EQUALITY AND QUALITY IN EDUCATION. A MULTIDIMENSIONAL ANALYSIS OF THE RESULTS OF THE 2021 NATIONAL ASSESSMENT EXAMINATION IN THE NORTH-EAST REGION, ROMANIA

DOI: https://doi.org/10.18509/GBP22289b
UDC: 373.5.091.27(498-18)"2021"

Victoria Buza
Marinela Istrate
Alexandru Ioan Cuza University of Iași, Faculty of Geography and Geology, Department of Geography, Iași, **Romania**

ABSTRACT

This study aims the analysis of the academic performance indicators related to the 2021 National Assessment Examination. The subject has a growing interest in the context of the fluctuations of the teaching methods and social interactions in the previous school year between physical and online classroom, but also from the perspective of the digitization level in urban versus rural areas. The chances of school un(success) are built during the middle school years, being influenced by a multitude of socioeconomic variables, amplified by territorial discrepancies. This examination is the key-method of assigning students to the next level of education, the high school, which has a crucial role in outlining the career prospects of future adults. The competition between the averages scores at this school level increases the value of the exams of the National Assessment, which is being seen as an important step to access a prestigious educational institution. Generally speaking, the urban areas offer the ingredients of the school performance in a much easier way than the rural areas, where certain challenges and preconceptions related to the quality of education must be overcome.

The study is based on official statistics, at the level of territorial administrative unit (LAU), throughout the middle school cycle of the 2021 graduates, respectively 2017-2020. This interval focuses on the analysis of the temporal and spatial evolution of the indicators that (in)directly influenced these results.

The conclusions reveal major discrepancies between the results obtained by students from urban and rural, while pointing out the importance of spatial accessibility and economic wealth, as essential elements for ensuring the chances of school success. These differences highlight the spatial dysfunctions between city-village relationship, which makes it unlikely for society and education system and to ensure an equal start for all children.

Keywords: geography of education, social equity, school dropout, academic performance, gender inequality

INTRODUCTION

The efficiency of an education system is determined equally by the resources allocated and the results achieved [12]. Financial contributions in education determine the development of human capital, therefore they must be regarded as long-term investments that ensure the development of society - the higher the state expenditure on education, the lower the level of inequality in the future [32]. It is recognized, however, that education is becoming increasingly expensive and its share of the household expenses is becoming

higher, with more parents having an interest in providing children with the necessary skills in an increasingly competitive society [21],[26]. In many developed countries, education has become a business, with the state transferring part of the costs to families that have readiness and the desire to contribute to higher levels of education for their descendants. This educational process dynamic also involves the issue of equal opportunities, since families have different access to educational services, depending on the place of residence, the standard of living, income and the level of education of adults (their previous form of education).

In general, it is considered that the main causes hindering access to education are the type of residential area in which the child lives (the rural environment is more vulnerable in this respect) [1],[33], the stereotypes in society [22], and, most importantly, the level of poverty. Human capital (parents' education, income, professional status) and physical, material capital (resources used for educational purposes) are positively associated with achieving a satisfactory level of education [10].

As with other Central and Eastern European countries, the Romanian education system has undergone profound transformations since 1990, going through a period of change that can be classified as a process of educational transition. It can be characterized by the fusion of three main components: the shift from a totalitarian to a democratic political system; overcoming the deep structural economic crisis, going through a difficult period (transition period) and achieving the status of an emerging economy today; the ongoing updating and adaptation of society to global change [25].

What is specific to Romania is the vulnerability of the education system (especially highlighted in the past two years in the pandemic period), which is linked to the quality of human resources, the material conditions and existing facilities, lack of accessibility to educational institutions [33]. Unequal access to education and the profound implications of this phenomenon are a highly debated topic over the past 50 years and continue to be discussed, especially as it influences the success rate of young people's integration into the labor market and society, despite the officially declared equality, at ideological level [6].

Vulnerabilities are particularly visible in rural areas, which face serious problems of functional illiteracy, massive early school absenteeism, difficulties in learning, poor performance or lack of motivation, all of which increase as they move from primary to secondary school and playing a decisive role in the transition from secondary to high school [20]. The concept of equity, which is theoretically guaranteed by the application of compulsory education, is closely linked to accessibility, but which in reality is difficult to ensure, even in the most advanced societies [28].

In terms of the sustainability of education, the success of this process depends on all parties involved: pupils (who benefit from the educational process), parents (who operate a selection between different schools but also contribute very much to the education of their children), teachers (who define the strategy and guidelines, but also implement them). Lastly, the local community (which supports the system by providing funds and benefits from an increase in overall educational attainment) [7].

The focus of this article is the National Assessment, which marks the transition of pupils from secondary school to high school. All students who completed secondary education that year or who did not pass the exam in previous years can take this assessment. Its value is crucial for access to high school and later, university studies. The rate of promotion, the marks obtained at the two disciplines (Romanian language and maths),

absenteeism, school dropout, the distribution of marks by areas and gender, all these elements contribute to the shaping of the socio-economic level of a region.
The aim of our study is to highlight the educational disparities that exist in one of the poorest and most populated regions of the country – the North East region, highlighting certain types of behavior and their distribution as being strongly influenced by the place of residence, and along the lines of social, economic or cultural origin [5], [16].
The working hypotheses are as follows:
H1: The distribution of results can be highlighted along distinct axes (rural / urban, boys/ girls).
H2: Children attending rural schools are at a disadvantage to their urban colleagues from the start, reducing their long-term chances of ensuring a high level of quality of life.
H3: Gender inequality is perceived in favor of boys, who are seen as more ambitious and talented.
The article is structured as follows: the next section is dedicated to the methodology used, then the results (exam's scales distribution, urban-rural gap, gender inequality, school dropout) and the conclusions.

