume 5. National composition and language proficiency. Table 1. National composition of the population, available at: https://rosstat.gov.ru/storage/mediabank/Tom5_tab1_VPN-2020.xlsx.

[21] *Ibid.*

[22] *Ibid.*

21. According to the 2021 census, out of 145,852 Ukrainians residing in the Republic of Crimea 99.3 % speak Russian and 99,7 % of them use it in their daily lives.

Population of the most numerous ethnicities

in terms of Russian language proficiency

Most numerous ethnicities	The number of persons of the respective ethnicity		of them		The share of Russian-speakers as a proportion in the number of people of the respective ethnicity, %	
	2014	2021	those who indicated proficiency in the Russian language		2014	2021
			2,014	2,021		
Armenians	11,030	7,717	10,921	7,449	99.01	96.53
Belorussians	21,694	8,672	21,645	8,635	99.77	99.57
Crimean Tatars	232,340	250,651	228,756	242,073	98.46	96.58
Tatars	44,996	28,363	44,458	27,500	98.80	96.96
Ukrainians	344,515	145,852	342,811	144,823	99.51	99.29

22. The identification of a significant disparity component based on race (ethnicity) according to the Census data is possible on the basis of information on the six predominant ethnicities: Armenians, Belarusians, Crimean Tatars, Russians, Tatars and Ukrainians.

23. When assessing racial / ethnic disparity in the sphere of education, statistics on general education (including levels: pre-school education; primary general education; basic general education; secondary general education) and professional education (including levels: secondary professional education; higher professional education (bachelor, specialist, master); higher education, *i.e.* training of personnel of higher qualifications) are to be considered.

24. The methodology for identifying disparity in this Report consists of the analysis of statistical cross-tables (contingency tables), variation indicators, hypothesis testing using the chi-square statistic – χ^2, assessment of the closeness of the relationship by Pearson and Chuprov contingency ratios, as well as by Spearman rank correlation coefficient. The assessment of differences in structures by ethnicity is based on the calculation and comparison of specific weights and a generalised / integral indicator of structural shifts / differences, *i.e.* the V. Ryabtsev Index.

25. According to the 2020 Population Census, out of the Ukrainians aged 6 years and older, who stated their level of education, 24.29 % had higher professional education; 36.05 % had secondary professional education; 36.75 % had general education; 0.51 % had no education; and 0.04 % were illiterate. Approximately the same proportions apply to the

number of Russians aged 6 years and older, who stated their level of education: 22.79 % had higher professional education; 33.91 % had secondary professional education; 39.07 % had general education; 1.37 % had no education; and 0.06 % were illiterate.

Population of most numerous ethnicities by level of education

	Size of population of the respective ethnicity	Those who stated their level of education	including														
			Those who have professional education									Those who have general education				No education	Of these, illiterate
			Top qualification personnel	Higher education	including by level of education			Undergraduate degree (incomplete higher education)	Professional secondary education	including		Secondary education	Basic education	Primary education	Preschool education		
					Master's degree	Specialist	Bachelor's degree			Middle-level specialist	Skilled worker, employee						
Russians	**1,223,018**	**1,115,722**	**9,809**	**254,308**	**27,331**	**168,059**	**58,918**	**22,019**	**378,395**	**255,021**	**123,374**	**226,650**	**73,250**	**82,990**	**53,067**	**15,234**	**634**
% of those who stated their level of education	-	-	0.88	22.79	2.45	15.06	5.28	1.97	33.91	22.86	11.06	20.31	6.57	7.44	4.76	1.37	0.06
Crimean Tatars	**227,716**	**215,241**	**1,039**	**34,775**	**3,761**	**22,029**	**8,985**	**2,600**	**63,755**	**42,450**	**21,305**	**55,901**	**16,049**	**21,066**	**15,843**	**4,213**	**136**
% of those who stated their level of education	-	-	0.48	16.16	1.75	10.23	4.17	1.21	29.62	19.72	9.90	25.97	7.46	9.79	7.36	2.00	0.06
Ukrainians	**143,611**	**139,769**	**1,356**	**33,952**	**4,170**	**24,196**	**5,586**	**2,008**	**50,381**	**33,270**	**17,111**	**31,597**	**10,373**	**6,861**	**2,532**	**709**	**53**
% of those who stated their level of education	-	-	0.97	24.29	2.98	17.31	4.00	1.44	36.05	23.80	12.24	22.61	7.42	4.91	1.81	0.51	0.04
Tatars	**26,254**	**24,637**	**156**	**3,326**	**295**	**2,020**	**1,011**	**354**	**7,310**	**4,826**	**2,484**	**7,129**	**2,396**	**2,136**	**1,444**	**386**	**9**
% of those who stated their level of education:	-	-	0.63	13.50	1.20	8 20	4.10	1.44	29.67	19.59	10.08	28.94	9.73	8.67	5.86	1.57	0.04
Belarusians	**8,578**	**8,377**	**93**	**2,137**	**224**	**1,584**	**329**	**124**	**3,153**	**2,068**	**1,085**	**1,825**	**598**	**337**	**79**	**31**	**-**
% of those who stated their level of education	-	-	1.11	25.51	2.67	18.91	3.93	1.48	37.64	24.69	12.95	21.79	7.14	4.02	0.94	0.37	-
Armenians	**7,225**	**6,719**	**77**	**1,883**	**253**	**1,148**	**482**	**180**	**1,701**	**1,135**	**566**	**1,599**	**415**	**416**	**340**	**108**	**6**
% of those who stated their level of education	-	-	1.15	28.03	3.77	17.09	7.17	2.68	25.32	16.89	8.42	23.80	6.18	6.19	5.06	1.61	0.09

26. During the first stage of the methodology testing, disparity is measured statistically by testing the hypothesis about the existence of a relationship between ethnicity and the education received.

27. The results of calculating statistics of the distribution of the proportions of those who have general education in the number of people of the respective ethnicity aged 6 years and older who stated their education is as follows: the minimum proportion, which is 33.89 %, is typical of the "Belarusian" group; the maximum proportion, which is 53.19 %, is typical of the "Tatar" group; the variation range is 19.30 percentage points (p.p.); the coefficient of variation was 18.25 % (less than 33 % is the threshold value), which shows homogeneity in the distribution of proportions by ethnicities.

28. An evaluation of cross-table data on general education and calculation of statistics on variation proves that structural distributions are not dependent on ethnicity.

Table of contingency of answers about having general education and the ethnicity of respondents (according to the 2020 Population Census)

Most numerous ethnicities	Number of people of the respective ethnicity aged 6 and over who stated they had general education (% of those who specified their education)	Of these, the number of people who have the following general education level				Share of those who have a specific level of general education in the number of people of the respective ethnicity who stated they had general education, %			
		Secondary education	Basic education	Primary education	Preschool education	Secondary education	Basic education	Primary education	Preschool education
Russians	435,957 (39.07 %)	226,650	73,250	82,990	53,067	51.99	16.80	19.04	12.17
Crimean Tatars	108,859 (50.58 %)	55,901	16,049	21,066	15,843	51.35	14.74	19.35	14.55
Ukrainians	51,363 (36.75 %)	31,597	10,373	6,861	2,532	61.52	20.20	13.36	4.93
Tatars	13,105 (53.19 %)	7,129	2,396	2,136	1,444	54.40	18.28	16.30	11.02
Belarusians	2,839 (33.89 %)	1,825	598	337	79	64.28	21.06	11.87	2.78
Armenians	2,770 (41.23 %)	1,599	415	416	340	57.73	14.98	15.02	12.27

29. The absence of differences in the structures by level of general education was also confirmed by the calculation of the Ryabtsev Index, the value of which was 0.1095 when the structures in relation to Russians and Ukrainians were compared (according to the qualitative rating scale, the value of the index is in the range from 0.071 to 0.150, which shows a low level of structure difference); 0.0274, when the structures in relation to Russians and Crimean Tatars were compared (according to the qualitative rating scale, the value of the index is in the range from 0.000 to 0.030, which shows the identity of the structures). The Ryabtsev Index varies from 0 to 1: 0 means no structural

changes/differences; 1 means maximum possible structural changes/differences in the aggregate.

30. The chi-square test (χ^2) confirmed that there was no link between ethnicity and the level of general education received: the value of $\chi^2_{estim.}$ is equal to 18.272 < χ^2_{table} which had a value of 24.994, with 5 % significance level and with 15 degrees of freedom. The calculations of Pearson's and Chuprov's contingency ratios also prove that there is no correlation between ethnicity and the level of general education received, as they were equal to 0.173 and 0.083, respectively (the values suggesting the existence of a relationship between indicators should be in the range from 0.3 to 1; the closer to 1, the stronger/more significant is the relationship). Consequently, **ethnic origin does not affect the possibility of receiving general education of different levels** ***(one can say that no disparity and certainly no racial / ethnic discrimination as an ongoing campaign in the Republic of Crimea has been detected***).

31. The results of calculating statistics of the distribution of the proportions of those who have higher professional education in the number of people of the respective ethnicity aged 6 years and older who stated their education is as follows: the minimum proportion, which is 13.50 %, is typical of the "Tatar" group; the maximum proportion, which is 28.03 %, is typical of the "Armenian" group; the variation range is 14.53 p.p.; the coefficient of variation was 26.09 % (less than 33 % is the threshold value), which shows homogeneity in the distribution of the proportions by ethnicities.

32. An evaluation of cross-table data on higher professional education and calculation of statistics on variation also proves that structural distributions are not dependent on ethnicity.

Table of contingency of answers about higher professional education and ethnicity of respondents (according to the 2020 Population Census)

Most numerous ethnic groups	Number of people of the respective ethnicity aged 6 and over who stated their higher professional education (% of those who specified their education)	Of these, the number of people who have the following higher professional education level:			Share of those who have a specific level of higher professional education in the number of people of the respective ethnicity who stated they had higher professional education, %		
		Master's degree	Specialist	Bachelor's degree	Master's degree	Specialist	Bachelor's degree
Russians	254,308 (22.79 %)	27,331	168,059	58,918	10.75	66.08	23.17
Crimean Tatars	34,775 (16.16 %)	3,761	22,029	8,985	10.82	63.35	25.84
Ukrainians	33,952 (24.29 %)	4,170	24,196	5,586	12.28	71.27	16.45

Most numerous ethnic groups	Number of people of the respective ethnicity aged 6 and over who stated their higher professional education (% of those who specified their education)	Of these, the number of people who have the following higher professional education level:			Share of those who have a specific level of higher professional education in the number of people of the respective ethnicity who stated they had higher professional education, %		
		Master's degree	Specialist	Bachelor's degree	Master's degree	Specialist	Bachelor's degree
Tatars	3,326 (13.50 %)	295	2,020	1,011	8.87	60.73	30.40
Belarusians	2,137 (25.51 %)	224	1,584	329	10.48	74.12	15.40
Armenians	1,883 (28.03 %)	253	1,148	482	13.44	60.97	25.60

33. The absence of differences in the structures by levels of higher professional education was also confirmed by the calculation of the Ryabtsev Index, the value of which was 0.0595, when the structures in relation to Russians and Ukrainians were compared (according to the qualitative rating scale, the value of the index is in the range from 0.031 to 0.070, which shows a quite low level of structure difference); and 0.0369, when the structures in relation to Russians and Crimean Tatars were compared (according to the qualitative rating scale, the value of the index is in the range from 0.031 to 0.070, which shows a quite low level of structure difference).

34. The chi-square test (χ^2) confirmed that there was no link between ethnicity and the level of higher professional education received: the value of $\chi^2_{estim.}$ is equal to 10.899 < χ^2_{table} which had a value of 18.307, with 5% significance level and with 10 degrees of freedom. Consequently, **the possibility of receiving higher professional education of its different levels does not depend on ethnic origin.**

35. During the second stage of methodology testing a comparative dynamic analysis is carried out using data from the 2014 Population Census in the Crimean Federal District and the 2020 Population Census, which allows to make a more comprehensive characterisation of changes in receiving education by ethnic origin.

36. In 2014, 26.89 % of Russians and 23.94 % of Ukrainians who stated their level of education had higher professional education (Figure 1). The highest percentage of those who received higher professional education is among the Armenians – 32.78 % of those who stated their level of education. By 2021, this indicator has decreased for Russians by 4.1 p.p. (to 22.79 %), while for Ukrainians, on the contrary, it increased by 0.35 p.p. (to 24.29 %). The largest increase in the indicator over the inter-census period was observed among Belarusians (by 4.37 p.p.: from 21.14 % in 2014 to 25.51 % in 2021); while the largest decrease was among Armenians (by 4.75 p.p.: to 28.03 % in 2021, which had no

effect on the leadership among Armenians in the percentage of those who received higher professional education in the six ethnicities under consideration who stated their level of education).

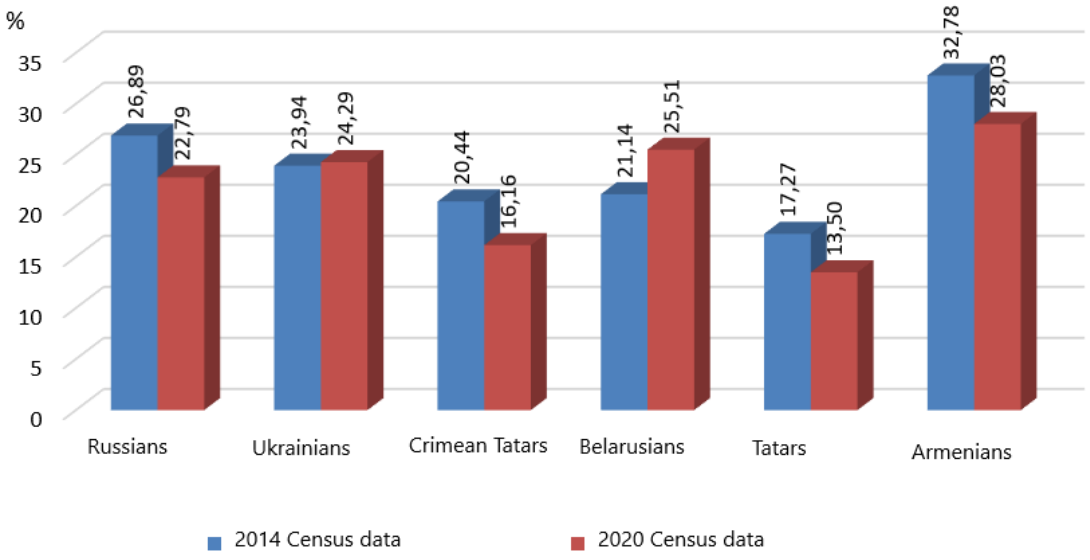

Figure 1 – Percentage of people of the respective ethnicity aged 6 and older who have completed higher professional education and stated they have education (according to census data)

37. The calculated Spearman rank correlation coefficient for the proportions of those having higher professional education in the number of people of the respective ethnicity aged 6 and older, who stated their education, is equal to 0.771, which indicates a high consistency in the responses about receiving higher professional education in 2014 and 2021. Consequently, **since the accession of the Republic of Crimea until present, the attitude of the residents of the Republic of Crimea (by ethnicity) towards higher professional education has not changed.**

38. The comparative dynamic analysis of the structure of Russians and Ukrainians with higher professional education by age showed the following results:

    (a) for both Russians and Ukrainians, the maximum proportion of people with higher professional education in the population of the respective ethnicity and age, is, according to the 2014 Census, 43.07 % and 46.93 %, respectively, and such people are aged 25 to 29 years. According to the 2020 Census, the share of such people who are aged 30 to 34 years is 36.13 % and 46.53 %, respectively (by ethnicity) (*see* table below);

Distribution of Russian and Ukrainian population having higher professional education by age group (according to census data)

