

Education and Poverty in Romania. Mutual Determinations and Social Sustainability

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Abstract

Both, poverty and education (school performance), are two of the current topics in Romania, and a parallel analysis of them is a topic that would help understand each other's influences. One of the five main objectives of the Europe 2020 strategy is to reduce the number of people at risk of poverty or social exclusion by 20 million, until 2020. Although the situation of children in disadvantaged areas of Romania has improved in recent years, there are still significant discrepancies for different categories of students from rural areas, certain communities and from socio-economically dis-advantaged areas. The main problems facing the education system are the following: the attendance in rural areas, major differences in the quality of education in schools, absenteeism, and early dropout among children from disadvantaged communities. The purpose of this paper is to analyze the problem of poverty in Romania, the level of school performance and to identify the existence of mutual determinations of the two subjects in the 8 regions of Romania, school performance being treated from the perspective of the baccalaureate exam passing rate and the school dropout rate, the research method being on qualitative data.

Keywords

school performance, relative poverty rate, promotion rate, school dropout rate.

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Introduction

Today's young people, or in other words, the beneficiaries of educational services, are the ones who will play an active role in the development of tomorrow's society. Thus, social policies must be formulated to guarantee their inclusion in the education system in order to combat social events such as poverty and social exclusion.

In order to minimize or even eradicate social imbalances, the education system must be remodeled in a continuous manner in accordance with the needs and aspirations of students but also in relation to the constantly evolving requirements of the labor market. A quality education system supports a child's social, emotional, cognitive and communication skills. Education programs also support the development of knowledge and skills. Children who receive a quality primary education are more likely to develop these skills at a higher level than those who do not. They can then use these skills to earn more income or to further develop other core assets later in life.

Various definitions and indicators have been used to study educational inequalities and school results. A basic approach that would explain these discrepancies would be the analysis of predetermined factors or circumstances such as gender, area of residence, social status, ethnicity, but especially the level of poverty, a factor that will be analyzed in this article.

Children living in poverty tend to be exposed to more intense and lasting stress, which negatively affects attention, concentration, knowledge, IQ and social skills. Children living in poverty, also, tend to hear fewer reciprocal conversations, are engaged in conversations with less complex vocabulary and a smaller sentence structure and read less than their non-poverty colleagues. Children's brains develop best when they have low exposure to stress at home. Poverty can create a situation that triggers stress hormones. These hormones have a dampening effect on brain development, which can lead to an inability to pay attention, regulate emotions, or develop proper memory function.

Children from low-income families often do not receive the necessary stimulation and do not learn the social skills needed to prepare them for school. Typical problems are parental inconsistency (in terms of daily routine and parenting), frequent changes of primary caregivers, lack of supervision and lack of role models, and very often the parents of these children do not provide the necessary moral and emotional support.

This article tries to analyze the correlation between poverty and school performance, if there is a causal relationship between the two variables and in what other ways does poverty affect the development of children in Romania.

Review of the scientific literature

Poverty and education have influenced both individual and collective development since ancient times, at all stages of history. Both poverty and education are social factors, but each one, as well as the interaction between them, influence the economy, the degree of culture and civilization and also, society as a whole.

The specialized literature abounds in papers, studies and statistics ("big data") on the topic of the article, poverty and education, as well as the factors that influence the bilateral relationship between them. The analysis of the relationship between poverty and school performance is broad because it involves correlating data from several areas: social, economic, political, historical, the results obtained allowing a correct positioning of various perimeters by comparability of indicators, both globally and in Romania.

The link between poverty and school achievements has been mentioned since 1916 (Holley, 1916) and brought to the level of general thinking in education by the "Coleman Report" (Coleman, et al. 1966).