METHODOLOGY

The results of the National Assessment, which marks the transition from secondary to high school (8th grade), involve multiple manifestations of social conditions and their geographical analysis is an essential element for distinguishing similar territories and delimiting spaces where certain economic dynamics manifest. The study is based on the official government data sources (www.data.gov.ro), which provides a series of statistical data on the Romanian education system. The National Assessment scores database 2021 for the North-East region is composed of 540 communes (LAUs [38]) with secondary school graduates, out of a total of 552 (including cities) with 25359 enrolled pupils, of which 23840 participated in both exams. In one LAU the percentage of exam attendance was 0%.
Therefore, the statistical analyses in this article take into account 539 entries. In order to cartographically represent the gross results of the students' scores, an additional database of the school network from the same area was used, from which the units of interest, respectively the secondary schools were selected. The data of the two sources were aggregated according to the SIIIR code (a unique code for each educational unit in Romania).
The most relevant parameters for this study are: Romanian language exam, maths and final scores for every LAU, the number of pupils enrolled at the beginning of the school year and those present or absent at the National Assessment; the data was also split by areas (urban-rural) and gender (male-female). For the last classification, the differences between the groups were analysed according to the Cohen model (1988) and for the statistical approach of the rural / urban and female / male dual relationships, the XLSTAT-Student Extension software was used, which facilitated the creation of boxplots, histograms and scattergrams.

[38] Local Administrative Unit, comprised of communes and municipalities

RESULTS AND DISSCUSIONS

Exam's scores distribution

The starting point of the analysis consisted of the mapping of the two exams: Romanian language and maths, as well as the final average (figure 1). Firstly, the defining factor in the spatial distribution of the secondary schools is the demographic size of the localities, especially the proportion of children between 11-14 years as the age structure determines the temporal stability of schools and classes. Secondary schools are individualized by the intermediate level they undertake, both in terms of educational and distribution within the territory; they are found where the demographic characteristics of the territory allows the support of such the institution, for example, in communes with a low school population there is usually only one school in the the main village: 231 rural localities are in this situation and 6 small towns (Darabani, Buccea jud. Botoșani, Cajvana, Solca, Suceava county, Podu Iloaiei, Iaşi county, Slănic Moldova, Bacău county). Most of the small towns in North-East Region (Murgeni, Negrești, Vaslui county, Broșteni, Frasin, Millișăuți, Suceava county) have 2-3 secondary schools and the most numerous are concentrated in county city-residences: 132 secondary schools out of 1082, which have the highest density of the school age population and the highest level of accessibility to the educational unit in relation to transport and distance-time options [15].

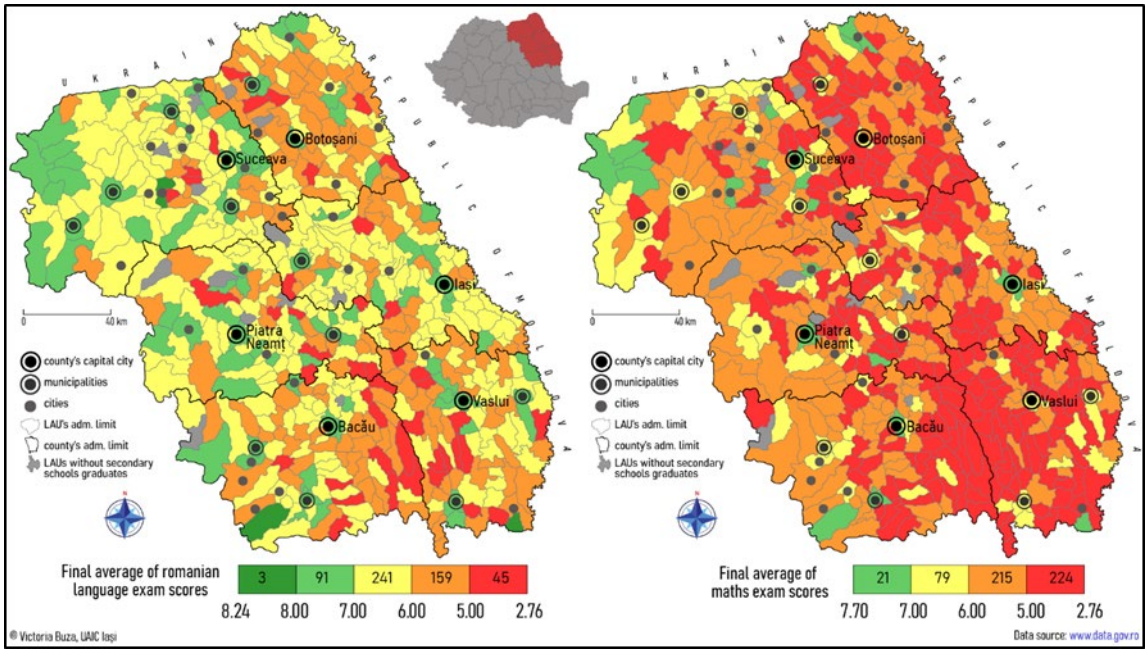

Figure 1 Distribution of the final average scores for Romanian language and maths exams.