Population age groups, years	Data from the 2014 Census							Data from the 2020 Census							Changes in shares over time (for the period from 2014 to 2021), p.p.	
	Size of population of the respective ethnicity, number of people		Including those of the respective ethnicity who have higher professional education		Share of those who have higher professional education in the population of the respective ethnicity and age, %		Difference in shares among ethnicities, p.p.	Size of population of the respective ethnicity, number of people		Including those of the respective ethnicity who have higher professional education		Share of p those who have higher professional education in the population of the respective ethnicity and age, %		Difference in shares, p.p.		
	Russians	**Ukrainians**	**Russians**	**Ukrainians**	**Russians**	**Ukrainians**		**Russians**	**Ukrainians**	**Russians**	**Ukrainians**	**Russians**	**Ukrainians**		**Russians**	**Ukrainians**
6 - 9	no data available	no data available	no data available	no data available	-	-	-	63,476	2,732	no data available	no data available	-	-	-	-	-
10 - 14	no data available	no data available	no data available	no data available	-	-	-	77,416	4,131	no data available	no data available	-	-	-	-	-
15 - 17	31,529	4,815	no data available	no data available	-	-	-	38,902	2,122	no data available	no data available	-	-	-	-	-
18 - 19	21,568	3,986	no data available	no data available	-	-	-	22,286	1,304	no data available	no data available	-	-	-	-	-
20 - 24	70,486	13,074	22,100	4,526	31.35	34.62	-3.27	54,036	3,417	10,868	1,004	20.11	29.38	-9.27	-11.24	-5.24
25 - 29	98,696	18,165	42,508	8,524	43.07	46.93	-3.86	63,252	4,653	21,908	2,146	34.64	46.12	-11.48	-8.43	-0.81
30 - 34	97,776	18,785	38,470	7,770	39.35	41.36	-2.01	100,347	7,348	36,257	3,419	36.13	46.53	-10.40	-3.22	5.17
35 - 39	88,008	19,175	28,941	6,475	32.88	33.77	-0.89	112,403	9,052	38,518	3,848	34.27	42.51	-8.24	1.39	8.74
40 - 44	79,467	20,470	21,195	5,340	26.67	26.09	0.58	102,617	9,475	30,302	3,503	29.53	36.97	-7.44	2.86	10.88
45 - 49	70,354	21,496	17,116	4,989	24.33	23.21	1.12	92,173	11,144	23,210	3,411	25.18	30.61	-5.43	0.85	7.40
50 - 54	82,563	26,267	19,480	5,861	23.59	22.31	1.28	82,333	11,855	17,727	3,039	21.53	25.63	-4.10	-2.06	3.32
55 - 59	85,250	26,859	19,611	5,427	23.00	20.21	2.79	84,156	13,868	16,944	3,237	20.13	23.34	-3.21	-2.87	3.13
60 - 64	80,627	25,974	18,240	4,828	22.62	18.59	4.03	94,036	16,123	17,962	3,290	19.10	20.41	-1.31	-3.52	1.82
65 - 69	57,233	19,813	14,107	3,569	24.65	18.01	6.64	86,256	14,523	15,678	2,615	18.18	18.01	0.17	-6.47	0
70 or above	123,264	48,327	22,960	6,542	18.63	13.54	5.09	149,329	31,864	24,934	4,440	16.70	13.93	2.77	-1.93	0.39
Total	986,821	267,206	264,728	63,851	26.83	23.90	2.93	1,223,018	143,611	254,308	33,952	20.79	23.64	-2.85	-6.04	-0.26

(b) in spite of different intensity of variability in the proportions of the ethnicities in question, both for Russians and Ukrainians the proportions of those having higher professional education in the population of the respective ethnicity and age decreased maximally over the inter-census period for people aged 20 to 24 years: by -11.24 p.p. and by -5.24 p.p., respectively (by ethnic group); and increased maximally over the inter-census period for people aged 40 to 44 years: by 2.86 p.p. and by 10.88 p.p., respectively (by ethnic group);

(c) the integral coefficient of structural differences (Ryabtsev Index) between the distribution of the number of Russians and Ukrainians with higher professional education by age shows a low level of differences in age structures between these ethnic groups: in 2014, it was equal to 0.0789 and in 2021 it was equal to 0.1376 (within the range of 0.071 to 0.150).

39. The comparative analysis of the variation of the distribution of the proportions of those having higher professional education in the number of Ukrainians by age showed little change from 2014 to 2021.

Statistical characteristics of the distribution of shares of those who have higher professional education in the number of Ukrainians by age (according to census data)

Statistical indicator	2014	2021
Average value	27.15	30.31
Range of variation	33.39	32.60
Minimum share	13.54	13.93
Maximum share	46.93	46.53
Standard deviation	10.60	11.38
Dispersion	112.30	129.53
Coefficient of variation	39.04	37.55

40. The variation of the proportions of those having higher professional education in the number of Ukrainians by age can be visualised by means of a scatter diagram (Figure 2). The scatter diagram is a graph showing the median value of the indicator among age groups, the arithmetic mean, the lower and upper quartiles (lower and upper bounds of normality), and the minimum and maximum values and outliers (anomalies).

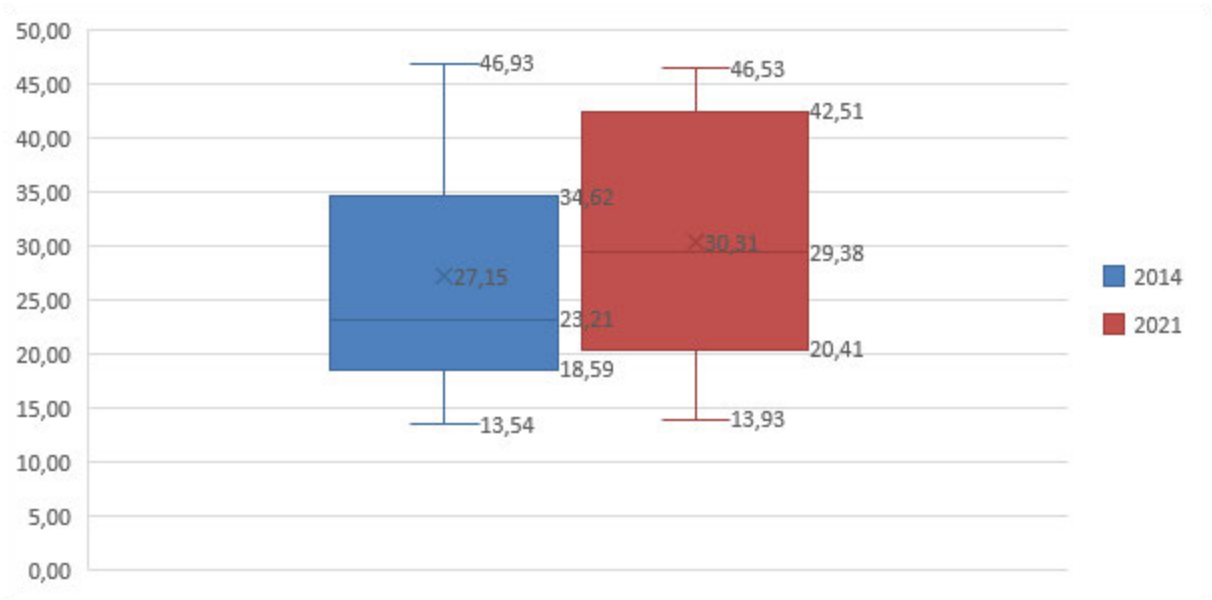

Figure 2 - Scatter diagram for the proportions of those who have higher professional education in the number of Ukrainians by age (according to census data)

41. In 2014, the boundaries within which the proportions of those having higher professional education in the number of Ukrainians in the respective age groups were distributed ranged from 13.54 % to 46.93 % and the boundaries of ¼ and ¾ quartiles were characterised by values ranging from 18.59 % to 34.62 %. In 2021, the boundaries within which the proportions of those having higher professional education in the number of Ukrainians in the respective age groups were distributed in the range from 13.93 % to 46.53 % (changes in the boundaries as compared to 2014 are insignificant – by 0.4 p.p.) and the boundaries of ¼ and ¾ quartiles were characterised by values ranging from 20.41 % to 42.51 % (these boundaries changed more significantly). No abnormal values of such shares were registered either in 2014 or 2021.

42. Despite the registered changes in the proportions of those having higher professional education in the number of Ukrainians in the respective age groups, the evaluation of Spearman rank correlation coefficient, which is 0.936, proves that they are unsubstantial / insignificant. The calculated Spearman rank correlation coefficient shows a high level of consistency in the answers of Ukrainian respondents in 2014 and 2021 about their higher professional education in different age groups. Consequently, **in the inter-census period analysed (from the accession of the Republic of Crimea until present), no changes in the opinions of Ukrainians about the higher professional education they receive were identified.**

43. The situation concerning disparity in secondary professional education is analysed by using a similar algorithm. In 2014, 31.1 % of Russians and 29.8 % of Ukrainians who stated their level of education received secondary professional education (Figure 3). The highest percentage of those who completed secondary professional education was among Belarusians, amounting to 31.2 %. By 2021, for Russians this indicator has increased by 2.79 p.p. (to 33,91 %) and the proportion of those who received secondary professional education in the number of Ukrainians also increased, but the increase was more significant: by 6.23 p.p. (to 36,05 %). The largest increase in the inter-census period was observed for Belarusians (by 6.46 p.p., to 37.64 % in 2021); a slight decrease was observed only among Crimean Tatars (by 0.39 p.p., from 30.01 % in 2014 to 29.62 % in 2021).

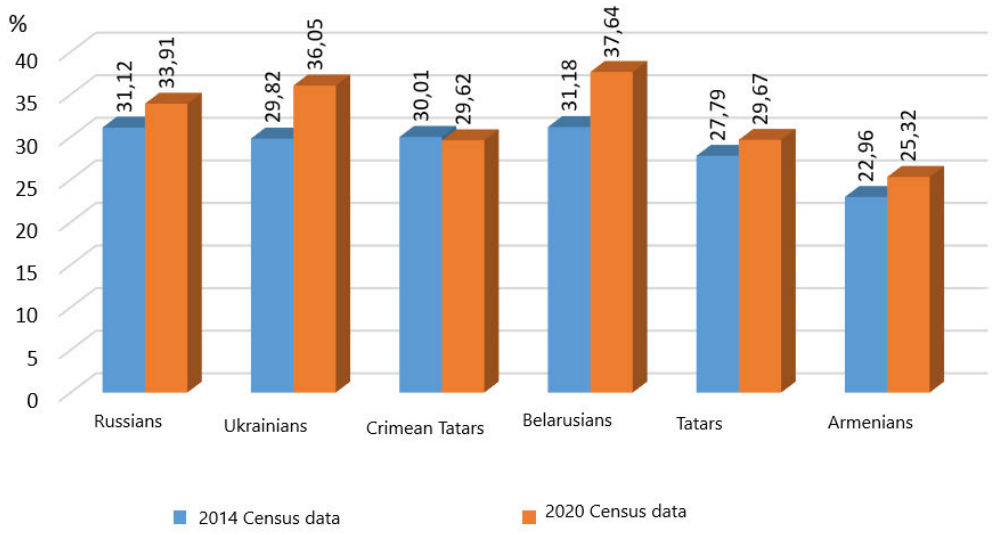

Figure 3 - Percentage of those who completed secondary professional education as a proportion of people of the respective ethnicity aged 6 and older who stated they had education (according to census data)

44. The calculated Spearman rank correlation coefficient for the proportions of those having secondary professional education in the number of people of the respective ethnicity aged 6 and older, who stated they have education, is equal to 0.714, which indicates a high consistency of responses about receiving secondary professional education in 2014 and 2021. Consequently, **since the accession of the Republic of Crimea until present, the attitude of the residents of the Republic of Crimea (by ethnicity) towards receiving secondary professional education has not changed.**

Distribution of Russian and Ukrainian population having secondary professional education by age group (according to census data)

Population age groups, years	Data from the 2014 Census							Data from the 2020 Census							Changes in shares over time (for the period from 2014 to 2021), p.p.	
	Size of population of the respective ethnicity, number of people		Including those of the respective ethnicity who have secondary professional education		Share of those who have secondary professional education in the population of the respective ethnicity and age, %		Difference in shares among ethnicities, p.p.	Size of population of the respective ethnicity, people		Including those of the respective ethnicity who have secondary professional education		Share of p those who have secondary professional education in the population of the respective ethnicity and age, %		Difference in shares, p.p.		
	Russians	**Ukrainians**	**Russians**	**Ukrainians**	**Russians**	**Ukrainians**		**Russians**	**Ukrainians**	**Russians**	**Ukrainians**	**Russians**	**Ukrainians**		**Russians**	**Ukrainians**
6 - 9	no data available	no data available	no data available	no data available	-	-	-	63,476	2,732	no data available	no data available	-	-	-	-	-
10 - 14	no data available	no data available	no data available	no data available	-	-	-	77,416	4,131	no data available	no data available	-	-	-	-	-
15 - 17	31,529	4,815	291	41	0.92	0.85	0.07	38,902	2,122	117	6	0.30	0.28	0.02	-0.62	-0.57
18 - 19	21,568	3,986	3,767	667	17.47	16.73	0.74	22,286	1,304	4,423	277	19.85	21.24	-1.39	2.38	4.51
20 - 24	70,486	13,074	16,426	2,830	23.30	21.65	1.65	54,036	3,417	16,099	996	29.79	29.15	0.64	6.49	7.50
25 - 29	98,696	18,165	21,136	3,632	21.42	19.99	1.43	63,252	4,653	19,431	1,278	30.72	27.47	3 25	9.30	7.48
30 - 34	97,776	18,785	23,377	4,156	23.91	22.12	1.79	100,347	7,348	29,031	1,930	28.93	26.27	2.66	5.02	4.15
35 - 39	88,008	19,175	25,336	5,198	28.79	27.11	1.68	112,403	9,052	33,478	2,526	29.78	27.91	1.87	0.99	0.80
40 - 44	79,467	20,470	29,284	7,232	36.85	35.33	1.52	102,617	9,475	34,267	2,979	33.39	31.44	1 95	-3.46	-3.89
45 - 49	70,354	21,496	29,620	8,798	42.10	40.93	1.17	92,173	11,144	35,177	4,307	38.16	38.65	-0.49	-3.94	-2.28
50 - 54	82,563	26,267	34,843	10,675	42.20	40.64	1.56	82,333	11,855	35,929	5,498	43.64	46.38	-2.74	1.44	5.74
55 - 59	85,250	26,859	35,609	10,688	41.77	39.79	1.98	84,156	13,868	37,480	6,504	44.54	46.90	-2.36	2.77	7.11
60 - 64	80,627	25,974	32,147	9,629	39.87	37.07	2.80	94,036	16,123	42,296	7,570	44.98	46.95	-1.97	5.11	9.88
65 - 69	57,233	19,813	21,553	6,296	37.66	31.78	5.88	86,256	14,523	37,930	6,497	43.97	44.74	-0.77	6.31	12.96
70 or more	123,264	48,327	32,986	9,700	26.76	20.07	6.69	149,329	31,864	52,737	10,013	35.31	31.42	3.89	8.55	11.35
Total	986,821	267,206	306,375	79,542	31.05	29.77	1.28	1,223,018	143,611	378,395	50,381	30.94	35.08	-4.14	-0.11	5.31

45. A comparative dynamic analysis of the structure of Russians and Ukrainians with secondary professional education by age showed the following results:

(a) for both Russians and Ukrainians, the most significant proportions of those having secondary professional education in the population of the respective ethnicity and age are, according to the 2014 Census, typical for people aged 45 to 49 years, 50 to 54 years and 55 to 59 years; according to the 2020 Census the maximum proportions are typical for people aged 60 to 64 years: 44.98 % and 46.95 %, respectively (by ethnicity);

(b) the integral coefficient of structural differences (the Ryabtsev Index) between the distribution of the number of Russians and Ukrainians with secondary professional education by age in 2014 showed a low level of difference in age structures between the ethnic groups: its value was 0.0916 (within the range from 0.071 to 0.150); in 2021 there was a low level of difference in age structures between the ethnic groups: in 2014 its value was 0.0789; in 2021, the structural difference was significant: the value was 0.1687 (within the range from 0.151 to 0.300).

46. The calculated Spearman rank correlation coefficient, the value of which is 0.827, shows a high level of consistency in the responses of Ukrainian respondents in different age groups in 2014 and 2021 about receiving secondary professional education. Consequently, in the **inter-census period analysed (since the accession of the Republic of Crimea until present) no changes in the opinions of Ukrainians about receiving secondary professional education have been revealed.**

47. Any assertions about the alleged “decline” in the quality of education in Crimea after 2014 are not supported by statistical data on any indicators (funding, school equipment, incentives for teachers, changes in personnel policy indicators in the field of school or professional education, etc.).

48. An analysis on teaching the Russian language, as well as the Crimean Tatar and Ukrainian languages under general education curricula for 2018/2019, 2019/2020, 2020/2021, 2021/2022, and 2022/2023 school years was conducted using data of the Ministry of

Education of the Russian Federation[23] for the Republic of Crimea. Summary reporting data as per Form No. OO-1 “Information about organisations carrying out educational activities under primary general, basic general, and secondary general education programmes” as at the beginning of the school year for state and non-state educational institutions are provided below.

[23] The statistics were compiled from materials available on the official website of the Ministry of Education of the Russian Federation, available at: https://edu.gov.ru/activity/statistics/general_edu. Possible differences in the statistics of the Ministry of Education and other federal and regional authorities can be explained by differences in the date and methodology of data collection.