The exploration of the studied sources allowed us to structure them in three main categories:

1. statistical data, info-graphs, reports on the level of poverty at European and Romanian level prepared by Eurostat, National Institute of Statistics in Romania and the results of school assessments (tests)/dropout prepared by National Institute of Statistics in Romania;
2. studies that analyze the 2 factors and propose solutions both for improving the standard of living and increasing the degree of accessibility to education;
3. strategies and policies of international or Romanian bodies / organizations: European Commission, Eurostat, World Bank, World Health Organization, OECD - PISA tests, UNESCO, Ministry of National Education and Ministry of Labor in Romania, which establish the objectives and mechanisms for implementing the decisions taken that influences, both, the standard of living and the standard of education. Like Dobrotă and Vasilca (2015) observed in their paper, the sector of education had a low interest, like health and social assistance and this had to be changed through ex-ante conditionalities, thus, for the 2014-2020 programming period, the EU has set a target for reducing school dropouts below 10% and increasing the number of higher education graduates to at least 40% by 2020. Likewise, in another paper, Dobrotă, et al. (2019) concluded that the starting point for reducing the gaps between the EU Member States should be to support national education systems by increasing public funding allocated to education funding.

The phenomenon of "poverty" is an important topic, but controversial enough and often disputed even by specialists in the field. Poverty refers to a quantitative element (the level of income obtained compared to that of subsistence), but also to a qualitative aspect, being a quantity interpreted according to a certain level of income.

Poverty can be defined as a social state in which an individual, active in the labor market, does not have the opportunity to provide himself and his family with the minimum material means of subsistence. Poverty is a dynamic notion and must be seen in correlation with the level of development of each country, the basis of assessment being a certain minimum standard of living. This standard is relative, being very different by country or region.

Measures to reduce poverty are aimed at alleviating social inequalities through a fair wage and taxation system, an efficient education, adapted to technical progress and the real needs of the national economy. Social assistance, state allowances for needy families can solve the problem of poverty only if they are followed by other measures, such as qualification or retraining of the workforce, to adapt to the needs of the economy, but also to competition in the labor market.

The causes of poverty are multiple: among them, social inequality, political and economic structure, inefficient governance, but also poor vocational training, due to an outdated education system, not adapted to the real needs of the economy.

In November 2015, the United Nations Organization Rapporteur on Extreme Poverty, Philip Alston, stated that "many Romanian officials are in a state of denial regarding the high degree of poverty in the country, although 40% of the population is affected by this phenomenon, and 34.1% of children suffer from extreme material deprivation". Romania ranks 10th place in the world as a percentage of the population living in extreme poverty, the World Bank (2014) showing that approximately 6-7% of Romanians live on less than \$1.90 a day.

On the other hand, a social problem that is manifesting itself with an increasing intensity in Romania, from year to year, is the problem of school dropout, mainly due to the deepening of poverty (especially in rural areas, but not only). The dropout rate is higher in rural areas than in urban areas, because incomes are lower, parents decide to go and work abroad or show a lack of interest in the future of their children. Merce, et al. (2015) showed that school dropout occurs from secondary education to post-secondary and university levels.

Major deficiencies and domestic responsibilities no longer allow children to complete their compulsory education, so that over 37% of people over the age of 15 reach functional illiteracy: they do not understand what they read or do not know how to write correctly. In rural areas, 20% of children (Institute of Education Sciences, 2015) remain with eight classes, a third of them being exposed to the risk of poverty, having low chances of employment. According to Eurostat data, the dropout rate in Romania in 2014 exceeded 18%, compared to 11% - the average of the early school leaving in the European Union. In rural areas, the unemployment rate among young people aged 18-24 is 22%, and the employment rate of people aged 18 to 60 is about 46% (World Vision Romania, 2017). The investment in education has immediate results, but also in the long term, in the development of human capital, which inherently leads to social benefits such as improved health, lower crime rates and dependence on social benefits.

Regarding school results, in addition to the evaluation and analysis criteria provided by the education system of each country, through the prism of which one can objectively assess school success or failure, there is also a structure of subjective rules and criteria based on students' and parents' perceptions of school success or failure. Therefore, given the lens of subjectivity, it can be identified situations in which the terms of failure or school success are defined by personal criteria, sometimes inconsistent with certain objective standards.

The school and the experiences lived in its context represent a primary source of regulating the performances, expectations, success or failure, as well in particular plan (school), as in general, having an important influence for the socio-professional trajectory of any person. The school is an organization whose main purpose is to teach and to achieve performance in the development of the student's personality.