In 2021 only 12 LAUs did not have pupils enrolled in the national evaluation, although they all have secondary schools, due to poor training of pupils and lack of interest in continuing education, either high school or attending a vocational school - which would allow them to be qualified in a profession / obtain a professional certificate. This situation is also common in agricultural-based villages, far from urban centers, where the majority of the population is economically instable. For disadvantaged children going to school and high school (which are in cities) represents a financial burden for parents and overcoming these challenges and is done with a lot of sacrifices. Thus belonging to a

vulnerable environment makes it nearly impossible to ensure school equity, as differences in educational performance between pupils occur very early.
As regards the distribution of the final average scores for Romanian language and maths exams (figure 2), the preservation of the same color classes allowed the comparasion between them and the highlighting of certain territorial configurations, most of which are explained by factors mentioned above: road accessibility, proximity to urban areas.

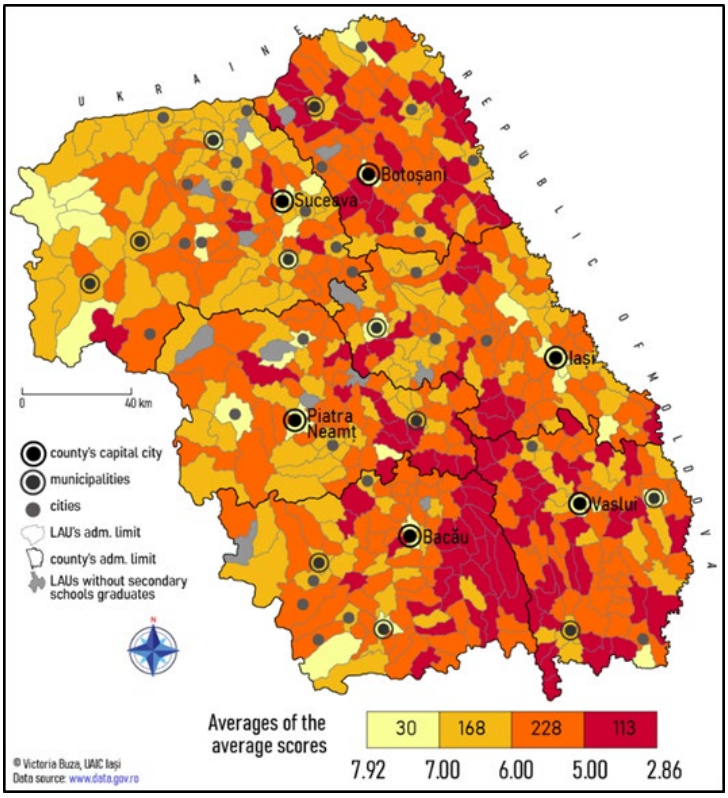

Figure 2 Distribution of the averages of the final average scores.

The element that stands out is the major discrepancy between the final scores at the Romanian language exam compared to the maths, where most LAU's (81.44%) achieved results below 6.00. The poor educational outcomes for maths exam which are almost uniform throughout the North-East region, (with few specific exceptions, in the Dornelor Depression and some urban centers) confirm serious problems with the quality of the teaching staff, teaching methods, exam preparations and insufficient communication between parents and teachers. On the other hand, the higher grades at the Romanian language exam are explainable through the flexibility of the subjects, which implies the creativity and originality of the answers, compared to the rigid and exact nature of maths correct answers. The territorial distribution of the Romanian language scores proves that urban areas are not a guarantee of the good scores, even if they are more advantageous terms of concentration of highly qualified human capital, but rather these are related to conjunctural factors such as the connection to online resources (especially important in 2021), the quality of teachers (Romanian language teachers are easier to find than maths) and the financial availability of families for extra hours [2]. In the northwesten part of the study area (Bucovina Hills, Suceava Plateau) are concentrated the LAUs with high scores at the Romanian language, areas coinciding with higher accessibility indicators because

the secondary schools are concentrated in the main villages and the quality of the road network allows to quickly cover the distances to school [15] [34].
Furthermore, the two exam averages (figure 2) underline a clear distinction of the dysfunctional disparities between urban - deep rural relationship. Therefore, in cities and towns the general average was 7.23 (Iași, 7.78, Bacău, 7.56, Piatra Neamț, 7.41), while in rural while the figures are much lower, with an average of 5.66. Regarding small cities (Gura Humorului, Târgu Neamț, Onești, Darabani), which had between 63 and 311 students, achieved better grades than some of the counties' capital cities. On the other hand, rural communities that have excelled with scores over 6.00 are unevenly distributed across the territory, mostly in the north of the Suceava county and in the Neamț Subcarpathians, areas known with a tradition of high school attendance [34].
In Vaslui and Botoșani counties the geographical distribution of the average scores over 6.00 expresses a dependency relationship between small cities and the LAUs located in the immediate proximity where values are higher than compared to the LAUs exceeding 30-35 km (Dorohoi, Darabani, Ștefănești, Bârlad). On the other hand, a compact area with low final scores are concentrated in the area of Tutova and Bașeu Hills, which is explained by a deep rural character and by poor road infrastructure, which leads to reduced accessibility to educational services as many villages have only primary school. Additionally, there are few trained adults and the average time to reach to the nearest secondary school is over 20 minutes. In this socially distressed area, the conditions for school failure are emerging: the economy based mainly on traditional agriculture, low education and household-quality indices, poverty, labor emigration of parents and neglect of children left at home. Of course, there is no doubt that the LAU's administrative classification between urban and rural does not reflect all the hierarchy levels of the two areas and the multiple features of the geographical territory, but sketches a clear separation of the theoretical school succes chances between urban/rural pupils.