Data on language education in general education curricula (based on Form No. OO-1)

Indicator	TOTAL	Number of pupils in all grades, except classes for pupils with disabilities, under curricula of						Number of pupils in classes for pupils with disabilities, under curricula of				of these, part-time and extramural pupils
		primary general education				Basic general education (grades 5 to 9)	secondary general education (grades 10 to 11 (12))	primary general education	basic general education	secondary general education	General education for mentally disabled pupils (intellectual disabilities)	
		1st grade	2d grade	3d grade	4th grade							
Number of language learners, by language taught												
2018 /2019 school year	208,023	24,202	23,344	22,146	18,080	97,404	20,358	869	872	33	715	32
2019 /2020 school year	213,457	24,962	24,032	23,163	22,080	96,315	20,184	988	978	34	844	0
2020 /2021 school year	218,046	24,231	24,846	23,933	23,162	100,178	18,890	989	919	29	869	0
2021 /2022 school year	223,281	24,840	24,182	24,781	23,994	104,371	18,137	1,084	938	15	939	498
2022 /2023 school year	228,483	24,196	24,650	24,267	24,974	108,132	19,244	1,077	948	26	969	627
Russian												
2018 /2019 school year	198,131	23,074	22,357	21,212	17,362	93,905	20,221	869	872	33	715	32
2019 /2020 school year	203,996	24,039	23,054	22,346	21,245	93,227	20,085	988	978	34	844	0
2020 /2021 school year	208,383	23,298	23,917	23,031	22,408	96,885	18,844	989	919	29	869	0
2021 /2022 school year	215,177	23,808	23,163	23,764	22,926	100,515	18,025	1,084	938	15	939	498
2022 /2023 school year	220,808	23,213	23,715	23,305	24,012	104,389	19,154	1,077	948	26	969	627
Crimean Tatar												
2018 /2019 school year	6,187	999	853	815	620	2,837	63	0	0	0	0	0
2019 /2020 school year	6,393	892	939	787	805	2,886	84	0	0	0	0	12
2020 /2021 school year	6,640	913	909	884	734	3,154	46	0	0	0	0	0
2021 /2022 school year	7,796	1,008	1,000	991	1,051	3,638	108	0	0	0	0	0
2022 /2023 school year	7,454	959	918	947	938	3,628	64	0	0	0	0	0

Indicator	TOTAL	Number of pupils in all grades, except classes for pupils with disabilities, under curricula of						Number of pupils in classes for pupils with disabilities, under curricula of				of these, part-time and extramural pupils
		primary general education				Basic general education (grades 5 to 9)	secondary general education (grades 10 to 11 (12))	primary general education	basic general education	secondary general education	General education for mentally disabled pupils (intellectual disabilities)	
		1st grade	2d grade	3d grade	4th grade							
Ukrainian												
2018 /2019 school year	248	21	21	12	15	179	0	0	0	0	0	0
2019 /2020 school year	206	21	20	19	14	132	0	0	0	0	0	0
2020 /2021 school year	217	20	20	18	20	139	0	0	0	0	0	0
2021 /2022 school year	308	24	19	26	17	218	4	0	0	0	0	0
2022 /2023 school year	221	24	17	15	24	115	26	0	0	0	0	0
Number of pupils studying their native language (not Russian) as a separate subject												
Crimean Tatar												
2018 /2019 school year	8,964	2,028	947	768	641	3,789	791	0	0	0	0	0
2019 /2020 school year	11,116	1,885	1,884	1,102	943	4,668	634	0	0	0	0	0
2020 /2021 school year	13,162	1,953	1,944	1,880	1,097	5,668	620	0	0	0	0	17
2021 /2022 school year	16,191	1,980	1,990	2,075	2,011	7,325	810	0	0	0	0	127
2022 /2023 school year	14,714	1,743	1,715	1,669	1,780	6,964	842	1	0	0	0	21
Ukrainian												
2018 /2019 school year	1,651	197	119	125	119	866	225	0	0	0	0	0
2019 /2020 school year	1,955	167	182	168	201	977	260	0	0	0	0	0
2020 /2021 school year	1,451	130	160	148	126	763	124	0	0	0	0	0
2021 /2022 school year	1,570	74	154	131	151	976	84	0	0	0	0	0
2022 /2023 school year	1,672	105	101	183	154	1,042	87	0	0	0	0	0

49. The average percentage of Russian language learners in the total number of pupils taught in primary general education programmes was 96.03 % for the five school years under review (the range of variation by school year is insignificant: 0.63 p.p.) – *see* table below.

50. The average percentage of Russian language learners in the total number of pupils taught in basic general education programmes was 96.55 % for the five school years under review (the range of variation by school year is also insignificant: 0.48 p.p.).

51. The average percentage of Russian language learners in the total number of pupils taught in secondary general education programmes was 99.50 % for the five school years under review (the range of variation by school year is also insignificant: 0.43 p.p.).

Structure of those learning languages in general education curricula, %

School year	All grades, except classes for pupils with disabilities		
	primary general education curricula	basic general education curricula	secondary general education curricula
Learning the Russian language, % of the total number of pupils			
2018/2019 school year.	95.71	96.41	99.33
2019/2020 school year	96.23	96.79	99.51
2020/2021 school year.	96.34	96.71	99.76
2021/2022 school year	95.77	96.31	99.38
2022/2023 school year.	96.08	96.54	99.53
Learning the Crimean Tatar language, % of the total number of pupils			
2018/2019 school year.	3.74	2.91	0.31
2019/2020 school year	3.63	3.00	0.42
2020/2021 school year.	3.58	3.15	0.24
2021/2022 school year	4.14	3.49	0.60
2022/2023 school year.	3.84	3.36	0.33
Learning the Ukrainian language, % of the total number of pupils			
2018/2019 school year.	0.08	0.18	0.00
2019/2020 school year	0.08	0.14	0.00
2020/2021 school year.	0.08	0.14	0.00
2021/2022 school year	0.09	0.21	0.02
2022/2023 school year.	0.08	0.11	0.14
Learning other languages, % of total number of pupils			
2018/2019 school year.	0.47	0.50	0.36
2019/2020 school year	0.06	0.07	0.07
2020/2021 school year.	0.00	0.00	0.00

School year	All grades, except classes for pupils with disabilities		
	primary general education curricula	basic general education curricula	secondary general education curricula
2021/2022 school year	0.00	0.00	0.00
2022/2023 school year.	0.00	0.00	0.00

52. No structural changes / transformations in language learning were registered over the 5 school years analysed, which is confirmed by the calculated Ryabtsev Index of 0.0032 (within the range of 0.000 to 0.030, which shows the identity of the structures).

53. The changes in the number of pupils studying Ukrainian as their native language and as a separate subject per 10,000 pupils in primary general education classes over time is visualised in Figure 4. In the 2022/2023 school year, out of 10,000 pupils, 43 children in grade 1 studied Ukrainian as their native language (81 in 2018/2019 school year); 41 children in grade 2 (51 in 2018/2019 school year); 75 children in grade 3 (56 in 2018/2019 school year); and 62 children in grade 4 (66 in 2018/2019 school year).

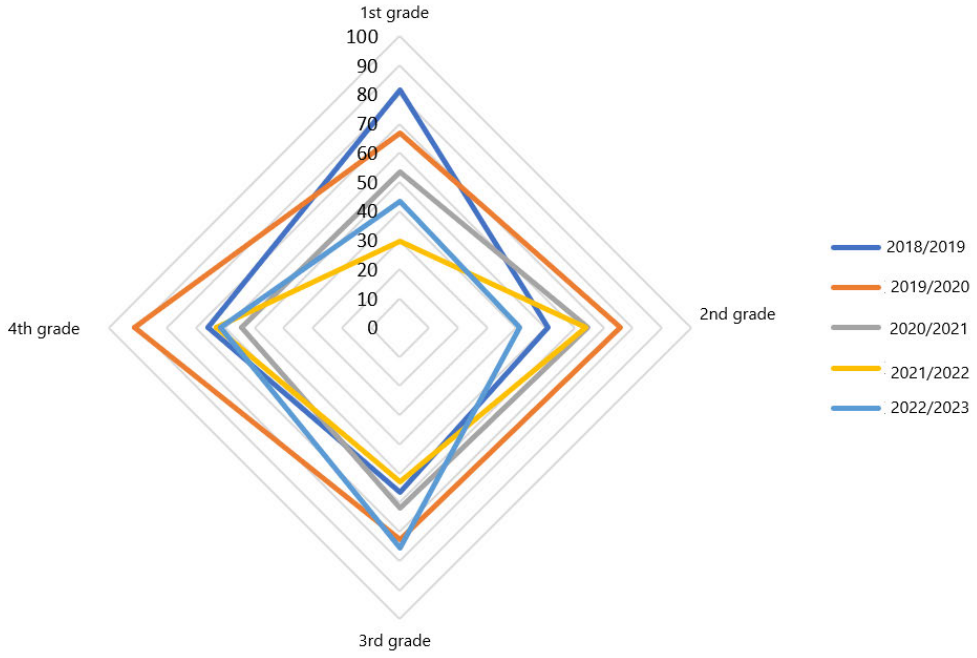

Figure 4 - Number of pupils studying Ukrainian as native language and as a separate subject, per 10,000 pupils in primary general education classes

54. The analysis of the movement (transition to a higher grade in the new academic year) has shown that the desire to study Ukrainian as native language and as a separate subject decreases from year to year: for instance, if in 2018/2019 academic year

81 children out of 10,000 students in the 1st grade studied Ukrainian as native language, in 2019/2020 academic year only 76 children out of 10,000 students in the 2nd grade studied Ukrainian as native language. In 2020/2021 academic year this figure decreased to 62 children and in 2021/2022 academic year there were 63 such children.

55. It should be noted that the conclusion about the disparate impact on ethnic groups in Crimea in education in native languages cannot be made on the basis of purely mathematical methods without taking into account a large number of external "non-mathematical" factors affecting Crimean parents' choice of language to educate their child. The situation with the change in the number of pupils studying in the Ukrainian language was affected both by the change in the global geopolitical situation in Crimea (including the change of its state belonging) and by the traditional predisposition of ethnic groups in the region to communicate specifically in the Russian language.

56. Present-day scholars consider a language as an "economic asset", the value of which increases, among other things, depending on the number of people using the language in question. Consequently, the popularity of a language is associated by its users (as well as by potential learners and their parents), *inter alia*, with the direct economic consequences that command of it may cause.[24] Research shows that when there are alternatives for learning, parents are more likely to opt for the language that will give their children the greatest economic advantage and career advancement in the future. Specifically, the authors of a World Bank report, citing data on language learning in Algeria and Egypt, note that "Mastery of students' mother tongue does not guarantee economic opportunity, and families recognize this fact."[25]

57. The observed decrease in the desire of children and the young population of the Republic of Crimea to study the Ukrainian language is therefore due to a number of objective factors, unrelated to racial discrimination. First of all, prior to its reunification with the Russian Federation Crimea underwent the process of intensive and artificial

[24] Y. Wang, The Economic Characteristics of Language Choice from the Perspective of Language and Society Interaction, in *Advances in Social Science, Education and Humanities Research*, Vol. 588, 2021, p. 44, available at: https://www.atlantis-press.com/article/125962038.pdf.

[25] *See* S. El-Kogali, C. Krafft (*eds.*), EXPECTATIONS AND ASPIRATIONS, A NEW FRAMEWORK FOR EDUCATION IN THE MIDDLE EAST AND NORTH AFRICA (International Bank for Reconstruction and Development / The World Bank, 2020), p. 156.

Ukrainization, as will be shown below. Pragmatic factors of the choice of language also play a significant role.

58. Naturally, after the reunification of Crimea with the Russian Federation and the cessation of the artificial imposition of the Ukrainian language in education, the population of Crimea naturally returned to the use of the Russian language as a language of education, also in view of further educational opportunities, successful career and self-actualization, in particular in business, due to the changes in positioning of the region, the development of new logistical chains in the context of the importance of interaction of regions and their cooperation for economic development. Here are the main statistical data demonstrating the ethno-linguistic situation in Ukraine and Crimea since 1991.

59. The main points are the following (details are provided further below):[26]

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[26] Statistical data is exposed on the basis of comparison of the numbers listed in the documents of the Ukraine's State Statistics Service and other organs of Ukraine and Russia, publications of non-state and international organisations, scientific publications and mass media publications. *See*, for example, data of the Yearbooks of the State Statistics Service of Ukraine, available at: https://ukrstat.gov.ua/druk/publicat/kat_e/publ1_e htm; data of the statistics bulletins of the State Statistics Service of Ukraine in the sphere of education, available at: https://ukrstat.gov.ua/druk/publicat/Arhiv_u/15/Arch_shool_bl.htm; State Statistics Service of Ukraine, General education schools, available at: https://ukrstat.gov.ua/operativ/operativ2023/osv/osv_rik/zzso_90-22_ue.xls; Ministry of Education, Science and Youth of the Republic of Crimea, On the state of education in the state languages of the Republic of Crimea (Russian, Ukrainian, Crimean Tatar) and the study of native languages of the peoples of the Russian Federation living in the Republic of Crimea in general education institutions of the Republic of Crimea in the academic year 2021/2022, available at: https://monm.rk.gov ru/uploads/txteditor/monm/attachments/d4/1d/8c/d98f00b204e9800, Ministry of Education, Science and Youth of the Republic of Crimea, Information on the Students Studying in the State Languages of the Republic of Crimea (Russian, Ukrainian, Crimean Tatar) in General Educational Institutions of the Republic of Crimea in the 2022/2023 School Year, available at: https://monm.rk.gov ru/uploads/txteditor/monm/attachments//d4/1d/8c/d98f00b204e980; other documents of Ministry of Education of the Russian Federation, Ministry of Education, Science and Youth of the Republic of Crimea and other federal and regional bodies (in particular, Ministry of Education, Science and Youth of the Republic of Crimea, On the state of education in the state (Crimean Tatar, Ukrainian) languages and the study of native languages in educational institutions of the Republic of Crimea in the 2018/2019 academic year, available at:
https://web.archive.org/web/20201102065059/https://monm.rk.gov ru/uploads/monm/attachments//d4/1d/8c/d98f00b204e9800998ecf8427e/phpFIkuR2_%D0%BE%D0%B1%D1%83%D1%87%D0%B5%D0%BD%D0%B8%D0%B8%D0%B8%D0%B7%D1%83%D1%87%D0%B5%D0%BD%D0%B8%D0%B8.docx; Ministry of Education, Science and Youth of the Republic of Crimea, On the state of education in the state (Crimean Tatar, Ukrainian) languages and the study of native languages in educational institutions of the Republic of Crimea in the 2020/2021 academic year, available at: https://monm.rk.gov ru/uploads/txteditor/monm/attachments//d4/1d/8c/d98f00b204e9800998ecf8427e/phpuhSs1y_%D0%9D%D0%B0%20%D1%81%D0%B0%D0%B9%D1%82%20%282%29.docx and others); Council of Europe, *Article 14* in Parallel Report Prepared by the Foundation for Research and Support of the Indigenous Peoples of Crimea About the situation in Crimea (Ukraine), available at: https://www.cilevics.eu/minelres/reports/ukraine/Article_14.htm; Ukrainian Institute of Politics, *Dynamics of the number of schools and pupils as to languages of education*, available at: https://uiamp.org/isled/dinamika-kolichestva-shkol-i-uchenikov-po-yazykam-obucheniya; Ministry of Foreign Affairs of the Russian Federation,

(a) ***First***, before reunification of Crimea with the Russian Federation there has been an artificial increase in the number of students studying in Ukrainian in Crimea as a result of special legislative measures: the number of students studying in Ukrainian increased more than 150 times between 1992/1993 and 2013/2014.

(b) ***Second***, despite the high demand for the education in Russian language (*see* Figure 24 below), there has been a sharp decline in the number of schools providing education in Russian – in 1990/1991 there were 4,633 Russian-language schools in Ukraine, by 2019/2020 this number had fallen to 125 (a 37-fold decrease from 1990/1991).[27]

(c) ***Third***, the proportion of students having Russian as a language of instruction in Ukraine has fallen from 51.4 % in 1990/1991 to 3 % in 2020/2021 – a more than 17-fold decrease.

Number of Russian language schools in Ukraine and Crimea[28]

School year	Ukraine	Crimea
1990/1991	4,633	583
1996/1997	2,940	-
1997/1998	2,747	-
1998/1999	2,561	577
1999/2000	2,399	-
2000/2001	2,215	-
2002/2003	-	457
2003/2004	-	435
2004/2005	1,555	414

Report "Russian Language in the World", 2003, available at: https://www.mid.ru/tv/?id=1629040&lang=ru; J. Besters-Dilger (ed.), LANGUAGE POLICY AND LANGUAGE SITUATION IN UKRAINE (Peter Lang, 2009), p. 214; A. Schvets, I. Voronin, The Change of Trends in Political and Geographical Subjectivity of Crimea, *Journal of Geography, Politics and Society*, No. 8(2), 2018, p. 48, available at: https://czasopisma.bg.ug.edu.pl/index.php/JGPS/article/view/3121/2523; Milli Firka, *How many schools are in Crimea?* (20 September 2010), available at: http://milli-firka.org/сколько-в-крыму-школ/; A. Arefyev, *Russian Language in Ukrainian Republic in* RUSSIAN LANGUAGE AT THE TURN OF XX – XXI CENTURIES (Centre for Social Forecasting and Marketing, 2012), available at: http://www.demoscope.ru/weekly/2013/0571/analit03.php#_FNR_8; A. Ablyatipov, CRIMEA: EDUCATION IN MOTHER TONGUE (Dolya, 2018), p. 44; R. Solchanyk, Russians in Ukraine: Problems and Prospects, *Harvard Ukrainian Studies*, Vol. 22, 1998, p. 544. The differences between pieces of statistical data in different sources are insignificant and are within statistical spread.