Thus, from the analyzed sources we can observe a causal link between poverty and school results that act in both directions: on the one hand, poverty acts as a factor that prevents people from accessing education, and on the other hand, those who have access to education are considered to be at lower risk of poverty.

Research methodology

This paper analyzed the issue of school performance in relation to poverty, in the 8 regions of Romania, analyzing the relative poverty rate, the promotion rate of the baccalaureate exam and the school dropout rate. Thus, by analyzing the specialized literature and secondary data, this paper aimed to analyze the current situation and the correlation between poverty and school performance in Romania.

In order to reach the problem of absorbing education in disadvantaged environments in Romania, the educational system must be in a continuous transformation in order to meet and prevent school dropout. In support of students, an education system must pursue their cognitive, social, emotional and communication development. A balanced knowledge and skills base accumulated during school can propel certain students to become successful people in the workplace.

The living environment of students can influence their intellectual development, as those from poor backgrounds can be exposed to stress factors and by the nature of the example, models in their family can emulate fewer complex behaviors and phrases that can cause them to put less effort into school than other colleagues.

Despite the fact that in Romania, unlike other countries in the European Union, spending on the child education is significantly lower, we still have an extremely high early school leaving rate, especially in the case of children from rural areas, Roma ethnicity and those with disabilities. Poverty among children remains among the highest in the European Union compared to the EU average.

Specialized research has shown that the main dropouts at all levels of education, in both residential and urban areas, are high absenteeism, learning difficulties, low school performance and low motivation of students for school activities, and the main challenges presented by a student at high risk of dropping out of school are: family income up to subsistence level, low parental education, lack of minimum conditions for home study, lack of interest in the school situation of children or divided families.

In this article we modeled the following indicators, statistical data being obtained from the online application of the National Institute of Statistics - Tempo Online, except for the information on promotion rate of the baccalaureate exam, information we obtained from official statements (online) of the Ministry of Education:

1. Relative poverty rate (the share of poor people, according to the relative estimation method, in the total population. It is considered poor the people in households with a disposable income per adult equivalent (inclusive or exclusive the value of own resources consumption) lower than the level poverty threshold level. This indicator is currently determined by the threshold of 60% of the median disposable income per adult-equivalent. The indicator is sometimes referred to as the 'poverty risk rate') - the period analyzed is 2010-2018;
2. Promotion rate of the baccalaureate exam (percentage of candidates who actually passed the exam) - analyzed period is 2015-2020;
3. School dropout rate in primary and secondary / high school and vocational education (the difference between the number of students enrolled at the beginning of the school year and that recorded at the end of the same school year, expressed as a percentage of the number of students, enrolled at the beginning of the school year) - the analyzed period is 2010-2018;

It should be mentioned that, regarding the promotion rate of the baccalaureate exam, in the case of all regions, except the Bucharest-Ilfov region, we calculated an arithmetic average at the level of the entire region, and regarding the Bucharest-Ilfov region we calculated a weighted average, knowing the total number of graduates from Bucharest and Ilfov counties, as well as the promotion rate from each county. We made this distinction to get closer to reality in terms of this region, Bucharest being one of the counties with the highest promotion rates, with the most candidates to take the baccalaureate exam in

this region (approximately 85%), and Ilfov being one of the counties with the lowest promotion rates, with the fewest candidates to take the baccalaureate exam in this region (approximately 15%), and a result obtained from an arithmetic average was far from the reality of this region.

Thus, the results obtained, following the data processing, can be viewed in the figures below, no. 1, 2 and 3.