Urban - Rural gap

Starting from the concept of "equal chances" and "social justice" [5], [27], we state that it is purely theoretical, based an ideal educational system, where all students begin from the same start level, with the same educational resources, at every school in a territory. The analysis below confirms that this is not possible: actually, the best results belong to those already who are already the most advantaged. Firstly, at the 2021 National Assessment, pupils from urban and rural areas did not have the same training, those form cities always benefited due to a series of interdependent factors such as: higher family incomes that have allowed more educational (online) resources, internet conection, smaller family nucleus, which allowed the individualization of the study time, parental education and the cultural capital of the family, higher in urban than in rural areas. [36]. Social differences, reflected through high poverty rates among the rural population and the concentration of the highly educated population in urban settings, are linked to the uneven distribution of the economic value of the territory. This is a natural phenomenon and discrepancies cannot be avoided: the urban areas will always provide more opportunities to develop and attract human capital compared to what rural can offer. Thereby, the gaps and challenges related to the financial vulnerability of the family, the low quality of teaching act, where a teacher is given several subjects or some children can afford school materials, in rural (isolated in urban), are reflected at the end of the academic year by significant discrepancies in academic performance between areas.

The scores's distribution at Romanian language, maths and final averages of the 23841 students present at both exams (figure 3) indicate sharp inequalities in the educational outcomes, which result in a tough competition to the detriment of the children from rural areas [19], [24], namely restricted opportunities and motivation to access the high school level. First of all, at the Romanian language exam the interquantilic range for urban area is lower compared to the rural one and has a superior position corresponding to higher grades, suggesting the clustering of the averages between 6.60 and 8.90, with the median of 7.95, compared to the rural distribution: Q1 = 5.00, Q2 = mean = 6.30, Q3 = 7.65. In contrast, there is an interesting special feature of the distribution of grades at the Romanian language and the final averages: the agglutination of the outliers corresponding to low scores, found in the small towns: Murgeni, Dolhasca, Bucecea, Solca, Slănic Moldova, Negrești. The scaterrgames shape the crowding of the large averagess, between 8.50 and 9.50 for urban, which corresponds to a narrow area for rural: few rural pupils have achieved this performance.

Secondly, the distribution of grades at maths exam presents the most dramatic urban / rural gap, both in terms of the position of the medians (6.9/5.16), Q1 (5.25/3.60) and Q3 (8.75/6.45), as well as their dispersion in scattergrams: while the number of scores over 5.00 is gradually increasing in urban, a relatively constant density is maintained in rural areas, with a slightly higher agglomeration between 5.00 and 6.00. At the same time, for low-performing students, the rigidity of the scale has led to the concentration of averages at the 5.00, 4.50, 4.00, 3.50, 3.00, 2.50 barriers, an absent condition at the Romanian language exam or the final averages, where the flexibility of teachers and the scoring system allowed the uniform dissemination of the media below the 5.00 barrier.

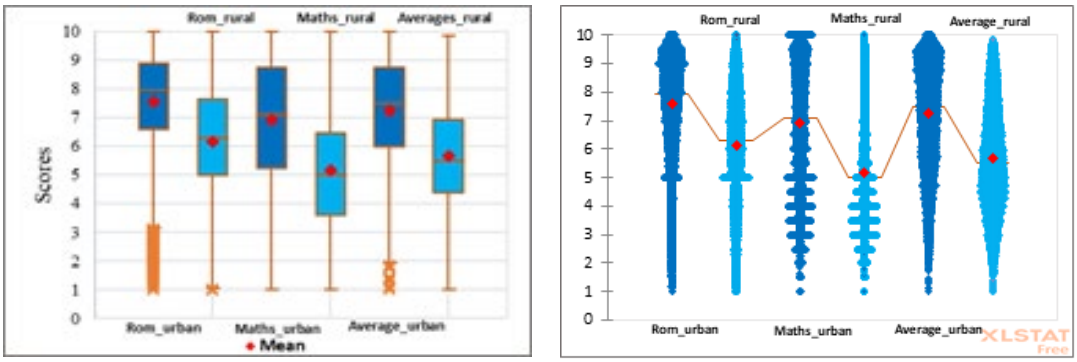

Figure 3 Distribution of the final averages scores, urban vs rural pupils in boxplots (1) and scattergrams (2).

The dispersion of the final averages is expected to improve the disparity between the two exams; it draws an upward diffusion of the urban pupils' scores, with a strong concentration between the thresholds 8.00-9.50 (mean = 7.50), while in rural interquantilic range is between 6.92 and 4.40 (mean = 5.52). Suceava county stands out with most villages where students managed to achieve very good results, especially in Rădăuți Depression (the highest scores), the Suceava Plateau and the Bucovina Hills, a related situation in the Neamț Depression and the middle course of Siret river, area with where young people are very well integrated in the school system [34]. On the other hand, the rural localities including the majority of pupils with final averages below 4.00 are in the Tutova Hills, an area where very low academic performance is connected to low values of school accessibility, accentuated by the lack of a catalytic urban center of human capital.

