

DECREASING SCHOOL DROPOUT RATE AS A FACTOR OF ECONOMIC GROWTH AND SOCIAL EMPOWERMENT. THEORETICAL INSIGHTS

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Abstract: *Economic development and social empowerment in Romania are unconceivable in the absence of a modern education system, which needs both economic and financial investments and social, political, cultural measures to increase the inclusion of young people in school system. In this particular context, given that Romania faces a high degree rate of school dropout, and moreover there are few chances that Romania reach its goals, we try in this paper to look inside the real situation. Indeed, school dropout present serious negative consequences both on individual level and for the whole society. Recognising this fact, next step is to investigate and reveal the determining factors for this situation, and we are particularly interested in the economic and systemic factors. Consequently, we present in this paper first a brief literature review on the phenomenon of school dropping out, including reviewing main studies related to factors, effects, causes etc. In the second part, starting from several statistical data provided by INS, EUROSTAT and UNICEF studies, we propose some theoretical models and policy recommendations in order to decrease the school dropout rate and especially the early school dropout rate.*

Keywords: school dropout, early school dropout, education policy, Romania.

JEL Classification: H52, I22, I25.

1. Introduction

Investing in education means investing for future, and probably the most important investment both the individual and the state can make. From the economic point of view, any investment in education today will generate a return on investment tomorrow, as Becker (1994, p.78) stated: "education and training are the most important investments in human capital". From the social point of view, the benefits of investment in education are even more visible: by increasing the knowledge and competencies of an individual, the status and social role of each individual will improve, and he or she acquires a certain reputation within the family, community and society. Indeed, educated people are a positive externality for the entire society, being associated with lower risks towards evil, crime level decreases and increasing interest in social harmony and development. As in "Capitalism and Freedom", written in 1962, by Nobel laureate Milton Friedman, he describes some of the effects associated with education: "A stable and democratic society can not exist without a minimum degree of literacy and knowledge of citizens and without the acceptance of a common set of values. Education can contribute to both". Therefore we believe that each of us is own laboratory of education, that requires thought life a continuous improvement to meet the socio-economic requirements. When we talk about economic growth and development of a country, we may first consider the labor force that is / may be part of it through various forms of education: continuous improvement, the chance to continue education, education of children with special educational needs etc.

The paper is organised as follows: in the first part we briefly review the literature on school dropout rate, in the second part we present several relevant figures, and in the final part we propose a research model regarding the measures to be implemented in order to achieve the goals of reducing the school dropout rate in Romania and enhance the community involvement in supporting educational system.

2. Literature review

School dropout is a serious issue not only on an individual level, but also for the educational system, family, community and even society as a whole.

Researches show that students who drop out of school have significantly lower chances of finding employment. Their lack of skills leads them to low paying jobs and no prospects for promotion, jobs typically avoided by other participants in the labor market. According to US reports, in 2000, more than half of all unemployed people had at least one dropout record, while the percentage of unemployment in the case of graduates was 4 times lower (approx. 15%) (Christle, et al., 2007). The income of employees with a dropout record was about 66% of those with completed studies (Campbell, 2003-2004), (Rumberger, 2011). The negative consequences of such decisions on individuals are aggravated by the fact that in recent decades, in most countries, the demand for qualified workforce has soared.

Students who drop out of school are more prone to medical conditions (mainly depression), are more likely to be drawn into illegal activities and, on the long run, become dependent on social assistance programs (Martin, et al., 2002), (Stanard, 2003).

On an economic and social level, dropout is associated with several negative phenomena, which tend to become chronic: reduced overall wellbeing, (potential) reduction of national income, unearned tax revenue, increased demand for (and, hence, spending on) social services, increased incidence of crime and antisocial behavior, reduced social and political participation, reduced mobility between generations, poorer communities, exposure to diseases or antisocial behaviors (Hayes, et al., 2002).

It is therefore not surprising that dropout is considered a national issue of great importance for the individuals, families, communities and society.

However, accurately determining the size and evolution of dropout is complicated, both within a state and in the case of regional comparisons or in the long run. The causes are diverse; it is worth pointing out the differences in educational policies, but also in methodology or data collection and analysis. Moreover there is no consensus on the definition of dropout.