[27] Data of the independent analytics consulting organization – Ukrainian Institute of Politics (Ukrainian Institute of Analysis and Management of Politics since 2012 to 2019), which are based on information from official requests to Ukrainan Center of assessment of education quality (response of 7 May 2020 №02-23-01/680) and to the Institute of Educational Analysis (Response of 5 May 2020 №04-13/7). *See* Ukrainian Institute of Politics, *Dynamics of the number of schools and pupils as to languages of education*, available at: https://uiamp.org/isled/dinamika-kolichestva-shkol-i-uchenikov-po-yazykam-obucheniya.

[28] Absence of numbers for several years does not exclude clear general tendency and dynamics of the changes which are revealed according to the statistical data at our disposal.

School year	Ukraine	Crimea
2005/2006	1,480	393
2006/2007	1,430	378
2007/2008	1,373	365
2008/2009	1,306	340
2009/2010	1,253	330
2010/2011	1,240	318
2011/2012	1,217	317
2012/2013	1,256	343
2013/2014	1,275	354
2014/2015	621	570
2015/2016	614	548
2016/2017	581	516
2017/2018	471	511
2018/2019	194	528
2019/2020	125	-
2020/2021	-	530
2021/2022	-	528
2022/2023	-	528

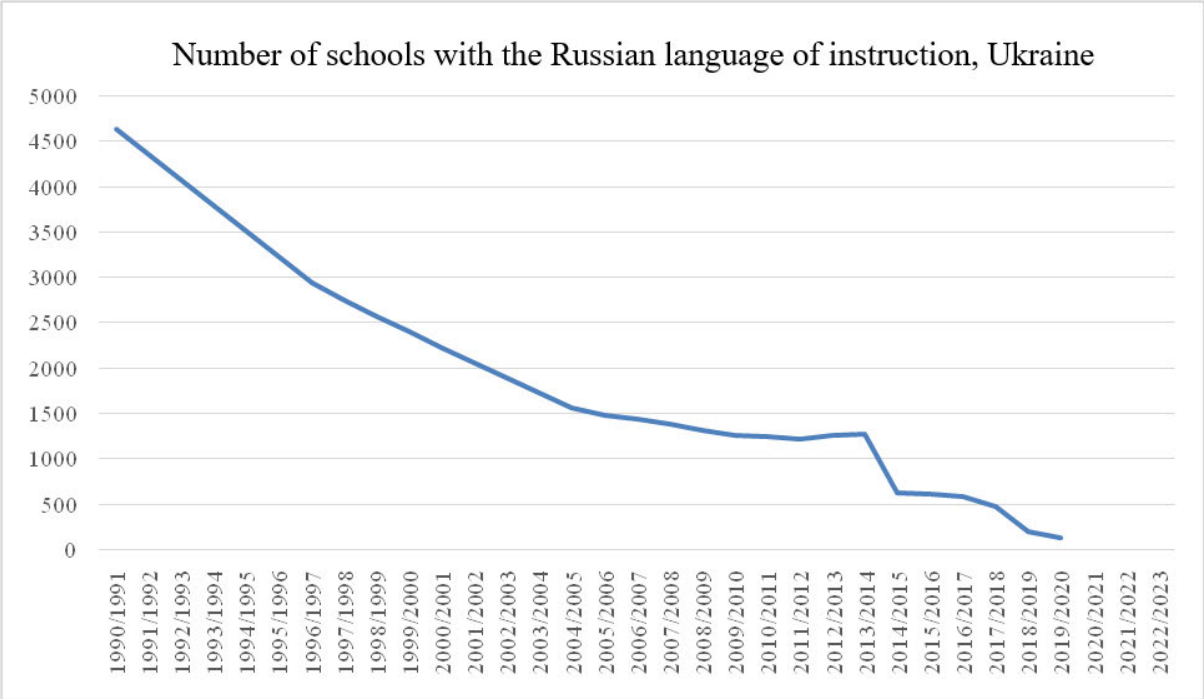

Figure 5 – Number of schools with the Russian language of instruction, Ukraine

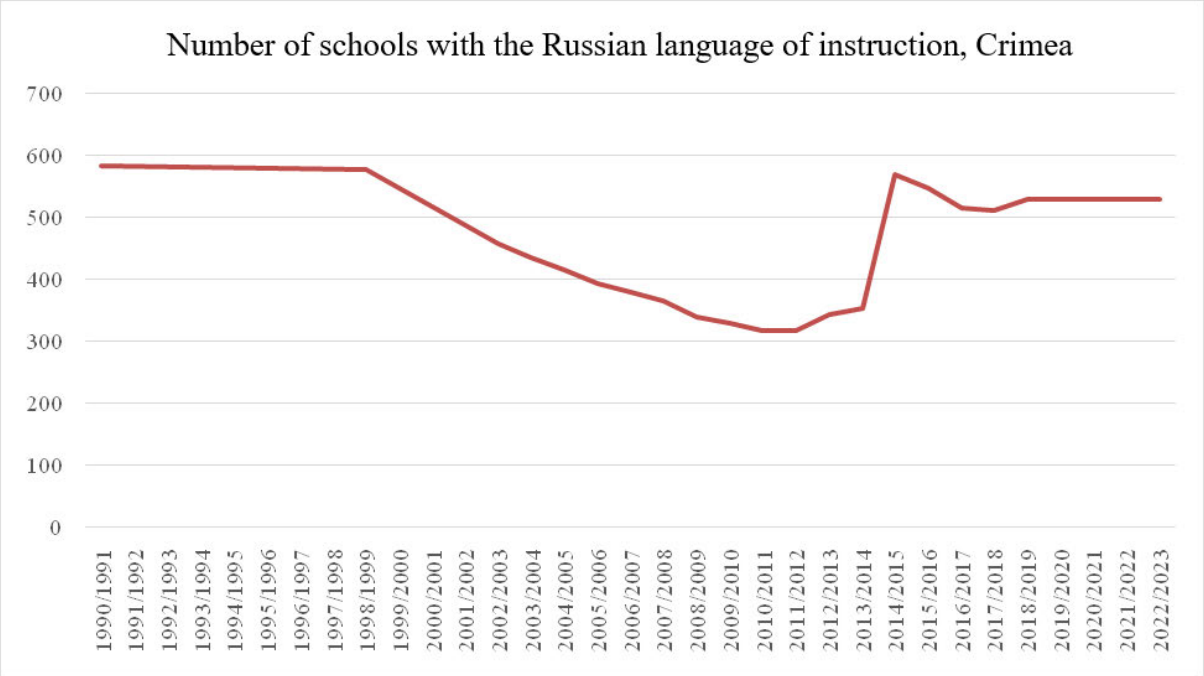

Figure 6 – Number of schools with the Russian language of instruction, Crimea

Number of schools with the Ukrainian language of instruction

School year	Ukraine	Crimea
1992/1993	-	0
1993/1994	-	0
1994/1995	-	0
1995/1996	-	0
1996/1997	-	0
1997/1998	-	1
1998/1999	-	3
1999/2000	-	3
2000/2001	-	3
2001/2002	-	4
2002/2003	-	4
2003/2004	-	4
2004/2005	17,044	6
2005/2006	17,075	7
2006/2007	17,119	7
2007/2008	17,117	7
2008/2009	17,044	7
2009/2010	16,814	7
2010/2011	16,731	7
2011/2012	16,446	7
2012/2013	16,356	7
2013/2014	16,045	7
2014/2015	15,696	1
2015/2016	15,476	-
2016/2017	15,020	1
2017/2018	14,414	1
2018/2019	13,838	1
2019/2020	13,584	-
2020/2021	-	1

School year	Ukraine	Crimea
2021/2022	-	1
2022/2023	-	1

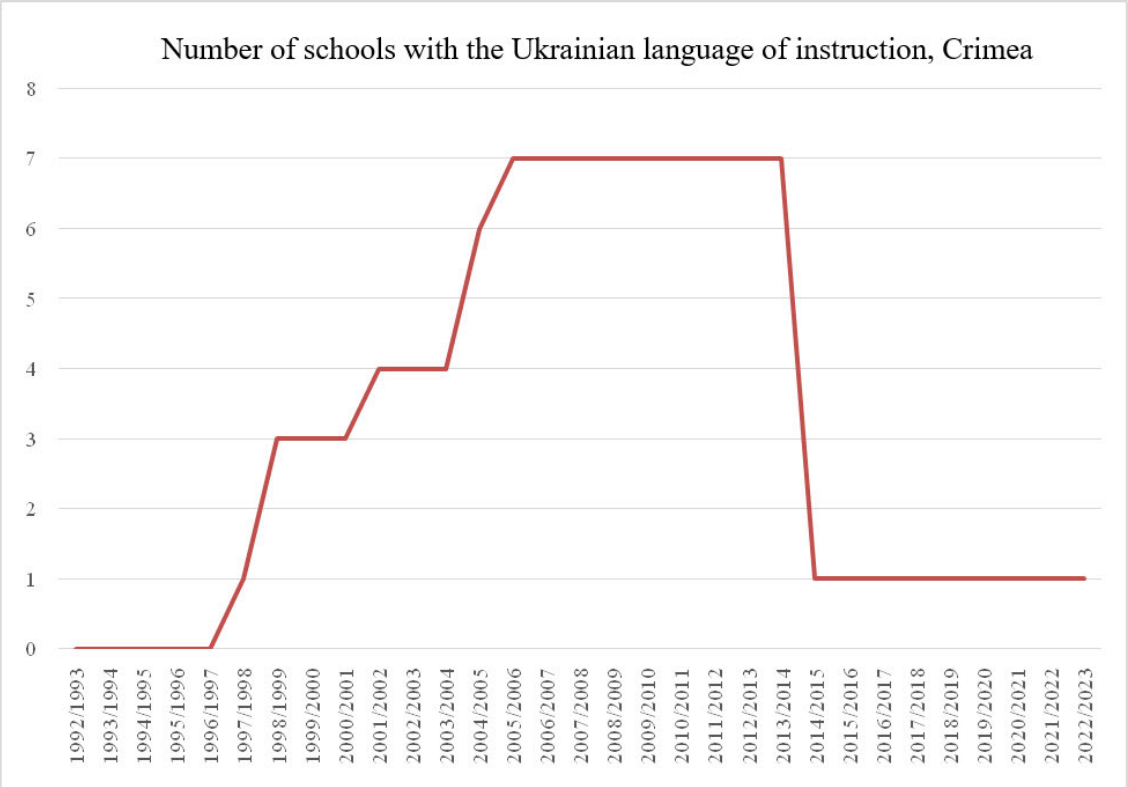

Figure 7 – Number of schools with the Ukrainian language of instruction, Crimea

Number of students studying in Ukrainian and Russian in Ukraine

School year	Students studying in Ukrainian (pers.)	Students studying in Ukrainian (%)	Students studying in Russian (pers.)	Students studying in Russian (%)
1990/1991	3,416,228	47.9	3,665,848	51.4
1991/1992	3,501,286	49.3	3,551,000	50
1992/1993	3,643,232	51.4	3,388,064	47.8
1993/1994	3,853,128	54.3	3,186,104	44.9
1994/1995	4,061,250	57	3,063,750	43
1995/1996	4,142,940	58	2,928,630	41
1996/1997	4,280,400	60	2,685,038	39
1997/1998	4,459,140	63	2,503,839	36
1998/1999	4,541,550	65	2,313,901	34
1999/2000	4,731,330	69	2,105,980	30
2000/2001	4,734,800	70	1,917,194	29
2004/2005	4,260,514	77	1,242,764	22
2005/2006	4,089,567	78	1,093,280	21
2006/2007	3,938,426	79	971,960	20
2007/2008	3,778,080	80	876,125	19
2008/2009	3,624,183	81	791,594	18
2009/2010	3,555,554	82	750,727	17
2010/2011	3,421,606	82	696,039	17
2011/2012	3,408,517	82	706,864	17
2012/2013	3,370,306	82	694,331	17

School year	Students studying in Ukrainian (pers.)	Students studying in Ukrainian (%)	Students studying in Russian (pers.)	Students studying in Russian (%)
2013/2014	3,352,871	82	703,572	17
2014/2015	3,281,644	89	356,262	10
2015/2016	3,316,459	90	351,948	9
2016/2017	3,376,785	90	355,955	9
2017/2018	3,462,894	90	347,867	9
2018/2019	3,614,637	91	319,815	8
2019/2020	3,753,305	92	281,257	7
2020/2021	4,043 049	96	126,345	3