Gender inequality

Statistical analysis of the Romanian language and maths exam results devided by gender in histograms (figure 4) shows specific dissonances for each of them. In the first place, at the Romanian language exam the girls achieved higher grades, with an overall average of 7.31 and 11129 of them with averages over 5.00, compared to 10086 boys. Although there is not very big difference, the histogram corresponding to the scores obtained by the girls is strongly asymmetrical to the right, SKEW.P = -0.83, compared to boys, SKEW.P = -0.452, where there are small differences in the distribution of grades over 5.00. These graphic representations confirm the many psychological studies: generally speaking, girls exceed at subjects such as literature or art, even though, in essence, these fields are male-dominated. Moreover, female pupils tend to constantly underestimate their mathematical skills and overestimate their language/literature ones, while boys overestimate their maths but have a neutral attitude toward language and literature [8], [11], which subconsciously practiced throughout 5-8 grades leads to visible differences at the National Assessment.

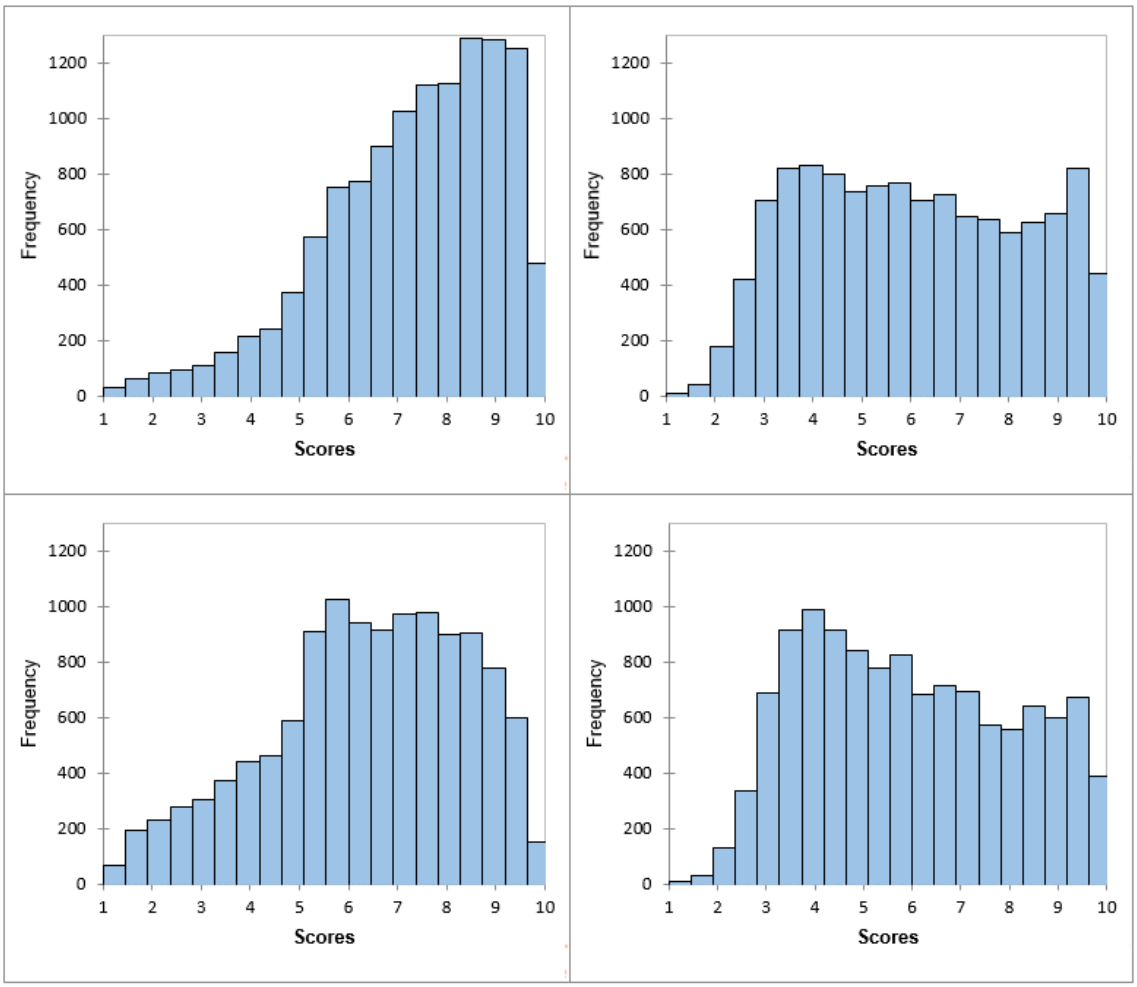

Figure 4 Distribution of the final grades for Romanian language (1) and Maths exam (2). Girls' scores (up) and boys' (down).

As regards the results of the maths exam, the discrepancies are much more faded: the girls obtained an average of 6.05 and the boys, 5.95, with a higher frequency between 3.00 - 5.00 cohorts (with 473 more pupils). Unlike the Romanian performances, the scores' asymetry at maths is extremely low to the left, SKEW.P = 0.064 for girls and SKEW.P

=0.168 for boys. In the case analyzed by this article, girls scored higher in maths than their peers, but many studies show that boys tend to perform better than the girls [14], [30], [31]. The key factors that favours them are gender stereotypes, perceptions and expectations of parents, teachers and employers, closely linked to the trust that this "protective barrier" provides, in dissonance with the low confidence of girls towards achieving the same analytical capabilities. Math gender gap manifests since primary school [31] and prejudices about language / literature vs. maths are more pronounced among girls and are accentuated in teenage years.
In order to calculate the strength of interaction between the two groups of pupils, girls and boys, the statistical method of analyzing the magnitude of gender differences was used, proposed by the psychologist Cohen in 1988 [9]

$$\text{Cohen's } d = \frac{A_g - A_b}{\sigma_t}, \text{ iar } \sigma_t = \sqrt{\frac{\sigma_f^2 + \sigma_m^2}{2}},$$

where Ag and Ab are the rows averages of girls and boys, and σg and σb are the standard deviations of the same range, accessible for values having the same distribution, (the grades from 1 to 10). Thus, for the English language exam d = 0.487, for maths d = 0.046, and the differences of the final scores d = 0.267 (table 1). According to the same author, all these values fall within small size impact [39], and in order to determine possible discrepancies between pupils in urban / rural versus girls / boys in the same areas, the same procedure has been applied:

Table 1. d - values for each group of individuals for same area, different gender (1), different area, same gender (2).

area	girls (1)/boys(2)	exam
urban/urban	0.441	Rom. language
	0.049	Maths
	0.235	Final average
rural/rural	0.601	Rom. language
	0.057	Maths
	0.035	Final average

area	girls	boys	exam
urban(1)/ rural (2)	0.731	**0.868**	Rom. language
	0.855	**0.897**	Maths
	0.858	**0.944**	Final average

The simplest method of understanding these indicators is by reporting the overlap rate between the group (1) and (2); values very close to zero indicate the high similarity between the groups (maths scores between girls and boys in urban and rural and the between rural final averages), and the discrepancies increase between urban final averages, where d = 0.235, indicating that 83,5% of the boys' and girls' scores overlap. This value can be analysed from two perspectives: in terms of the differences in the quality and accessibility of education between large cities compared to small towns (Murgeni, Dolhasca, Bucecea), which registered low scores, and also because girls tend to spend more hours on homework and exam training than boys. The magnitude of the differences between boys and girls at the Romanian language exam is slightly lower in urban than in rural (31.21% vs. 26.43% of boys had higher scores than the median of girls' scores). Thereby, this analysis emphasizes that within-gender differences are much greater than between gender [14]. For this particular case, the values from Table 1(b) for girls point out major discrepancies between urban / rural, the last ones showing

[39] According Cohen's guide for the interpretation of the effect size, 0.01 - very small impact, 0.2 - small, 0.5 - medium, 0.8 - large, above 0.8 - very large.

shortcomings regarding knowledge assimilation, learning skills and transposing them into the test sheet. All d values in the urban / rural relationship have very large effect size: only 28.16% of rural girls achieve their urban peers performance at Romanian exam, and 20.87% at maths. For the boys the ratio is 22.53% at Romanian exam and 18.95% at maths.
Therefore, the results of the distribution of girls' and boys' scores, analysed from intra- and inter-groups perspectives, support the idea of relative closeness between same residential area values compared to high dissimilarities between same gender. The girls, regardless of the area (urban/rural) surpass boys in both exams, but do better in Romanian language, which is also supported by numerous psychological researches [13], [18], [29]. Although both adults and children have assumptions about boys' math skills, as their good results are seen as normal, while for girls are perceived as exceptional, in 2021 girls managed to outperform their peers by a difference of 0.1.

School dropout
Early school leaving is analysed from two distinct perspectives: school drop-out (figure 5 (1)), which is the percentage ratio of the number of pupils enrolled at the end of the school year compared to the number at the beginning of school year [37]. The absenteeism rate (figure 5 (2)) refers to the percentage of pupils reaching the end of the school year but missing the National Assessment, hence failing to obtain a full qualification, respectively, not being able to attend high school. Studies from previous years show that in rural areas both phenomena have been more pronounced than in urban areas [3], [4], [23], Romania having some of the highest school drop-out rates in the EU [17], [24] and within the country, the North-East region ranks first positions [20].
In these circumstances, the issue of early leaving compulsory education correlates with a variety of factors, which can be classified as follows:
1. educational factors: low attendance during the school year, learning difficulties, lack of teacher encouragement (a good teacher / pupil relationship has a positive effect on academic success [35]), poor relationships with colleagues, bullying.
2. family factors: low income, single-parent families or children left in the care of grandparents / relatives, numerous families, i.e. lack of individual study spaces, hard household chores. In rural communities school drop-outs are more pronounced among families where parents have also given up compulsory school. [36].
3. community factors: quality of life, expressed in terms of unemployment, economic profile of the community, emigration of adults.
The spatial distribution of the two indicators highlights broad areas facing very high levels of early school leaving (Jijia Plain, Western Moldovan Central Plateau, Tutova Hills, Fălciu Hills, Ibănești Hills, although Botoșani county has the lowest school drop-out rate of 6%. Most of the LAUs with low final averages are associated with high school dropouts and absenteeism. In the same time, in the northwest of the study area there are villages with very low school drop-out values, which are positively linked to high school performance in both exams (former Habsburg area with a strong educational tradition). There is a similar situation in the Subcarpathians area of the Neamț county, which has the lowest rate of absenteeism, 2.29%), explained by the presence of highly qualified human capital communities [34].