Methodologies used in developed countries approach two major methods to assess dropout rates: reporting *event dropout rates* (i.e. the percentage of students who leave school in a given year) and *status dropout rates* (i.e. the percentage of young people of a certain age group who have left school within a certain range, ex. 4 years).

Most experts consider that officially reported values for both rates are likely to be underestimated. Actually, the figures would be much higher, due to reporting and methodology errors, or due to the uncertainty of some categories who are not taken into consideration (age, deprivation of liberty, insufficient data) (Hayes, et al., 2002).

Despite some differences in reporting, certain data and traits tend to be clear, not only due to their consistency but also due to a likely occurrence (within certain limits) in most countries, interested in studying and limiting this phenomenon. We refer here to the strong correlation between dropout and (very) low-income families, within disadvantaged ethnic / racial groups (Dorn, 1996), students with disabilities, cognitive deficiencies or emotional disturbances (Bellis, 2003).

Risk factors associated with dropout occur over the course of schooling, and over the last decades, no significant changes in the presence or disappearance of certain factors became noticeable, regardless of country or educational system. The only significant changes occur rather in the prevalence of a factor or another within a risk group. These

risk factors originate from different areas: the individual, their family, community, school, personal relationships, and it is proven that the probability of dropping out of school increases as these risk factors accumulate (Woods, 1995), (Prevatt & Kelly, 2003), (Rumberger, 2011), (Rumberger & Rotermund, 2012).

In other words, no single risk factor can exactly predict the occurrence of dropout; but the predictions' accuracy increases with each identified risk factor (Bowers, et al., 2013), (Suh & Suh, 2007), (Lee & Burkam, 2003). Thus, identification ought to start early, and noticing low grades and their persistence over time seems to be the most accurate predictor of individual school dropout (Bowers, et al., 2013).

Risk factors have been described as belonging to two groups (Suh & Suh, 2007), (Freeman & Simonsen, 2015): status risk factors (i.e., parental education and employment, age, gender, native language, mobility, family structure, ability or disability) and alterable risk factors (i.e., academic failure, retention, attendance, misbehavior, early aggression).

Although it is difficult to establish a clear cause-and-effect relationship between any risk factor and dropout, the probability of dropout increases when several risk factors are present (Suh & Suh, 2007), (Christle, et al., 2007), (Freeman & Simonsen, 2015). Risk factors occurring within school (e.g., behavior and individual performance, pressure from the system or teachers) and outside school (community factors, involvement in antisocial behavior, deviant patterns, and group models) may affect the decision of a student to drop out of school (Rumberger & Rotermund, 2012).

Moreover, the impact of individual and familial risk factors on students may change as students mature. The decision to drop out of school is influenced by social, political and economic factors, it depends on the record of the individual's evolution, on the educational system, on accumulated experiences and real circumstances (Campbell, 2003-2004).

Researchers have identified four main groups of schoolchildren predisposed to school dropout: (A) disrupting school, (b) chronically struggling with academics, (c) bored with the process, or (d) quiet dropouts (Bowers, 2010), (Bowers & Sprott, 2012), (Freeman & Simonsen, 2015).

Other researchers argue that there are actually three subgroups: quiet, jaded, and involved (Bowers & Sprott, 2012). Among them, the *quiet* students provide the highest percentage of dropouts. This group consists of students with a weak academic performance, having a lower school attendance and little involvement in extracurricular activities

The second group, in order of abandon tendencies, consists of the *jaded*, exhausted students. They have the lowest academic performance, tend to dislike school, have a large number of absences and sanctions/penalties.

Finally, there are the students involved either in conflicts with the school, or to impose a certain status within the group with active behaviors. Without having a remarkable school performance, they have got a better attendance and are frequently engaged in a variety of extracurricular activities (Bowers & Sprott, 2012), (Christle, et al., 2007).

Of course, there are combinations of these typologies and the correlated action of these risk factors could complicate identifying and understanding the specificities of each group, thus increasing the difficulties of defining better national policies and programs, of guiding schools to more effective and accurate interventions (Janosz, et al., 2000), (Fortin, et al., 2006).

Several studies show that early dropout in high school years is not conjectural, it is influenced by several early-installment factors. Predisposition for dropout occurs in childhood, being based on personality traits and family influences. During school and high school certain factors increase their influence and are often complemented by more, such as stress, low school performance, lack of social perspectives, drug abuse, so dropout probability increases significantly (Garnier, et al., 1997).