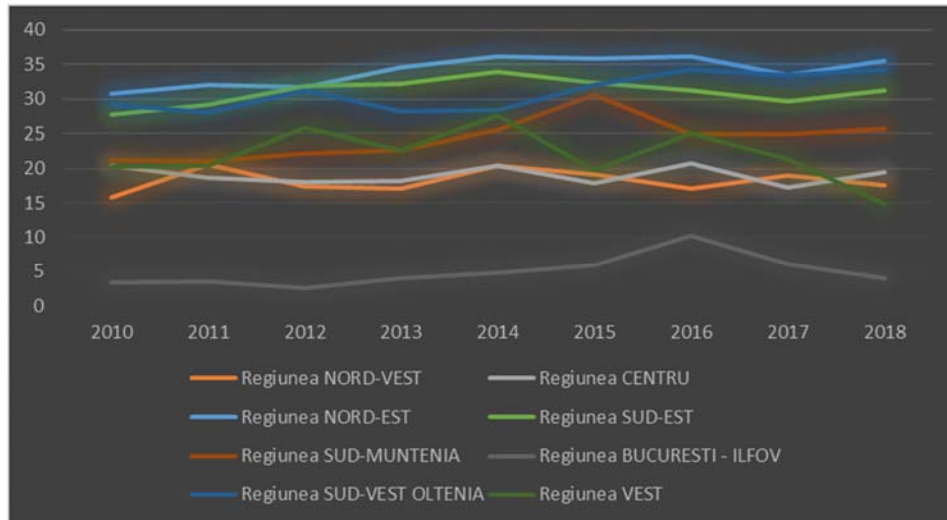


Figure no. 1. The relative poverty rate at the level of the 8 regions of Romania (%)

Source: processed by the authors with the help of statistical data obtained from the online application of the National Institute of Statistics: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table> [16].

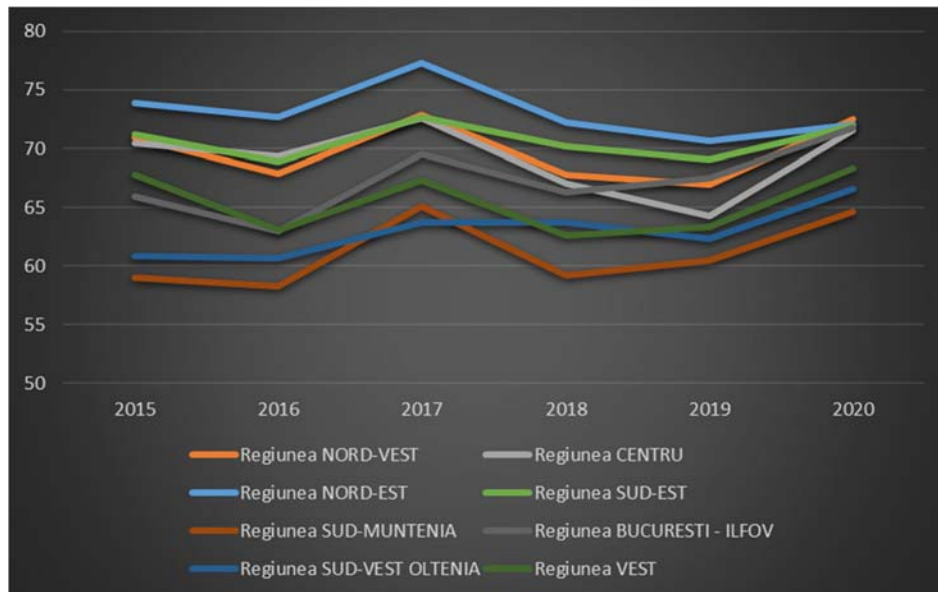


Figure no. 2. The promotion rate of the baccalaureate exam at the level of the 8 regions of Romania (%)

Source: processed by the authors based on the official statements (online) of the Ministry of Education.