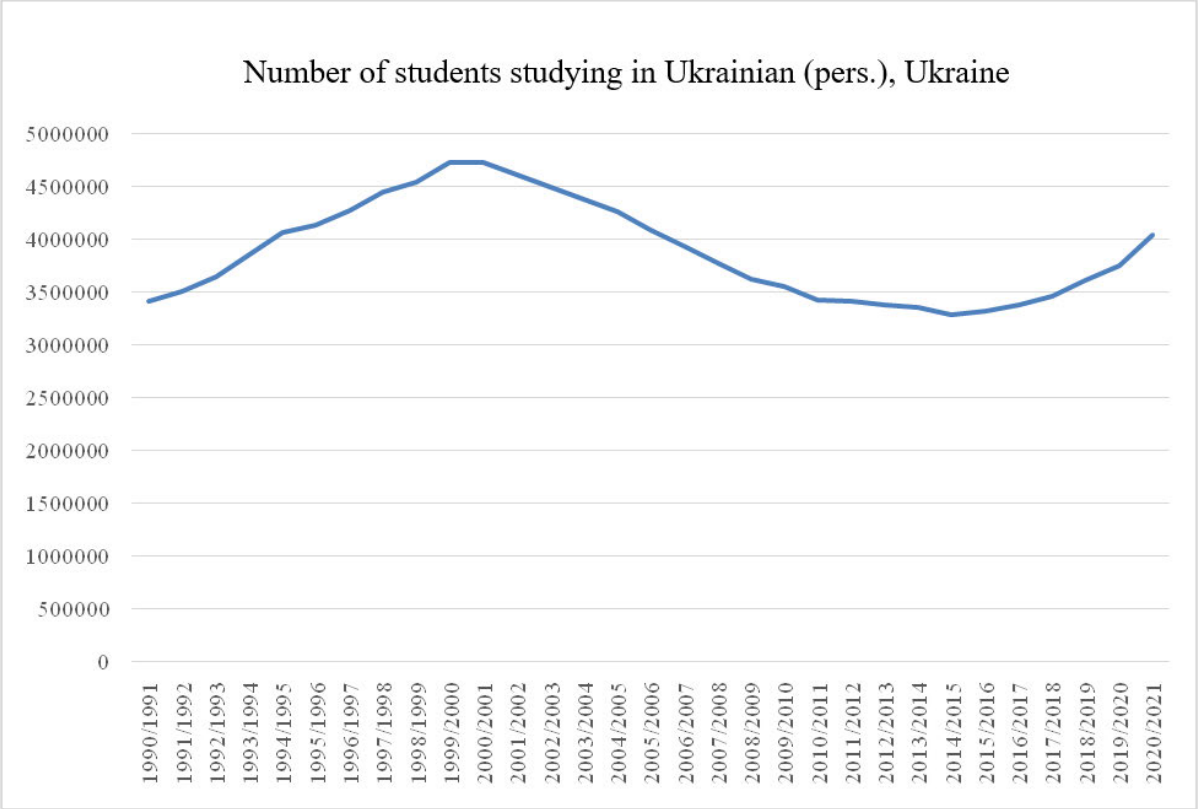

Figure 8 – Number of students studying in Ukrainian, Ukraine

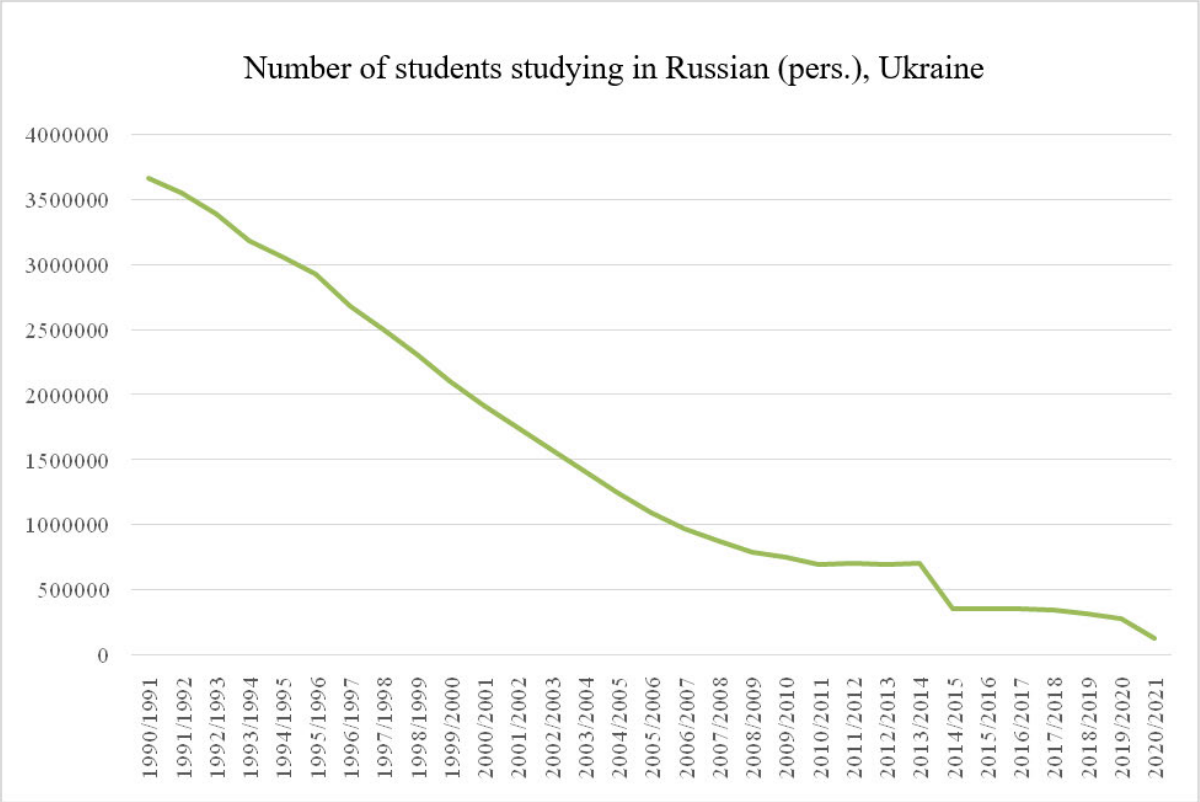

Figure 9 – Number of students studying in Russian, Ukraine

Number of students studying in Russian and Ukrainian in Crimea

School year	Students studying in Ukrainian (pers.)	Students studying in Ukrainian (%)	Students studying in Russian (pers.)	Students studying in Russian (%)
1992/1993	82	-	-	-
1993/1994	190	-	-	-
1994/1995	214	-	-	-
1995/1996	322	0.1	327,355	99.5
1996/1997	392	-	-	-
1997/1998	937	-	-	-
1998/1999	1,316	-	-	-
1999/2000	1,865	-	-	-
2000/2001	2,595	0.9	286,150	97
2001/2002	3,773	-	-	-
2002/2003	4,855	2	252,153	96
2003/2004	6,135	3	233,702	95
2004/2005	7,935	3	216,200	95
2005/2006	9,903	5	196,832	93
2006/2007	10,719	5	182,490	92
2007/2008	11,707	6	170,302	91
2008/2009	12,860	7	159,568	90
2009/2010	13,758	8	156,767	89
2010/2011	13,609	8	150,010	89
2011/2012	13,672	8	156,666	89
2012/2013	12,867	7	155,336	89
2013/2014	12,694	7	158,174	90
2014/2015	1,990	1	177,984	96
2015/2016	894	0.4	177,183	97

School year	Students studying in Ukrainian (pers.)	Students studying in Ukrainian (%)	Students studying in Russian (pers.)	Students studying in Russian (%)
2016/2017	371	0.2	182,747	97
2017/2018	318	0.2	194,399	97
2018/2019	248	0.1	198,131	96
2019/2020	206	0.1	203,996	97
2020/2021	217	0.1	208,383	97
2021/2022	308	0.1	215,177	96
2022/2023	221	0.1	220,808	97

Figure 10 – Number of students studying in Ukrainian, Crimea

Figure 11 – Number of students studying in Russian, Crimea

Proportion of students studying in Russian and Ukrainian in different regions of Ukraine[29]

Donetsk Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
6 %	94 %	50 %	50 %	98.4 %	1.6 %
Lugansk Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
9 %	91 %	46 %	54 %	91 %	9 %
Zaporozhye Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
31 %	69 %	75 %	25 %	86.5 %	13.5 %
Kherson Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
60 %	40 %	85 %	15 %	97 %	3 %
Kharkov Region					
1995/1996		**2013/2014**		**2020/2021**	

[29] *See* I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 117; O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

Ukr.	Rus.	Ukr.	Rus.	Ukr.	Rus.
37 %	63 %	74 %	26 %	79 %	21 %
Odessa Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
32 %	66 %	71 %	28 %	93 %	6 %

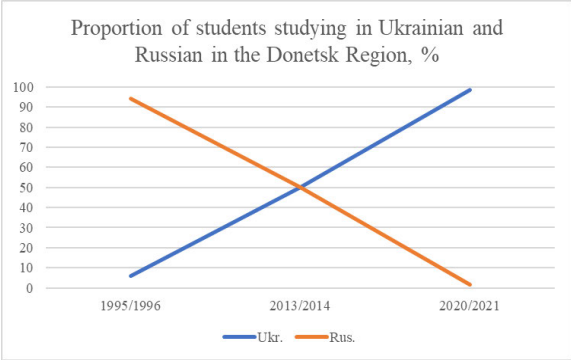

Figure 12 - Proportion of students studying in Ukrainian and Russian in the Donetsk Region, %

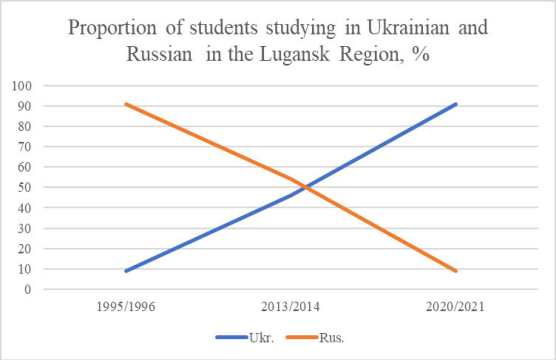

Figure 13 - Proportion of students studying in Ukrainian and Russian in the Lugansk Region, %

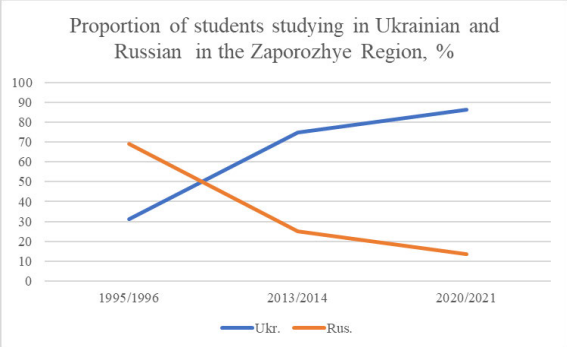

Figure 14 - Proportion of students studying in Ukrainian and Russian in the Zaporozhye Region, %

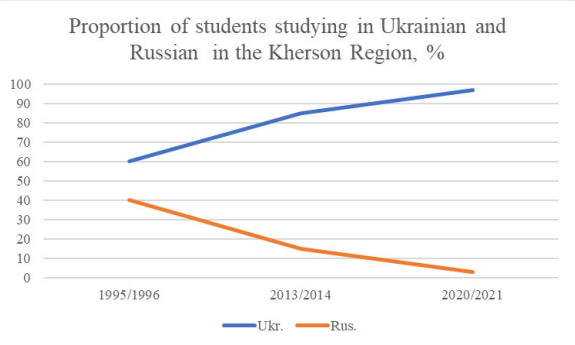

Figure 15 - Proportion of students studying in Ukrainian and Russian in the Kherson Region, %

Figure 16 - Proportion of students studying in Ukrainian and Russian in the Kharkov Region, %

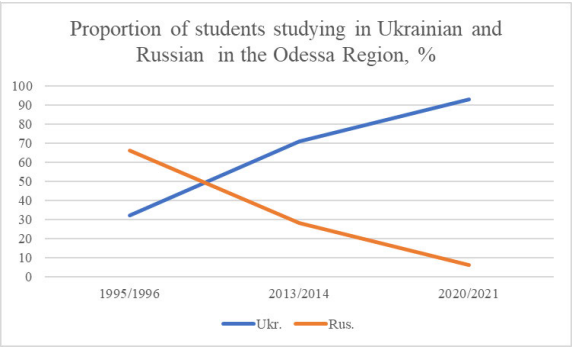

Figure 17 - Proportion of students studying in Ukrainian and Russian in the Odessa Region, %

Proportion of children in pre-school educational institutions studying in Russian and Ukrainian in different regions of Ukraine[30]

Donetsk Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
10 %	90 %	73.7 %	26.3 %	98 %	2 %
Lugansk Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
14 %	86 %	35.5 %	64.5 %	91.7 %	8.3 %
Zaporozhye Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
36 %	64 %	83.3 %	16.7 %	96.9 %	3.1 %
Kherson Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
82 %	18 %	87.7 %	12.3 %	99.5 %	0.2 %
Kharkov Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
48 %	52 %	88.6 %	11.4 %	95.2 %	4.8 %
Odessa Region					
1995/1996		**2013/2014**		**2020/2021**	
Ukr.	**Rus.**	**Ukr.**	**Rus.**	**Ukr.**	**Rus.**
33 %	66 %	69.5 %	28.9 %	91.7 %	6.6 %

[30] *See* I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 111; O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 408.

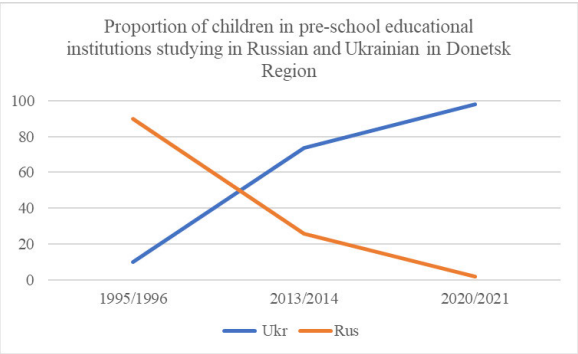

Figure 18 - Proportion of children in pre-school educational institutions studying in Russian and Ukrainian in Donetsk Region, %

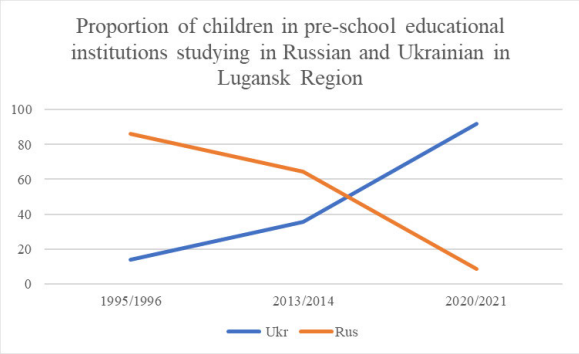

Figure 19 - Proportion of children in pre-school educational institutions studying in Russian and Ukrainian in Lugansk Region, %

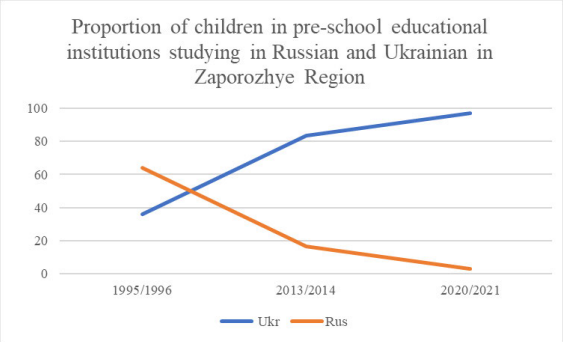

Figure 20 - Proportion of children in pre-school educational institutions studying in Russian and Ukrainian in Zaporozhye Region, %

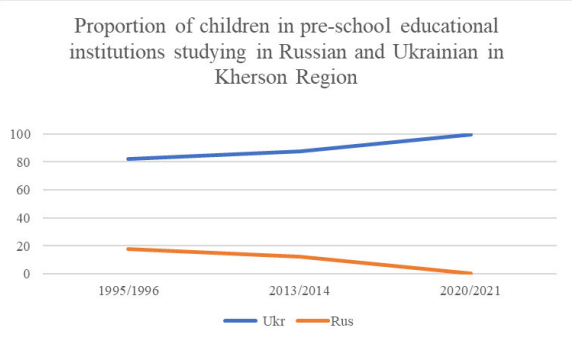

Figure 21 - Proportion of children in pre-school educational institutions studying in Russian and Ukrainian in Kherson Region, %

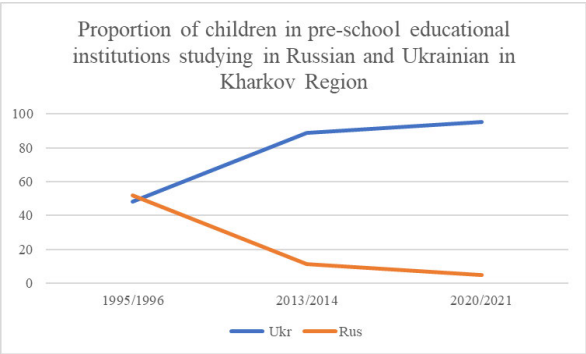

Figure 22 - Proportion of children in pre-school educational institutions studying in Russian and Ukrainian in Kharkov Region, %

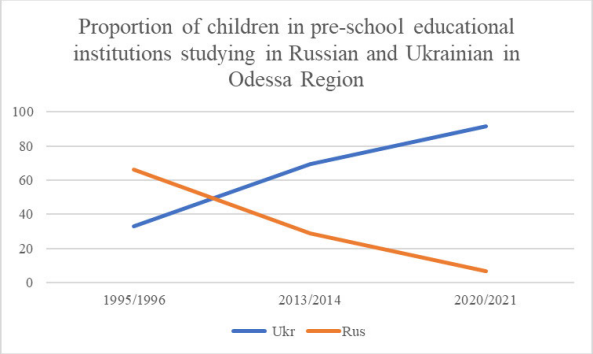

Figure 23 - Proportion of children in pre-school educational institutions studying in Russian and Ukrainian in Odessa Region, %

Load of schools teaching in Ukrainian and Russian languages, Ukraine[31]

	Load of Ukrainian language schools (pupils per school)	Load of Russian language schools (pupils per school)
2004/2005	250	799.2
2005/2006	239.5	738.7
2006/2007	230	679.7
2007/2008	220.7	638.1
2008/2009	212.6	606.1
2009/2010	211.5	599.1
2010/2011	204.5	561.3
2011/2012	207.3	580.8
2012/2013	206.1	552.8
2013/2014	209	551.8
2014/2015	209	573.7
2015/2016	214.3	573.2
2016/2017	224.8	612.7
2017/2018	240.2	738.6
2018/2019	261.2	1 648.5
2019/2020	276.3	2 250.1

[31] Calculations made on the basis of the information on the number of students receiving education in Ukrainian and Russian languages and number of schools providing education in Ukrainian and Russian languages, contained in the Statistical Yearbooks of Ukraine for various years and data of the Ukrainian Institute of Politics. *See* Ukrainian Institute of Politics, *Dynamics of the number of schools and pupils as to languages of education*, available at: https://uiamp.org/isled/dinamika-kolichestva-shkol-i-uchenikov-po-yazykam-obucheniya.