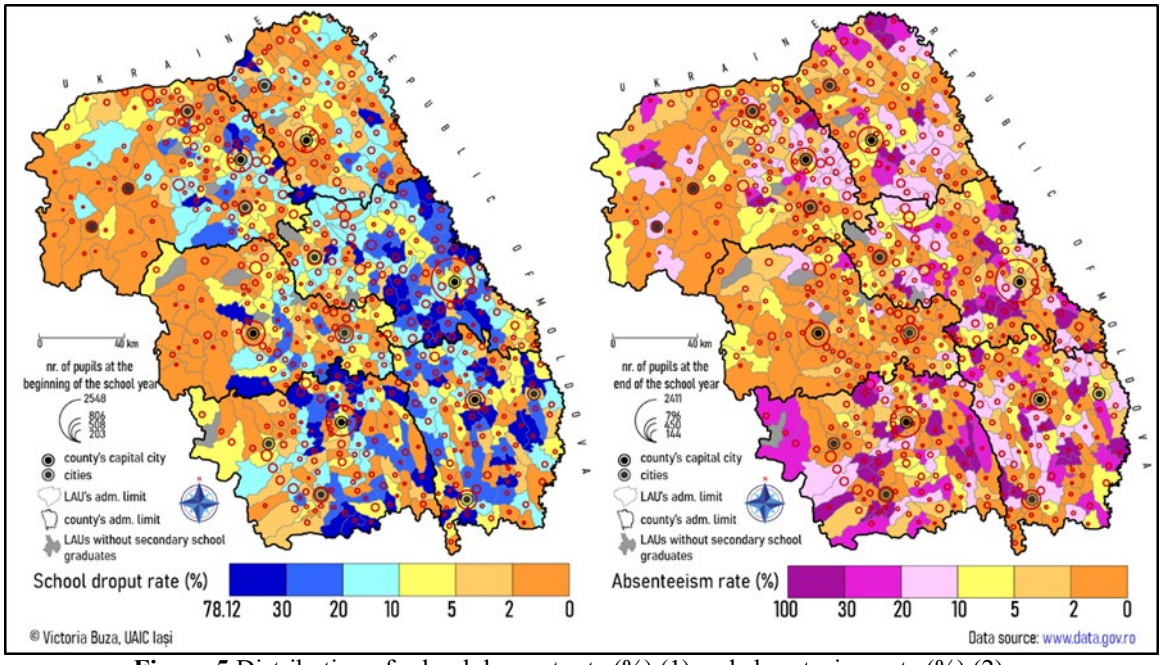

Figure 5 Distribution of school dropout rate (%) (1) and absenteeism rate (%) (2).

Splitting the data on the rural-urban axis supports the idea that the worst cases of early school leaving and absenteeism are manifest in rural areas, which, combined with poor academic outcomes, lead to an increase in educational gaps compared to urban pupils [23]. Differences in school performance are getting higher for the children living in isolated rural areas, far from the cities. Difficult living conditions often involve both spending less time on homework (aggravated if there is no adult capable of extra help) and the need to get immediate sources of income, in particular, from agriculture, to the detriment of the time that could have been allocated to learning / attending school. In the meantime, students belonging to advantaged backgrounds (urban and periurban) are able to excel thanks to better-trained teachers and paying for extra hours, a tool that is accessible to families with above-average incomes, providing much better training for examinations and improving their future life opportunities. In this context, the start of urban/rural children in secondary school is no longer fair, as schools have standardized tests and poverty accentuates gender gaps [17]. Thus, the data show that the average percentage of early school leavers in rural areas is 11.33% (absenteeism rate, 9.28%), compared with 6.48% in cities (absenteeism rate, 5.37%).

CONCLUSIONS

This study has shown that there are significant differences in the quality of education, expressed in this case by the results of the national assessment, supplemented by the drop-out rate and the rate of absenteeism, all calculated and represented graphicly for the North-East Romanian Region (Moldavia), one of the poorest and most populous regions of Romania. The analysis has shown that social, economic and educational faults are present, thus confirming the H1 hypothesis. The lower scores in the National Assessment exams registered in rural areas emphasize the precarious nature of school infrastructure, the lack of human resources (of well-trained teachers), poverty and the precarious nature of living conditions, all of which lead to the unfairness of access to education. The chance for students from rural areas to study high school is quite low, only 66.1% of them successful in passing the exam, comparing to urban passing rate: 87.44% .

The existence of high urban scores, especially in county capital cities, can be explained by the concentration of material and human resources in a prosperous urban environment and the availability of a selection of pupils at the best schools, what entitles us to appreciate that the notions of "equity" and "quality" in education remain, for the time being, at levels of desideratum, not reality. Another highlighted element is the academic gap between girls and boys, thus confirming the H3 hypothesis, as well as the magnitude between the Romanian and the mathematics scores, the latter being closely linked to the quality of the education and a certain relaxation to the exact sciences.
The results of the study can be a starting point for more in-depth studies at local level, able not only to identify the vulnerabilities of the educational system, but also to provide solutions to reduce the reported disparities. A forward-looking education system must promote a balance between students' theoretical and practical knowledge and facilitate the transition from education to professional life by ensuring the quality of technical and vocational education, especially in rural areas.

REFERENCES

[1] Alacacı, C., Erbas, A.K. Unpacking the inequality among Turkish schools: Finding from PISA 2006. IJED 30, 182–192, 2006.

[2] Anghel, G.A. School segregation vs. desegregation in Romania. Case study. Revista Românească pentru Educație Multidimensională, 2017, 9(1), 95-105.

[3] Bonea G. V. Abandonul școlar, Revista Calitatea Vieții, XXX, nr.4, 2019, pp 387-403.

[4] Borș O. Prioritățile Strategiei privind părăsirea timpurie a școlii problematizate în relație cu evoluția participării școlare în 2008-2018, Revista Calitatea Vieții, XXXI, nr.2, 2020, pp115-135.

[5] Brock, C. Geography of Education. Scale, Space and Location in the Study of Education, Bloombury Academic, 2016.

[6] Butler, T., Hamnett, C. The Geography of Education: Introduction. Urban Studies, 44 (7), 2007, pp. 1161–1176, Routledge.