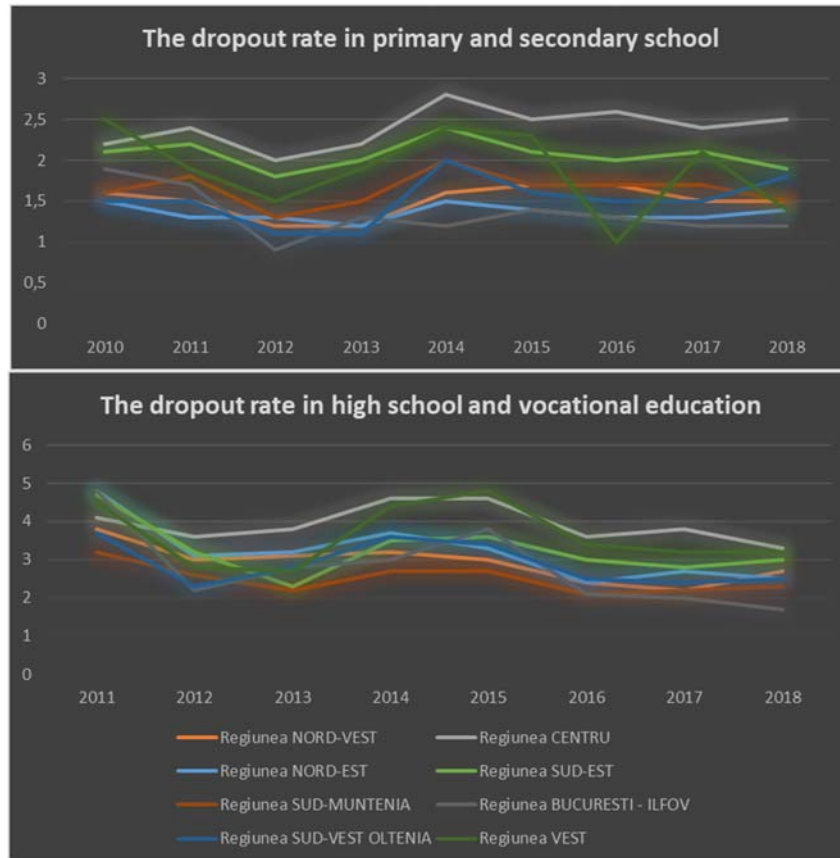


Figure no. 3. The school dropout rate in primary and secondary education / high school and vocational education at the level of the 8 regions of Romania (%)

Source: processed by the authors with the help of statistical data obtained from the online application of the National Institute of Statistics: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>.

Results and discussion

The first indicator analyzed and highlighted in figure no. 1, namely the relative poverty rate, gives us an image of the situation regarding poverty in the 8 regions of Romania, in total, at the level of the whole country, this indicator varying between 21.6% and 25.4%, in the period 2010-2018, which is why Romania is among the first countries in the EU, in terms of the risk of poverty or social exclusion, with a rate well above the EU-27 average. It can be seen from this graph that the Bucharest-Ilfov region is the region with the lowest relative poverty rate, during the period 2010-2018 it recorded values between 2.6% and 10.2% (a relatively constant trend), much lower compared with the rest of the regions (also classified as a developed area since 2014, compared to the rest of the regions that are classified as less developed areas – developing areas), while the North-East region is the region with the highest relative poverty rate, during the period 2010-2018 it recorded values between 30.8% and 36.1% (a slightly upward trend). Immediately below the North-East region, as values, are the South-East regions (between 27.8% and 32.4% - a relatively constant trend) and South-West Oltenia (between 28.1% and 34.3% - a slightly ascending trend). Furthermore, 2 regions register values that are interspersing during the period 2010-2018 and it is not possible to determine which region is poorer than the other, namely the South-Muntenia region and the West region. The same can be said about the last 2 regions, Central and North-West, whose trend is almost constant, and the values recorded are almost identical.

The second indicator analyzed is the promotion rate of the baccalaureate exam, this being highlighted in figure no. 2. This indicator helps us to get an idea of the graduates of the baccalaureate exam from the total number of candidates, at the level of the 8 regions of Romania, in total, at the level of the entire country, this indicator varying between 65.47% and 70.13%, during 2015 - 2020 period. It can be seen from this graph that the North-East region is the region with the highest baccalaureate exam promotion rate, throughout the period 2015-2020, registering values between 70.63% and 77.32% (a relative constant trend), being the only region that registered values over 70% for the entire analyzed period, while the South-Muntenia region is the region with the lowest baccalaureate promotion rate, during the period 2015-2020 it registered values between 58.23% and 65.08% (a slightly upward trend), being the only region that recorded values below 65% for the entire analyzed period. Immediately below the North-East region, the South-East, North-West and Center regions registered values ranging between 64% and 73% (a relatively constant trend, in the case of all 3 regions). The Bucharest-Ilfov region is at the middle of the ranking of the 8 regions in terms of promoting the baccalaureate exam, the trend of this rate being an ascending one, starting from 62.96% (in 2016) and reaching 71.77 % (in 2020). Furthermore, 2 regions register values that are interspersed during the period 2015-2020 and it is not possible to determine which region has the highest baccalaureate promotion rate compared to the other, namely the West region and the South-West Oltenia region, their trend being slightly ascending.