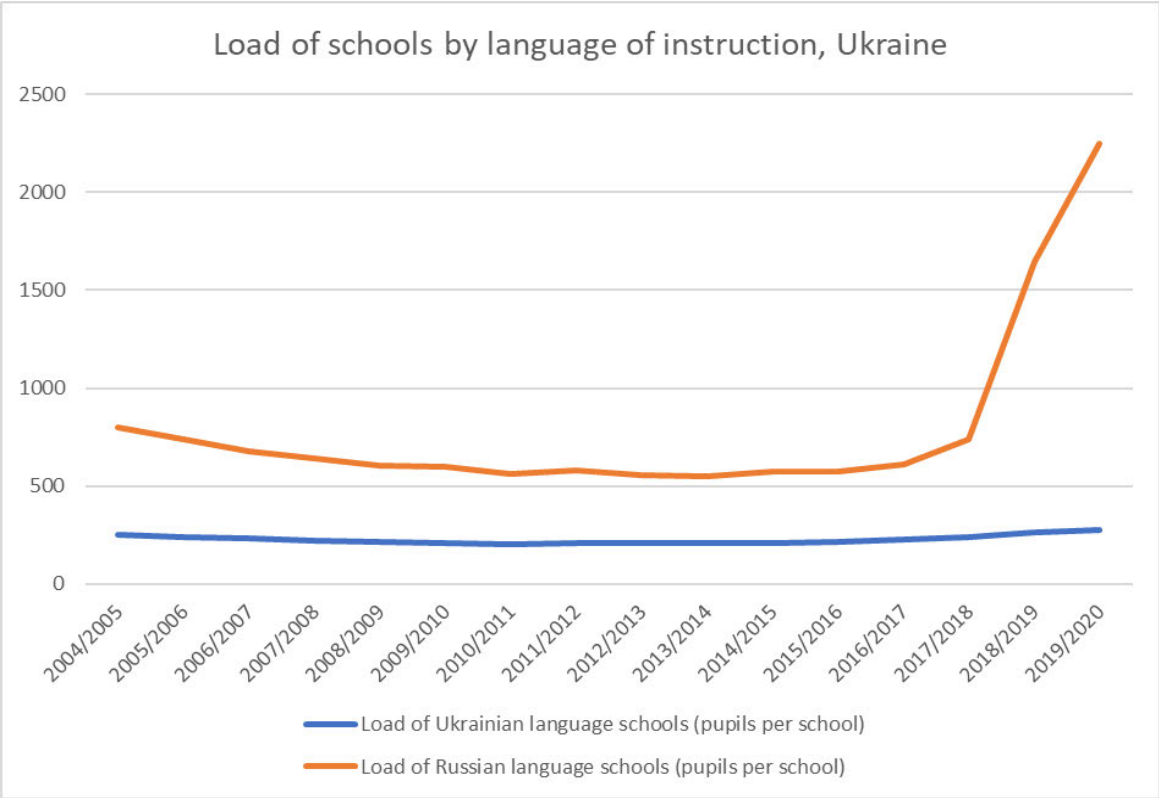

Figure 24 – Load of schools by language of instruction, Ukraine

60. In Ukraine:

(a) According to 1989 census data, out of 11,355,582 ethnic Russians 3,721,713 (32.7 %) indicated their knowledge of Ukrainian as their second language.[32] After the dissolution of the Soviet Union, according to the results of the 2001 census of the population of Ukraine, the proportion of Russians indicating knowledge of Ukrainian increased significantly – out of 8,334,141 Russians 4,569,313 (54.8 %) indicated their knowledge of the Ukrainian language.[33] At the same time the

[32] It should be noted that the above data does not indicate the popularity of the Ukrainian language among ethnic Russians in Crimea - in 1989 only 160 056 of 1 629 542 ethnic Russians living in Crimea (9.8%) indicated that they speak Ukrainian. Thus, popularity of the Ukrainian language among ethnic Russians in Crimea was almost four times less than the national average. *See* State Statistics Service of Ukraine, All-Ukrainian population census. Database, Distribution of the population by nationality and the second language of the peoples of the USSR (persons) by Year, Nationality, Region, Settlement type, Gender and Second language of the peoples of the USSR, available at: http://db.ukrcensus.gov.ua/MULT/Dialog/varval.asp?ma=19A050501_03&ti=19A050501_03.%20Distribution%20of%20the%20population%20by%20nationality%20and%20the%20second%20language%20of%20the%20peoples%20of%20the%20USSR%20(0,1)&path=../Database/Census/05/01/&lang=2&multilang=en.

[33] State Statistics Committee of Ukraine, All-Ukrainian population census 2001. The distribution of the population by nationality and language except mother tongue. Ukraine, available at:

number of ethnic Ukrainians, who speak Russian has significantly decreased (from 22,258,914 out of 37,419,053 Ukrainians in 1989 (59.4 %)[34] to 16,256,473 out of 37,541,693 Ukrainians in 2001 (43.3 %)[35]). Meanwhile, the number of schools providing education in the Russian language dropped sharply: while in 1990/1991 there were 4,633 schools with instruction in Russian in Ukraine, by 2004/2005 their number dropped to 1,555, by 2010/2011 this number decreased to 1 240 (compared to 1990/1991 – almost 4 times), by 2014/2015 to 621 (compared to 1990/1991 – almost 7 times) and by 2019/2020 to 125 (compared to 1990/1991 – 37 times).[36] As a result, the load of schools teaching in Russian increased significantly: from 2004/2005 to 2019/2020 the pupil-school ratio in Russian language schools enlarged from 799,2 to 2250,1 (which is an almost 300% increase).[37]

(b) The total number of students studying in Russian in Ukraine has decreased from 3,666,000 in 1990/1991[38] to 696,000 in 2010/2011;[39] 281,000 in 2019/2020;[40] and

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http://2001.ukrcensus.gov.ua/eng/results/nationality_population/nationality_6/n56?data1=1&box=5.6W&out_type=&id=&data=1&rz=1_1&k_t=00&id=&botton=cens_db2.

[34] State Statistics Service of Ukraine, All-Ukrainian population census. Database, Distribution of the population by nationality and the second language of the peoples of the USSR (persons) by Year, Region, Nationality, Settlement type, Gender and Second language of the peoples of the USSR, available at: http://db.ukrcensus.gov.ua/MULT/Dialog/varval.asp?ma=19A050501_03&ti=19A050501_03.%20Distribution%20of%20the%20population%20by%20nationality%20and%20the%20second%20language%20of%20the%20peoples%20of%20the%20USSR%20(0,1)&path=../Database/Census/05/01/&lang=2&multilang=en.

[35] State Statistics Committee of Ukraine, All-Ukrainian population census 2001. The distribution of the population by nationality and language except mother tongue. Ukraine, available at: http://2001.ukrcensus.gov.ua/eng/results/nationality_population/nationality_6/n56?data1=1&box=5.6W&out_type=&id=&data=1&rz=1_1&k_t=00&id=&botton=cens_db2.

[36] Ukrainian Institute of Politics, *Dynamics of the number of schools and pupils as to languages of education*, available at: https://uiamp.org/isled/dinamika-kolichestva-shkol-i-uchenikov-po-yazykam-obucheniya.

[37] *See* Figure 24.

[38] The number of students is calculated by multiplying the share of students studying in Russian (51.4% - *see* A. Arefyev, *Russian Language in Ukrainian Republic in* RUSSIAN LANGUAGE AT THE TURN OF XX – XXI CENTURIES (Centre for Social Forecasting and Marketing, 2012), available at: http://www.demoscope.ru/weekly/2013/0571/analit03.php#_FNR_8) by the total number of students indicated in the statistical information of the State Statistics Service of Ukraine (*see* State Statistics Service of Ukraine, General education schools, available at: https://ukrstat.gov.ua/operativ/operativ2023/osv/osv_rik/zzso_90-22_ue.xls.

[39] Ukrainian Institute of Politics, *Dynamics of the number of schools and pupils as to languages of education*, available at: https://uiamp.org/isled/dinamika-kolichestva-shkol-i-uchenikov-po-yazykam-obucheniya.

[40] *Ibid.*

126,000 in 2020/2021, a 29-fold decrease.[41] The share of students studying in Russian decreased from 51.4 % in 1990/1991[42] to 29 % in 2000/2001,[43] to 17 % in 2010/2011-2013/2014[44] and to 3 % in 2020 – a 17-fold decrease from 1990/1991 (the lowest figure in 30 years),[45] while the share of those studying in Ukrainian increased sharply over the same period, from 47.9 % in 1990/1991[46] to 70 % in 2000/2001,[47] 82 % in 2010/2011-2013/2014[48] and 96 % in 2020/2021.[49] This trend has been seen across the country as a whole, as well as in many individual regions. For instance, in Donetsk the percentage of students studying in Russian decreased from 94 % in 1995/1996[50] to 1.6% in 2020/2021 (59 times),[51] while the percentage of those studying in Ukrainian increased from 6 % in 1995/1996[52] to 98.4 % in 2020/2021.[53] The proportion of students studying in

[41] The number of students is calculated multiplying the share of students studying in Russian language specified in the Yearbook of the State Statistics Service of Ukraine (3%) by the total number of students in 2020/2021 specified in the statistical information from the website of the State Statistics Service of Ukraine. *See* I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 117; State Statistics Service of Ukraine, General education schools, available at: https://ukrstat.gov.ua/operativ/operativ2023/osv/osv_rik/zzso_90-22_ue.xls.

[42] A. Arefyev, *Russian Language in Ukrainian Republic in* RUSSIAN LANGUAGE AT THE TURN OF XX – XXI CENTURIES (Centre for Social Forecasting and Marketing, 2012), available at: http://www.demoscope.ru/weekly/2013/0571/analit03.php#_FNR_8.

[43] O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

[44] *Ibid.*

[45] I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 117.

[46] A. Arefyev, *Russian Language in Ukrainian Republic in* RUSSIAN LANGUAGE AT THE TURN OF XX – XXI CENTURIES (Centre for Social Forecasting and Marketing, 2012), available at: http://www.demoscope.ru/weekly/2013/0571/analit03.php#_FNR_8.

[47] O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

[48] *Ibid.*

[49] I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 117.

[50] O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

[51] I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 117.

[52] O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

[53] I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 117.

Russian in Lugansk decreased from 91 % in 1995/1996[54] to 9 % in 2020/2021,[55] while the proportion of students studying in Ukrainian increased from 9 % in 1995/1996[56] to 91 % in 2020/2021.[57] In 2020 Ukraine passed legislation banning secondary education in Russian – Russians were only guaranteed the right to study in their native language up to 4th grade.[58]

(c) Even in Crimea, a region whose population has had a strong predisposition to learn Russian,[59] the policy of imposing the Ukrainian language in education has also manifested itself in significant structural shifts in the distribution of students by language of instruction, with an overall decline in the number of students. Thus, according to Ukraine itself, between 1992/1993 and 2013/2014 the number of students studying in Ukrainian increased by more than 150 times: from 82 people (less than 0.1% of all students) in 1992/1993 to 12,694 people in 2013/2014[60] (7 % of the total number of students), with a simultaneous decline in the proportion of students studying in Russian (in 1995/1996 about 327,355 people were studying in Russian (99.5 % of all students),[61] by 2013/2014, this figure dropped by half, to 158,174 people (90 % of all students),[62] and the number of schools providing education in Russian decreased (in just five years, from 2002/2003 to 2007/2008, their number decreased from 457 to 365, *i.e.* a decrease of 20 %[63], and in the period from 1990/1991 to 2013/2014, the total number of

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[54] *Ibid.*

[55] *Ibid.*

[56] O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

[57] I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 117.

[58] Article 5(5), Law of Ukraine "On Complete General Secondary Education", 16 January 2020 (as amended).

[59] Which is confirmed by Ukraine's official statistics – *see* O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

[60] *Application of the International Convention for the Suppression of the Financing of Terrorism and of the International Convention on the Elimination of All Forms of Racial Discrimination (Ukraine v. Russian Federation)*, Memorial of Ukraine, ¶536.

[61] Absolute values for the number of students were calculated based on the data of the State Statistics Service of Ukraine on the total number of students for a given school year and the percentage of educational institutions providing education in Ukrainian and Russian languages. *See* O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), pp. 411, 415.

[62] A. Ablyatipov, CRIMEA: EDUCATION IN MOTHER TONGUE (Dolya, 2018), p. 44.

[63] J. Besters-Dilger (ed.), LANGUAGE POLICY AND LANGUAGE SITUATION IN UKRAINE (Peter Lang, 2009), p. 214.

schools decreased from 583[64] to 354,[65] a 40 % decrease). It is worth noting, however, that between 1989 and 2014 the number of ethnic Ukrainians living in Crimea almost halved – from 625.9 thousand in 1989[66] to 492.2 thousand in 2001[67] and 344.5 thousand in 2014,[68] while the Russian population decreased much less significantly – from 1,629,542 in 1989[69] to 1,492,078 in 2014[70] (by 9 %). As a result, the proportion of ethnic Ukrainians in the ethnic composition of Crimea fell from 25.7 % in 1989 to 24.2 % in 2001 and 15.7 % in 2014. There is also a decreasing trend in the number of residents who consider Ukrainian their native language – if in 2001 about 10 % of Crimeans considered Ukrainian their native language,[71] by 2014 the figure dropped to 3.3 %.[72] At the same time, as of

[64] O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 411.

[65] State Statistics Committee of Ukraine, General Education Schools at the Beginning of 2013/14 School Year. Statistical Bulletin, 2014, p. 64, available at: https://ukrstat.gov.ua/druk/publicat/Arhiv_u/15/Arch_shool_bl htm.

[66] State Statistics Service of Ukraine, All-Ukrainian population census. Database, Distribution of the population by nationality and the second language of the peoples of the USSR (persons) by Year, Region, Nationality, Settlement type, Gender and Second language of the peoples of the USSR, available at: http://db.ukrcensus.gov.ua/MULT/Dialog/varval.asp?ma=19A050501_03&ti=19A050501_03.%20Distribution%20of%20the%20population%20by%20nationality%20and%20the%20second%20language%20of%20the%20peoples%20of%20the%20USSR%20(0,1)&path=../Database/Census/05/01/&lang=2&multilang=en.

[67] State Statistics Committee of Ukraine, All-Ukrainian population census 2001, About number and composition population of Autonomous Republic of Crimea, available at: http://2001.ukrcensus.gov.ua/eng/results/general/nationality/Crimea/.

[68] A. Surinov, M. Dianov (eds.), THE RESULTS OF THE POPULATION CENSUS IN THE CRIMEAN FEDERAL DISTRICT. FEDERAL STATE STATISTICS SERVICE (Statistical Institute of Russia, Moscow, 2015), p. 108, available at: https://rosstat.gov.ru/storage/mediabank/KRUM_2015.pdf.

[69] State Statistics Service of Ukraine, All-Ukrainian population census. Database, Distribution of the population by nationality and the second language of the peoples of the USSR (persons) by Year, Region, Nationality, Settlement type, Gender and Second language of the peoples of the USSR, available at: http://db.ukrcensus.gov.ua/MULT/Dialog/varval.asp?ma=19A050501_03&ti=19A050501_03.%20Distribution%20of%20the%20population%20by%20nationality%20and%20the%20second%20language%20of%20the%20peoples%20of%20the%20USSR%20(0,1)&path=../Database/Census/05/01/&lang=2&multilang=en.

[70] A. Surinov, M. Dianov (eds.), THE RESULTS OF THE POPULATION CENSUS IN THE CRIMEAN FEDERAL DISTRICT. FEDERAL STATE STATISTICS SERVICE (Statistical Institute of Russia, Moscow, 2015), p. 108, available at: https://rosstat.gov.ru/storage/mediabank/KRUM_2015.pdf.

[71] According to the States Statistics Committee of Ukraine, this number amounted to 10.1%, while the Federal Service of State Statistics of the Russian Federation provides a number of 9.5%. *See* State Statistics Committee of Ukraine, All-Ukrainian population census 2001, Linguistic composition of population, Autonomous Republic of Crimea, available at: http://2001.ukrcensus.gov.ua/eng/results/general/language/Crimea/. A. Surinov, M. Dianov (eds.), THE RESULTS OF THE POPULATION CENSUS IN THE CRIMEAN FEDERAL DISTRICT. FEDERAL STATE STATISTICS SERVICE (Statistical Institute of Russia, Moscow, 2015), p. 119, available at: https://rosstat.gov.ru/storage/mediabank/KRUM_2015.pdf

[72] A. Surinov, M. Dianov (eds.), THE RESULTS OF THE POPULATION CENSUS IN THE CRIMEAN FEDERAL DISTRICT. FEDERAL STATE STATISTICS SERVICE (Statistical Institute of Russia, Moscow, 2015), p. 119, available at: https://rosstat.gov.ru/storage/mediabank/KRUM_2015.pdf.

2014 the share of pupils studying in Ukrainian in Crimea amounted to only 7% of the total number of pupils, while the share of pupils studying in Russian according to this indicator was 90%.[73]

(d) Notably, in the 2009 external testing in Crimea, 96.8 % of more than 20,000 participants in the external independent knowledge assessment were tested in Russian;[74] this shows that even almost 20 years after Ukraine gained its independence, the vast majority of Crimean residents - including most ethnic Ukrainians - preferred to use Russian in education, despite the mass closure of Russian schools and the introduction of compulsory exams in the Ukrainian language. This confirms the above-mentioned statement about the strong predisposition of the population towards the Russian language despite the active policy of the central authorities in Kiev to impose the Ukrainian language in the educational system on the peninsula.

(e) The same decrease in the number of people receiving education in Russian is observed in the sphere of pre-school education. According to the official statistics, the proportion of children receiving pre-school education in Russian sharply decreased from 1995 to 2020 in various regions of Ukraine: in Donetsk the proportion dropped off from 90% in 1995 to 2% in 2020; in Lugansk the percentage reduced from 86% in 1995 to 8,3% in 2020.[75]

(f) The above changes, while statistically significant and ostensibly related to a state policy aimed at imposing a particular language and reducing access to education in minority languages such as the Russian language, have not been qualified by international organisations and institutions as racial discrimination against the Russian population. For example, the 2014 Report of the Committee of Experts on the Convention for the Protection of Minority Languages notes that Ukraine's

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[73] O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 415.