[7] Cassano, R., Costa, V., Fornasari, T. An Effective National Evaluation System of Schools for Sustainable Development: A Comparative European Analysis. Sustainability 2019, 11, 195.

[8] Chatard, A., Guimond, S., & Selimbegovic, L. "How good are you in math?" The effect of gender stereotypes on students' recollection of their school marks. Journal of Experimental Social Psychology, 43(6), 2007, 1017–1024.

[9] Cohen, J. Statistical Power Analysis for the Behavioral Sciencies. Hillshade, NJ: Erlbaum. 2nd ed., 1988,

[10] Coleman, J. Families and schools. Educ. Res. 1987, 16, 32–38.

[11] Ellemers N. Gender Stereotypes, Annual Review of Psychology, 2018, 68:19.1-19.24

[12] Ezechil, L. The Necessity of a Pedagogical Reform in the Pre-university Education in Romania. 6th International Conference Edu World 2014,"Education Facing Contemporary World Issues", Procedia – Social and Behavioral Sciences, 2015, 180, pp. 559–564, Elsevier.

[13] Guimond, S., & Roussel, L. Social Psychology of Education, 2001, 4(3/4), 275–293.

[14] Hyde Janet Shibley. Gender similarities and differencies, Annual Review of Psychology, 2014, 65:3.1-3.26.

[15] Istrate M. Relațiile urban-rural în Moldova în perioada contemporană, pp 231-242, Editura Universității „Alexandru Ioan Cuza" Iași, 2008.

[16] Istrate M, Horea Șerban R., Muntele I. Young Romanians' Transition from School to Work in a Path Dependence Context. Sustainability 2019, 11, 1254.

[17] Ivan C., Rostaș I. Măsuri de succes în prevenirea părăsirii timpurii a școlii, chapter in the project "Copiii și părinții romi vor la școală!" POSDRU ID 132996, pp. 9-11, 2015, online at: https://romaeducationfund.ro/wp-content/uploads/2016/03/Raport_ POSDRU_132996_Complet-FINAL-1.pdf

[18] Kiefer, A. K., & Sekaquaptewa, D. Implicit stereotypes and women's math performance: How implicit gender-math stereotypes influence women's susceptibility to stereotype threat. Journal of Experimental Social Psychology, 2007, 43(5), 825–832.

[19] van Maarseveen R. The urban-rural education gap: do cities indeed make us smarter? Journal of Economic Geography 2013, 00, 1-28.

[20] Merce, I. School-dropout – a social problem in Romania. 4th WCETR 2014, Procedia of Social and Behavioural Sciences, 2015, 182, pp. 623–628, Elsevier.

[21] Morrill, R. Applied Geography in the provision of educational services, in Janelle D.G., World Minds: Geographical Perspectives on 100 Problems, 2004, pp. 113–117, Kluwer.

[22] Mosora (Dobre), M.; Mosora, C. The access to education in Romania. A regional study. Procedia Soc. Behav. Sci. 2012, 93, 916–920.

[23] Muntele, I., Istrate, M., Babii, F. Educational Disparities In Romania. A Multilevel Analysis Of The National Assessment Examination Succes Rate. Rev. Roum. Géogr./Rom. Journ. Geogr., 64, (1), p. 43–55, 2020, Bucureşti.

[24] Preda Marian. Riscuri și inechități sociale în România, pag.340-341, Polirom, Iași, 2009, pp. 340-341.

[25] Radó, P. Transition in Education. Open Society Institute, Institute for Educational Policy, Budapest, 2001.

[26] Rogoff, N. The Social Psychology of School to College Transition. The Journal of Educational Sociology, 1960, 33(6), pp. 252–259, American Sociological Association.

[27] Lupton, R. Social justice and school improvement: improving the quality of schooling in the poorest neighbourhoods. British Educational Research Journal, 2005, 31(5), 589–604.

[28] Shields, L. Equality of Educational Opportunity, in The Stanford Encyclopedia of Philosophy (Summer 2017 Edition), Edward N. Zalta (editor)), 2017.

[29] Stanef M. R. Sistemul educațional din România, disparități între mediul urban și cel rural, Economie teoretică și aplicată, Vol. XX (2013), No.1 (578), pp 83-93.

[30] Steele, J. R., & Ambady, N. "Math is Hard!" The effect of gender priming on women's attitudes. Journal of Experimental Social Psychology, 2006, 42(4), 428–436.

[31] Steffens, M. C., Jelenec, P., & Noack, P. On the leaky math pipeline: Comparing implicit math-gender stereotypes and math withdrawal in female and male children and adolescents. Journal of Educational Psychology, 2010, 102(4), 947–963.

[32] Sylwester, K. Can education expenditures reduce income inequality? Econ. Educ. Rev., 2002, 21, 43–52.

[33] Tomulețiu, A.E., Moraru, A. Rural education in Romania: Present and perspectives. WCES. Procedia Soc. Behav. Sci., 2010, 2, 402–406.

[34] Tudora D., Muntele I. Coeziune teritorială și disparități în Moldova, pp 40-49, Editura Universității „Alexandru Ioan Cuza" Iași, 2012.

[35] Țoc S. Diferențe sociale în dobândirea performanței școlare la elevii din România. Perspective politice 2013, 6(2), pp 97-112.

[36] Țoc S. Familie, școală și succes școlar în învățământul liceal românesc, Revista Calitatea Vieții, XXVII, nr.3, 2016, pp189-215.

[37] Government data base: www.data.gov.ro