The last indicator analyzed is the school dropout rate, both in terms of primary and secondary education, as well as high school and vocational education, these being high-lighted in figure no. 3. This indicator, in the 8 regions of Romania. at the level of the whole country, is having values between 1.4% and 2%, in the 2010-2018 period. It can be seen from this graph that the Center region is the region with the school dropout rate, both in terms of primary and secondary education, and high school and vocational education, the highest throughout the period 2010-2018, recording values between 2% and 2.8%, with a slightly increasing trend (primary and secondary education) and values between 3.3% and 4.6%, with a relatively constant trend (high school and vocational education), being the only region that recorded values over 2%, respectively 3%, for the entire analyzed period. The Bucharest-Ilfov region is the region with the lowest school dropout rate in terms of primary and secondary education (with a relatively constant trend), and the South-Muntenia region is the region with the lowest school dropout rate in terms of high school and vocational education (with a relatively constant trend). Also, important to mention, compared to the analyzes carried out so far, is the North-East region which has a low school dropout rate in terms of primary and secondary education, but in terms of high school and vocational education this rate is relatively high. The other regions, as can be seen, have a relatively constant trend during the period 2010-2018, in terms of school dropout rates, the only ones that stand out being the West and South-East regions that have sudden increases and decreases during this period, both in terms of primary and secondary education, as well as high school and vocational education.

From the analyzes performed, it can be stated that poverty influences school performance, and vice-versa, and this influence is a direct one. It was expected that the two elements would depend on each other, but an initial assumption would have been that in poorer regions, the promotion rate of the baccalaureate exam would be lower. Thus, from the previous analyzes, this was denied, the situation being exactly the opposite in terms of the promotion rate of the baccalaureate exam, in the regions where the relative poverty rate is higher, the promotion rate is also high, and in the areas where the relative poverty rate is lower, the promotion rate is also low (directly proportional relationship). Regarding the school dropout rate, it can be stated that in most regions with the highest relative poverty rate, the school dropout rate (both in terms of primary and secondary education, as well as in high school and vocational education) is low, and vice-versa, in most regions with a lower relative poverty rate, the school dropout rate (both in primary and secondary education, as well as in high school and vocational education) is high (inversely proportional relationship). The regions where this relationship is not as we exposed it are the South-East region, where both the relative poverty rate and school dropout rate are high, and the Bucharest-Ilfov and North-West regions, where both the relative poverty rate and school dropout rate are low (directly proportional relationship). One aspect to mention is related to the North-East region, considered to be the poorest in Romania, where more middle school students, compared to other regions, continue school to high school, but in terms of school dropout rate at the high school level, more students drop out of school than the rest of the regions, probably the main reason being to enter the workforce and support financially their parents/family.

Conclusions

In conclusion, from the analysis carried out in this article, it can be stated that the two elements (poverty and school performance) influence each other. Thus, a low standard of living can determine a low school performance, from the perspective of school dropout (Central and West regions), but also a high school performance, in terms of promoting the baccalaureate exam (North-East, South-East and West regions), the desire of these students being to overcome their condition and to perform in a field that would take them out of the world in which they lived until that moment. Also, poor school performance in some regions can influence and lead to a low standard of living, with no motivation among students, and the risk of poverty being negatively affected. In reverse, a high school performance can influence the standard of living in the region, in which case there is a motivation among students to participate in classes, the desire not to be excluded, implicitly the risk of poverty being affected in a positive way.

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