[74] Russkiymir, *The Ministry of Education of Ukraine did not allow examination in Russian in Crimea* (19 October 2009), available at: https://russkiymir.ru/news/16498/?sphrase_id=1463245.

[75] I. Verner (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2020 (State Statistics Committee of Ukraine, 2021), p. 111; O. Osaulenko (ed.), STATISTICAL YEARBOOK OF UKRAINE FOR 2013 (State Statistics Committee of Ukraine, 2014), p. 408.

undertakings under the Convention regarding education for Russian-speaking groups are considered fulfilled.[76]

(g) The statistical changes in the number of students in Russian and Ukrainian that emerged in 2014 following Crimea's reunification with Russia show that following the collapse of the Soviet Union the decrease in the number of Russian-speaking schools in Ukraine since 1990 has been much larger (374 times) than the decrease of Ukrainian language schools in Crimea after 2014 (7 times). The difference between the data on post-Soviet Ukraine and Crimea reunited with Russia is that, according to the statistical data, Russian was significantly more popular in Crimea, even among ethnic Ukrainians, than Ukrainian. Another key difference is Ukraine's adoption of legislative measures restricting, and eventually banning altogether, secondary education in Russian; by contrast, education in Ukrainian was not legally restricted or prohibited in Crimea after 2014. Consequently, the decline in the popularity of the Ukrainian language among the population of Crimea after its reunification with Russia can be seen as a response by the population of the region to Kiev's longstanding policy of artificially increasing the share of Ukrainian language teaching and imposing it through administrative measures.

61. In addition to the geopolitical factor described above, which influences the behaviour of ethnic groups as such in relation to language preferences, the following factors affected the situation with education in Crimea:

(a) The higher prestige of Russian universities as compared to Ukrainian ones; for students who wish to enter leading Russian universities in the future, proficiency in the Russian language is of high importance;

(b) Ukraine's policy of not recognising school diplomas obtained after 2014 at schools in Crimea;[77] other steps taken by the Ukrainian government at various

[76] Council of Europe, European Charter for Regional or Minority Languages, Application of the Charter in Ukraine, 15 January 2014, ¶¶1425-1458 available at: https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016806dc600.

[77] *See* Ministry of Education and Science of Ukraine, Letter No. 1/9-535 "On the organisation of education in general educational institutions for persons residing in the temporarily occupied territory in the Autonomous

times after 2014 (ban on entry for Crimean residents, application of the law on language and indigenous peoples in Ukraine that was disproportionate to the number of Russian and Ukrainian speakers in Ukraine, lack of response by Ukrainian law enforcement agencies to harassment and physical reprisals against the Russian speaking population by right-wing radicals,[78] etc.).

62. Significant changes in education in languages are revealed when analysing statistics for other countries of the same geographical region (Eastern Europe) that have experienced fundamental changes in their status, including secession from another state. For example, a comparison of the 1991 and 2002 population census results for Slovenia, formerly part of Yugoslavia,[79] shows that the use of Serbo-Croatian, one of the main languages of Yugoslavia, which was also the official language, more than halved (from 4.2 % to 1.8 % of the population of Slovenia) during this period.

63. **Based on the analysis of the Censuses' data, it can be concluded that no unjustified disparate impact on different ethnic groups, and especially no racial / ethnic discrimination campaign in the territory of the Republic of Crimea have been identified since 2014 to date.**

C. THE STATISTICS OF THE RUSSIAN FEDERATION'S LAW ENFORCEMENT ACTIVITIES IN CRIMEA SHOW THE ABSENCE OF DISPARATE IMPACT ON UKRAINIANS AND CRIMEAN TATARS

64. Taking into account the statistical data, it would be incorrect and unfounded to suggest the disparate treatment of Crimean Tatars and Ukrainians by law enforcement agencies as part of a systematic campaign of racial/ethnic discrimination, in particular the targeted criminal prosecution of Crimean Tatars and Ukrainians for the commission of

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Republic of Crimea, Sevastopol and anti-terrorist operation locations in Donetsk and Lugansk regions", 14 October 2014, available at: https://don.kyivcity.gov.ua/files/2014/10/17/sodo1.pdf.

[78] *See, e.g.*, MK, *Ukrainian Veterinarian Bullied for Discounts for Russian Speaking Individuals* (26 January 2021), available at: https://www.mk ru/incident/2021/01/26/ukrainskuyu-veterinarshu-zatravili-za-skidki-dlya-russkoyazychnykh html; Russia Today, *39 People Die After Radicals Set Trade Unions House on Fire in Ukraine's Odessa* (2 May 2014), available at: https://www.rt.com/news/156480-odessa-fire-protesters-dead/.

[79] Statistical Office of the Republic of Slovenia, Census of population, households and housing 2002.9. Population by mother tongue, Slovenia, Census 1991 and 2002, available at: https://www.stat.si/popis2002/en/rezultati/rezultati_red.asp?ter=SLO&st=9.

extremist crimes in Crimea and the inaction of law enforcement agencies in finding missing persons from these ethnic groups.

65. To address this matter, we analysed official statistics from the Prosecutor General's Office and the Ministry of Internal Affairs of the Russian Federation. This section uses a different methodology from the one used in the section above, due to the following circumstances. Chi-square statistic is used to characterize distributions for quantitative regularities of mass phenomena[80] which can only appear clearly if the law of large numbers is observed.[81] Since in the present case the statistics under study operate with small numbers (and on the part of Ukraine only isolated incidents / single facts are presented), application of chi-square statistic would not be adequate. Therefore, comparative analysis of data in relation to similar overall figures for the country as a whole is used in the study of statistics here.

1. Activities to Counter Extremism

66. In order to examine the actions of the law enforcement authorities in combating extremism, an analysis of statistics on extremist crimes provided for under the following provisions of the Criminal Code of the Russian Federation (hereinafter the RF Criminal Code) was conducted:

(a) Art. 280 of the RF Criminal Code ("Public Calls for Extremist Activities");

(b) Art. 280.1 of the RF Criminal Code ("Public Calls for Actions Aimed at Violating the Territorial Integrity of the Russian Federation");

(c) Art. 280.2 of the RF Criminal Code ("Violation of the Territorial Integrity of the Russian Federation");

(d) Art. 280.3 of the RF Criminal Code ("Public Actions Aimed at Discrediting the Use of the Russian Federation's Armed Forces to Protect the Interests of the Russian Federation and Its Citizens, to Maintain International Peace and Security, to Perform the Powers of State Bodies of the Russian Federation, and to Assist

[80] Investopedia, *Chi-Square (χ2) Statistic: What It Is, Examples, How and When to Use the Test* (23 October 2022), available at: https://www.investopedia.com/terms/c/chi-square-statistic.asp.

[81] *See* above, ¶9.

Volunteer Units, Organisations or Persons in Carrying Out the Tasks Entrusted to the Armed Forces of the Russian Federation");

(e) Art. 280.4 of the RF Criminal Code ("Public Calls for Activities Against the Security of the State");

(f) Art. 282 of the RF Criminal Code ("Incitement of Hatred or Enmity and Humiliation of Human Dignity");

(g) Art. 282.1 of the RF Criminal Code ("Organisation of an Extremist Association");

(h) Art. 282.2 of the RF Criminal Code ("Organising the Activities of an Extremist Organisation");

(i) Art. 282.3 of the RF Criminal Code ("Financing of Extremist Activities");

(j) Art. 282.4 of the RF Criminal Code ("Repeated Propaganda or Display of Nazi Attributes or Symbols or Attributes or Symbols of Extremist Organisations or Other Attributes or Symbols the Promotion or Public Display of Which is Prohibited by Federal Laws").

67. In Crimea until 2014, the activities of the radical Islamic groups, including Hizb-ut-Tahrir terrorist organisation, which is banned in many countries, including Russia, Turkey, Germany, countries of the Middle East and South-East Asia for distribution of extremist and radical racist literature, armed attacks and terrorist attacks, participation in coup attempts in various countries, collaboration with other terrorist groups,[82] were not suppressed in Crimea. This organisation freely distributed extremist propaganda literature produced in Lebanon among Crimean Tatars and published its own newspaper, "Vozrozhdeniye" ("Revival") in Crimea.[83] This created additional prerequisites to the spread of radical Islam ideology among the Muslim population of

[82] International Crisis Group, Radical Islam in Central Asia: Responding to Hizb Ut-Tahrir, 30 June 2003, ICG Asia Report No. 58, pp. 3, 10-11, 31 available at: https://www.files.ethz.ch/isn/28372/058_radical_islam_central_asia.pdf; The Washington Post, *Germany Bans Islamic Group* (16 January 2003), available at: https://www.washingtonpost.com/archive/politics/2003/01/16/germany-bans-islamic-group/8220a0d6-442e-403c-8382-45fd315cacdb/.

[83] Crimean Newswire, *Crimean Printers Refuse to Print Hizb ut-Tahrir Newspaper* (9 November 2013), available at: https://crimea-news.com/society/2013/11/09/1454.html.

Crimea until 2014. After Crimea joined the Russian Federation, the number of supporters of this aggressive terrorist organisation in Crimea decreased fourfold, from ten thousand to two and a half thousand.[84] The official statistics of crimes in the Russian Federation as a whole and in the Republic of Crimea in particular indicate that the reduction of radicalism was primarily due to pre-emptive measures to prevent manifestations of extremism and outreach to the youth of the Crimean Tatar community.

68. The crime rate changes with respect to reported and investigated extremist crimes in the Russian Federation and in the Republic of Crimea for the period from 2014 through 2022 are as follows[85]:

Number of extremist crimes and those prosecuted in Russia and the Republic of Crimea

	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**Total**
Registered in Russia as a whole	1,034	1,329	1,450	1,521	1,265	585	833	1,057	1,566	10,640
Registered in the Republic of Crimea	10	11	12	26	23	3	14	15	47	161
Registered in the Republic of Crimea as % of Russia as a whole	1 %	0.8 %	0.8 %	1.7 %	1.8 %	0.5 %	1.7 %	1.4 %	3 %	1.5 %
Identified persons in Russia as a whole	836	931	934	972	894	445	664	925	1,078	7,679
Identified persons in the Republic of Crimea	3	12	10	14	18	3	2	9	29	100
Identified persons in the Republic of Crimea as % of identified in Russia as a whole	0.4 %	1.3 %	1 %	1.4 %	2 %	0.7 %	0.3 %	1 %	2.7 %	1.3 %

69. A comparative analysis of crime rate dynamics in terms of countering extremism in Crimea demonstrates the following:

[84] RIA Novosti, *Ministry of Internal Affairs: Number of Hizb ut-Tahrir supporters in Crimea decreased fourfold* (30 March 2015), available at: https://ria.ru/20150330/1055412640.html.

[85] Office of the Prosecutor General of the Russian Federation, Crime Rates for Russia, 2010-2022, available at: http://crimestat.ru/offenses_chart; Office of the Prosecutor General of the Russian Federation, Crime in the Regions, data for the Republic of Crimea, 2014-2022, available at: http://crimestat ru/regions_chart_total.

(a) ***First***, over the period of 2014 through 2022, the number of extremist crimes detected in Crimea accounted for 1.5 % of the total number of such crimes recorded in the Russian Federation. The number of such crimes over the nine-year period in question was only 161, while the number of extremist crimes committed in the whole of Russia during the same period was 10,640.

(b) ***Second***, 100 individuals were prosecuted for committing such crimes in the Republic of Crimea, or 1.3 % of the total number (7,679) of persons detained under "extremist" articles [of the RF Criminal Code] in the Russian Federation over the period of 2014 through 2022, or about 0.005 % of the total population of the region.

(c) ***Third***, of these 100 individuals, who were prosecuted for extremist crimes in the Republic of Crimea over the 9-year period in question, about half (42 persons) committed acts mentioned in Article 282 of the RF Criminal Code.[86] They suffered punishment in the form of a fine, community service or a suspended jail sentence for "incitement of hatred or enmity and also humiliation of human dignity or a group of persons on the grounds of gender, race, ethnicity, language, origin, attitude to religion and also affiliation to social groups, which were committed publicly, including with the use of mass media or information and telecommunications networks, including the Internet, within one year after such persons have been penalised under administrative law for a similar offence". Thus, these criminals, despite having been previously held administratively liable for an illegal act, decided to commit it again. Generally, such offences are punishable by a fine. For example:

(i) The Supreme Court of the Republic of Crimea found P. Syuzev guilty of committing crimes under Art. 282 (1) of the RF Criminal Code, Art. 354.1 (1) of the RF Criminal Code for the commission of acts aimed at inciting hatred and enmity and also humiliation of dignity of a group of persons on the grounds of ethnicity using the Internet, as well as approval of the crimes defined in the Sentence of the International Military Tribunal for the

[86] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 491, Section 15, Subdivision: Republic of Crimea.

prosecution and punishment of the major war criminals of the European Axis. He was sentenced to a fine of 9 thousand roubles.[87]

(ii) V. Malakeyev was sentenced by the Supreme Court of the Republic of Crimea for a similar offence to 300 hours of community service and a fine of 30,000 roubles.[88]

70. As for the more serious crimes, in the period of 2014 through 2022, only one person was detained and only one criminal case was investigated in Crimea in connection with the organisation of an extremist association (Art. 282.1 of the RF Criminal Code).[89] During the same period, 296 persons were prosecuted under this article in the Russian Federation.[90] Such figures demonstrate that the population of the Republic of Crimea, including Ukrainians and Crimean Tatars, is not subject to any disadvantages.

71. Ukraine has made accusations related to response action against individuals who are members of groups with a strong ethnic (*e.g.*, the Mejlis of the Crimean Tatar People) or religious bias (Islamic groups made up of Crimean Tatars, as the largest Muslim denomination in Crimea). However, countering organised criminal groups, including those based on ethnicity or religious beliefs, is an integral part of any multinational state. It is logical to assume that ethnic group A would not form the basis of a criminal organisation whose activities are aimed solely at promoting the interests of ethnic group B. Specifically, statistics show, for example, that skinhead gangs are unlikely to have ethnic minority members of Asian countries. Consequently, law enforcement actions against such gangs therefore do not imply discrimination against members of other ethnic groups, who make up the vast majority of "skinheads", as compared to Asian ethnic groups. Similarly, it would be absurd to suggest that most of the active members of ISIS are Protestant Europeans, or that most members of Hizb-ut-Tahrir are Orthodox

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[87] Supreme Court of the Republic of Crimea, Sentence No. 1-25/2015, 30 October 2015, available at: https://vs--krm.sudrf.ru/modules.php?name=sud_delo&srv_num=1&name_op=case&case_id=14222743&case_uid=ac59375c-fd04-46f4-9a52-aa30666925de&delo_id=1540006.

[88] Supreme Court of the Republic of Crimea, Sentence No. 1-18/2017, 2 August 2017, available at: https://vs--krm.sudrf.ru/modules.php?name=sud_delo&srv_num=1&name_op=case&case_id=14224153&case_uid=f5fe7538-aea8-4394-9694-64f26ca4c228&delo_id=1540006.

[89] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 491, Section 15, Subdivision: Republic of Crimea.

[90] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 491, Section 15, Subdivision: Total for Russia.

Slavs. In any case, criminal groups are prosecuted because of their criminal activities, regardless of their ethnicity.

72. Since 2014, there have been no high-profile mass disturbances involving Crimean Tatars, Ukrainians and Russians residing in Crimea, which indicates a stabilisation of the operational situation and the correct application of criminal and administrative legislation of the Russian Federation in relation to countering the spread of religious extremist ideology.

73. The statistical data forms of the Ministry of Internal Affairs of the Russian Federation do not provide for keeping records of individual investigative actions (searches, examinations, inspections, etc.) in relation to Crimean Tatars, Ukrainians, Russians or representatives of any other ethnic groups. Similarly, there is no evidence that there is international experience in keeping such statistics. It is logical to assume that keeping such statistics is impractical, since in any democratic state ethnicity does not play any role in these issues. We believe that statistics on investigative actions, including searches and examinations in relation to any ethnic group, in particular a Russian-ethnic group, are not kept by the Ukrainian law enforcement agencies either.

74. During the period from 2014 through 2022, citizens of Ukraine committed only 48 extremist crimes out of 10,640, the total number of reported crimes in this category.[91] That is, citizens of Ukraine were prosecuted in only 0.45 % of all extremist crime cases in Russia during the nine years of tense relations between the two states. In comparison, citizens of Tajikistan committed 110, or 1.03 %, of such crimes in the Russian Federation during the same period.[92]

75. The analysis of the above statistical data shows that there is no evidence of disparate treatment, let alone discrimination or targeted criminal prosecution of Ukrainians and Crimean Tatars on the territory of the Republic of Crimea as well as on the territory of the other constituent entities of the Russian Federation.

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[91] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Information on crimes committed by foreigners and stateless persons and crimes committed against them.

[92] *Ibid.*

2. Investigating the abductions and disappearances

76. In accordance with the Constitution of the Russian Federation, the law enforcement agencies pay particular attention to organising the search of missing persons in order to safeguard the rights of citizens. This is one of the tasks of the police under Federal Law No. 3-FZ "On Police" dated 7 February 2011[93] and Federal Law No. 144-FZ "On Operative and Search Activity" dated 12 August 1995.[94] When such reports are considered, national, racial or ethnic origin or citizenship does not affect the timing or objectivity of decision-making or the completeness of operative and search activities carried out to establish the whereabouts of the missing person.

77. In the period from 2014 to 2022, 1,353 missing persons search cases were opened in the Republic of Crimea and the city of Sevastopol. Of these, 1,039 (76.8 %) were Russians, 228 (16.9 %) were Ukrainians, and 86 (6.4 %) were Crimean Tatars. 1,095 missing persons cases have been closed, including in relation to: 878 Russians, 148 Ukrainians and 69 Crimean Tatars, *i.e.*, 84.5 % of Russians, 64.9 % of Ukrainians and 80.2 % of Crimean Tatars. The search operations in relation to 258 missing persons, including 161 Russians, 80 Ukrainians and 17 Crimean Tatars, is still ongoing. Of 258 persons that were searched for, in 188 instances it was found that the disappearance involved circumstances related to criminal activity and criminal cases were opened, 55 of which were closed.[95]

78. An exhaustive list of circumstances that may indicate the commission of a crime against a missing person is defined by the relevant interdepartmental regulation.[96] At the beginning of 2023, there were 133 missing persons as a result of disappearance of whom criminal proceedings were initiated, including 106 (79.7 %) of Russians, 13 (9.8

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[93] Federal Law No. 3-FZ "On Police", 7 February 2011, available at: https://rg ru/documents/2011/02/07/police-dok.html.

[94] Federal Law No. 144-FZ "On Operative and Search Activity", 12 August 1995, available at: https://docs.cntd ru/document/9012676.

[95] According to the database of the Ministry of Internal Affairs of the Russian Federation.

[96] Ministry of Internal Affairs of the Russian Federation, Prosecutor General's Office of the Russian Federation, Investigative Committee of the Russian Federation, Joint Order "On approval of the Instruction on the procedure for considering applications, crime reports and other information on incidents related to disappearance of persons", 16 January 2015, available at: https://mvd.consultant.ru/documents/1053682?items=1&page=1.

%) of Ukrainians and 14 (10.5 %) of Crimean Tatars.[97] In relation to the total population of the ethnic groups of Crimea, 0.0082 % of Russians, 0.0089 % of Ukrainians and 0.0056 % of Crimean Tatars are searched for. The total number of missing persons who are searched for in the Russian Federation is 28,359.[98] As follows from the above data, there are fewer missing persons in the Republic of Crimea than in other regions of the Russian Federation in general. For example, while 258 persons are currently searched for in Crimea, there are 796 people searched for in Crimea's neighbouring Krasnodar Krai (three times as many), which is fully comparable given that the population of Krasnodar Krai is about 5.6 million people (also three times as many).[99]

79. Any claims of disparity according to the ethnic composition of the missing persons currently searched for is completely refuted by the statistical data given above and by the international experience:

(a) In the Italian metropolitan region of Lazio (with population of about 5.7 million – approximately three times the population of Crimea),[100] 4,983 people (*i.e.* 19 times more than in Crimea), 89 % of whom are non-Italians, have not been found in the comparable period from 2013 to 2022 (the situation is similar in several other Italian regions).[101]

(b) In the American city of Dallas, whose population is approximately 1.5 to 2 times smaller than in Crimea, the number of unsolved cases of disappearances increased

[97] According to the database of the Ministry of Internal Affairs of the Russian Federation.

[98] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 030, Section II, Subdivision: Russian Federation.

[99] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 030, Section II, Subdivision: Krasnodar Krai.

[100] Tuttitalia, Population Lazio, 2001-2021, available at: https://www.tuttitalia.it/lazio/statistiche/popolazione-andamento-demografico/.

[101] Extraordinary Government Commissioner for Missing Persons, XXVIII Report Year 2022 ten years after the Missing Persons Act, 2022, pp. 145-147, available at: https://commissari.gov.it/media/1952/xxviii-relazione-anno-2022-commissario-straordinario-persone-scomparse.pdf.

by 117 in 2022 alone (from 204 in January[102] to 321 in December[103]), almost half the number of cases unsolved in Crimea in 8 years.

80. It should also be noted that the number of premeditated murders committed in Crimea has dropped significantly since 2014. While in 2015 there were 167 registered premeditated murders, in 2022 the number decreased to 89.[104] Most of them are of a domestic nature and, due to the "small numbers", cannot bear the signs of any mass phenomenon. In total there were 81,832 murders in the Russian Federation from 2014 to 2022 and 71,432 were solved,[105] while in Crimea Federal District there were 957 and 862 solved.[106] The number of premeditated murders in Crimea is less than 1.2 % of the national total and correlates with the population of Crimea in relation to the population of the Russian Federation (which, as stated above, is 1.3 %).

81. Analysis of statistical data from the Ministry of Internal Affairs and the Prosecutor General's Office of the Russian Federation showcases that the Russian Federation is implementing the principles of equality set out in its Constitution. The law enforcement agencies effectively carry out the full range of investigative activities required, irrespective of the race or ethnicity of the victim or accused person, his or her citizenship or political beliefs, as confirmed by official statistics.

82. Thus, it can be concluded on the basis of the analysis of statistical data that there are actually no manifestations of disparity, let alone systematic discrimination, or any campaign of discrimination, on racial or ethnic grounds in the territory of the Republic of Crimea during the period under review from 2014 through 2022. The number of crimes against individuals, as well as identified extremist crimes is lower than in other

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[102] National Missing and Unidentified Persons System, Unresolved Missing Persons Cases Published in NamUs, January 2022, available at: https://namus.nij.ojp.gov/sites/g/files/xyckuh336/files/media/document/namus-stats-overall-january-2022.pdf.

[103] National Missing and Unidentified Persons System, Unresolved Missing Persons Cases Published in NamUs, December 2022, available at: https://namus.nij.ojp.gov/sites/g/files/xyckuh336/files/media/document/namus-stats-overall-december-2022.pdf.

[104] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 491, Section II, Subdivision: Crimean Federal District.

[105] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 491, Section II, Subdivision: Russia.

[106] According to the internal database of the Main Information and Analytical Centre of the Ministry of Internal Affairs of the Russian Federation, Form 491, Section II, Subdivision: Crimean Federal District.

regions of the Russian Federation comparable in number and geographical location. The rights of Ukrainians and Crimean Tatars residing in the territory of the Republic of Crimea with regard to their security are fully ensured in accordance with the Constitution of the Russian Federation.

31 May 2023

Exhibit A

Method for statistical analysis in the sphere of education.

1. The determination of the "systematic campaign of racial / ethnic discrimination" in the territory of the Republic of Crimea should first of all be based on statistics, in particular on the results of the analysis of the Population Censuses' data as the only reliable source of information on the size, ethnic composition, level of education of the population of the Russian Federation and its constituent entities.

2. The method for identifying a "systematic campaign of racial / ethnic discrimination" in the sphere of education on the basis of Population Censuses' data consists of an analysis of statistical cross-tables (contingency tables), variation indicators, hypothesis testing using the chi-square statistic[1] - χ^2, assessment of the closeness of the relationship by Pearson and Chuprov contingency ratios, as well as by Spearman rank correlation coefficient. The assessment of differences in structures by ethnicity is based on the calculation and comparison of specific weights and a generalised / integral indicator of structural shifts / differences, *i.e.* the V. Ryabtsev Index.[2]

3. When there is a correlation between a variation of qualitative features, their interrelationship is considered. In such cases, correlation indicators are used to evaluate the contingence. The chi-square statistic χ^2 helps to determine whether or not there is a significant correlation between qualitative (categorised) variables.[3] Usually, two hypotheses are implied:

   (a) The null hypothesis, H_0, which implies that there is no relationship between attributes;

   (b) The alternative hypothesis, H_1, which shows that a correlation exists.

4. The formula for calculating the statistic is as follows:

$$\chi^2 = (\sum \frac{n_{ij}^2}{n_i n_j} - 1) \cdot n \qquad (1)$$

where n_i is the sums of frequencies per row;

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[1] Investopedia, *Chi-Square (χ2) Statistic: What It Is, Examples, How and When to Use the Test* (23 October 2022), available at: https://www.investopedia.com/terms/c/chi-square-statistic.asp.

[2] Yu. Trifonov, V. Veselova, Methodological approaches to analyzing the structure of the economy at the regional level, *Voprosy statistiki*, 2015 (2), available at: https://voprstat.elpub.ru/jour/article/view/190/191.

[3] Britannica, *Chi-squared test hypothesis testing* (30 March 2023), available at: https://www.britannica.com/topic/chi-squared-test.

n_j is the sums of frequencies by column;

n_{ij} is the initial frequencies in the table;

n is the total number of attributes (respondents).

5. To confirm the correlation between variables, Pearson distribution testing is carried out. If the calculated value is greater than the tabulated one, it can be asserted that the correlation between the factors (or the consistency of respondents' opinions) is not random, hence the correlation exists. In order to determine the tabulated value as per χ^2 - distribution table, it is necessary to calculate the number of degrees of freedom by using the formula $\nu = (r - 1)(c - 1)$, taking into account the table size (r - number of rows in the correlation table, c - number of columns in the table),[4] and to know the significance level (in most cases $\alpha = 0.05$ - 5% significance level).

6. When each of the qualitative attributes consists of more than two categories (groups), Pearson's[5] and Chuprov's cross-correlation coefficients can be applied to determine the degree of strength of correlation, which are calculated using the following formulas:

$$C_1 = \sqrt{\frac{\chi^2}{\chi^2 + n}} \text{ - Pearson's coefficient,} \quad (2)$$

$$C_2 = \sqrt{\frac{\chi^2}{n\sqrt{(r-1)(c-1)}}} \text{ - Chuprov's coefficient.} \quad (3)$$

Both coefficients vary from 0 to 1.

When C_1 and $C_2 \geq$ of 0.3 one can say that there is a correlation between the attributes.

7. Spearman's test is used to analyse paired correlations between attributes, which can be measured in ordinal (rank) scales. The Spearman rank correlation coefficient (ρ) is calculated according to the formula:

$$\rho = 1 - \frac{6\sum_{i=1}^{n} d_i^2}{n(n^2-1)}, \quad (4)$$

where d_i is the difference between the *i*- pairs of ranks;

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[4] J. Watkins, AN INTRODUCTION TO THE SCIENCE OF STATISTICS: FROM THEORY TO IMPLEMENTATION, (2016), p. 395.

[5] Britannica, *Pearson's correlation coefficient. Statistics* (29 March 2023), available at: https://www.britannica.com/topic/Pearsons-correlation-coefficient.

n is the number of ranked values of the variable, *i.e*. the pairs of ranks to be compared.

$$-1 \le \rho \le 1 .$$

8. If the ranks of the two attributes coincide completely, the coefficient will be equal to "1", which characterises the strongest possible direct correlation ($\rho > 0$ – rank consistency is direct); if the ranks of the two attributes have the strict opposite direction, then the coefficient will be equal to "-1" ($\rho < 0$ – rank consistency is inverse); if there is no correlation between the variables, then the coefficient is equal to zero ($\rho = 0$ – no correlation between ranks). The Spearman rank correlation coefficient[6] can also be used to identify the correlation between indicators measured on a metric scale; moreover, it is appropriate to calculate this coefficient when atypical values (outliers) are present in samples, as the Spearman rank correlation coefficient is more resistant to outliers than the Pearson correlation coefficient.

9. The structure of the population under study is seen as the mutual arrangement of structural units, the relationships between which determine its specific features. Developing a method for studying structural changes is necessary to determine the development of each process observed in society. A comprehensive analysis of the structure required an answer to the following questions: Have there been changes in the structure during the period under review and what is their nature? Has a phenomenon of "unbalanced" structure been observed? The system of indicators determining the size and dynamics of structural changes should include individual and general characteristics. The individual indicators include the following: the share of a structural unit and absolute and relative change in the shares of structural units. The generalizing characteristics should include: ***first***, characteristics of the properties of a single structure (a system of generalizing distribution indicators, including extreme values of the indicator in the aggregate as a whole and by groups, the average level of the varying indicator (taking into account the asymmetric distribution), and the nature of variation; ***second***, generalizing indices of two structures comparison (in time or space).

10. For an in-depth analysis of the population under study, it is necessary to take into account the spread or variation in values of individual units, which is an important characteristic of

[6] Britannica, *Statistics science*, available at: https://www.britannica.com/science/statistics/Residual-analysis#ref60722.

the population under study.[7] The main indicators that characterise a variation are the following:

(a) the range of variation;

(b) a dispersion;

(c) a mean squared deviation; and

(d) the coefficient of variation.

11. The simplest measure of variation is the variation range (range of variability in the data).[8] It is the difference between the maximum and minimum values of an indicator: $R=X_{max} -X_{min}$. A disadvantage of this indicator is that it only evaluates the boundaries of variation of an attribute and does not reflect its variability within those boundaries. The dispersion does not contain this disadvantage and is calculated as the average of the sum of the squares of the deviations of the empirical values of an indicator from its mean:

$$\sigma^2 = \frac{\sum \left(x_i - \bar{x}\right)^2}{n} \qquad \text{unweighted formula} \qquad (5)$$

$$\sigma^2 = \frac{\sum \left(x_i - \bar{x}\right)^2 f_i}{\sum f_i} \qquad \text{weighted formula} \qquad (6)$$

12. In some cases, it is more convenient to calculate the dispersion using a different formula:

$$\sigma^2 = \overline{x^2} - (\overline{x})^2 \qquad (7)$$

$$\text{where } \overline{x^2} = \frac{\sum x_i^2}{n} \quad \text{or} \quad \overline{x^2} = \frac{\sum x_i^2 fi}{\sum fi} \qquad (8)$$

13. A disadvantage of the dispersion indicator is that its dimension does not correspond to the dimension of the attribute under study. This disadvantage is eliminated by calculating and analysing the standard deviation:

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[7] V. Gudivada, *Data Analytics: Fundamentals* in M. Chowdhury, A. Apon *et al*. (eds.), DATA ANALYTICS FOR INTELLIGENT TRANSPORTATION SYSTEMS (Elsevier, 2017), ¶2.2.1.1.

[8] Britannica, *Statistics science*, available at: https://www.britannica.com/science/statistics/Residual-analysis#ref60722.

$$\sigma = \sqrt{\frac{\sum(xi - \overline{x})^2}{n}}$$ unweighted formula (9)

$$\sigma = \sqrt{\frac{\sum(xi - \overline{x})^2 fi}{\sum fi}}$$ weighted formula (10)

14. The coefficient of variation measures the variability in relative terms, relative to the mean value, which is preferable in many cases: the indicator is a relative measure of variation. The coefficient of variation is the ratio of the standard deviation to the mean value of the varying attribute:

$$V = \frac{\sigma}{\overline{x}} \times 100\% \quad (11)$$

15. If the coefficient of variation does not exceed 33%, the population by the attribute in question can be considered virtually homogeneous. Variation indicators are more informative if they are calculated for comparative analysis purposes. In such cases, the indicators calculated for one population are compared with the indicators calculated for another similar population or for the same population but for a different time period.

16. To assess the significance of structural differences in relative terms, it is reasonable to apply the integral Ryabtsev index which takes into account the size of the population, the number of groups identified and the different contributions of groups to the total volume of the indicator under analysis. The Ryabtsev index, a generalizing indicator of structural changes, is used not only to examine the differences between two populations (*e.g.* by ethnic origin) but also to assess the dynamics of structure change. In such cases, the Ryabtsev index should be interpreted as a generalizing indicator of structural changes over time.

$$I_p = \sqrt{\frac{\Sigma(d_{i1} - d_{i0})^2}{\Sigma(d_{i1} + d_{i0})^2}} \quad (12)$$

where d_i is the population volume structure expressed as a fraction of units.

17. The Ryabtsev integral coefficient of structural changes / differences has the best analytical properties, as it has the following rating scale:

RYABTSEV INDEX QUALITATIVE RATING SCALE

Range of values	Characteristics of a measure of structural changes / differences	Range of values	Characteristics of a measure of structural changes / differences
0.000-0.030	Structures approximation	**0.301-0.500**	Significant level of structural differences
0.031-0.070	Very low level of structural differences	**0.501-0.700**	Quite significant level of structural difference
0.071-0.150	Low level of structural differences	**0.701-0.900**	Opposite type of structures
0.151-0.300	Substantial level of structural differences	**0.901 and above**	Exact opposite of structures

18. Depending on the purposes of a study of structural changes, the Ryabtsev index can be used, ***first***, to evaluate internal structural differences in a particular population by time periods; ***second***, to evaluate the significance of differences between populations with the same breakdown by a particular attribute for a specific period; and ***third***, to evaluate structural differences between the studied structure of a particular population in a particular region and the nationwide structure.