It appears that a vast majority of researchers have focused on the characteristics, individual motivations and family context, rather than external factors such as the characteristics of schools or the local communities' influence (Campbell, 2003-2004),

(Dorn, 1996).

In the last decade, however, researchers have begun to also take into consideration risk factors related to schools (school policies, the concentration of poverty, size and attractiveness of the school, the school offer - courses and extra-curricular activities, relations between teachers and students) (Rumberger, 2011).

Although intensely invoked, the influence of experiences and interactions with, and within the school, or the influence of the educational system on dropout were much less taken into account. Also influence the economic environment in the community or area can mitigate or exacerbate the risk of dropout.

Although there is little empirical research on the factors that may be associated with school dropout, several studies have reported that dropout rates seem to vary greatly depending on school factors. For example, early school failure or lack of school accomplishments can act as a starting point in a cycle that weakens the students' attachment to school, ultimately leading to dropout.

Alexander et al (2001) highlight that, beyond the risk factors and resources, schools play an important role, through current assessments (grades), scores and regular assessments, retention, special education services, actions and behaviors capable of stimulating the involvement of students etc. They concluded that dropout rates are closely related to educational experiences and to a long-term process of disengagement of the individual from school.

Research completed by Balfanz & Legters (2004) and Christle et al. (2007) emphasizes that the accumulation of problems in poor communities, complicated by the existence of few alternatives for the selection of quality schools (the so-called phenomenon of zonal concentration of worst performing schools, where graduation is rather infrequent) significantly increases the risk of dropout. Moreover, it is considered that, for many pupils, the attended school may be the most important factor in leading to dropout.

Research shows that the probability of giving up school increases for groups of school children who attend schools perceived as unfair or indifferent with students, with an atmosphere of indiscipline or with a high percentage of insolent, aggressive or (formally or informally) privileged students (Rumberger, 2011). In other words, schools are active and dynamic settings, that can stimulate, help or hinder students' success (Săveanu & Săveanu, 2012), and consequently may encourage behaviors that would eventually lead to dropping out of school (Christle, et al., 2007).

3. Some facts and figures

One of the international organisations involved in investigating and designing policies related to education from the perspective of children is UNICEF. Several studies were conducted by UNICEF on the topic of underinvestment in Romanian education and concluded on the consequences and importance of promoting education and preventing and reducing drop out rate. Indeed, increasing investment in education can enable young people with limited income or belonging to disadvantaged families or communities (e.g. Roma communities) to participate in education and even earn a university degree.

"Any extra year of schooling can represent a revenue growth of 8-9%, reduce the risk of becoming unemployed by 8%, and occurrence of serious health problems by 8.2%. Graduates of high degree education can earn by 25%-31% more than those who have completed just primary and secondary education. Income of people who graduate a university exceed with nearly 67% that of students who drop out of school after lower secondary education. Increase of proportion of college graduates from 13.6% to 19% by 2025 would increase GDP by about 3.6%. Even a slight increase in the number of secondary school graduates (from 58% to 59.7% by 2025) would result in an increase of 0.52% of GDP. If the investment in education gradually increase to 6% of GDP, economic growth could

reach a level of 2.7 - 2.95% in the period 2015 - 2025 instead of 2%, according to official figures" (UNICEF, 2014, p.2).

Statistics provided by Eurostat reveal that early school dropout in Romania is far above the average EU-27, recorded a 17.4% in 2012 compared with 12.8% EU-27. Moreover, the rate exceeds the EU reference level of 10%, remaining almost the same as in 2011, that is 17.5% (FEDR 2013).

The table bellow shows some figures concerning the early school dropout rate (ESDR) during 2008-2014.

Table 1. Evolution of ESDR - national indicator compared with EU level

Year	Early school dropout rate ESDR (%)	UE-27	Notes
2008	15.9 (+)	14.9%	-target under 10% for EU
2009	16.6 (+)		
2010	16.3 (-)		
2011	17.5% (+)	12.8%	-target of 11,3% for Romania 2020
2012	17.4% (-)		
2013	17.3% (-)		
2014	17.3% (=)		

Source: own ellaboration (Cs. Cs.) after INS, EUROSTAT

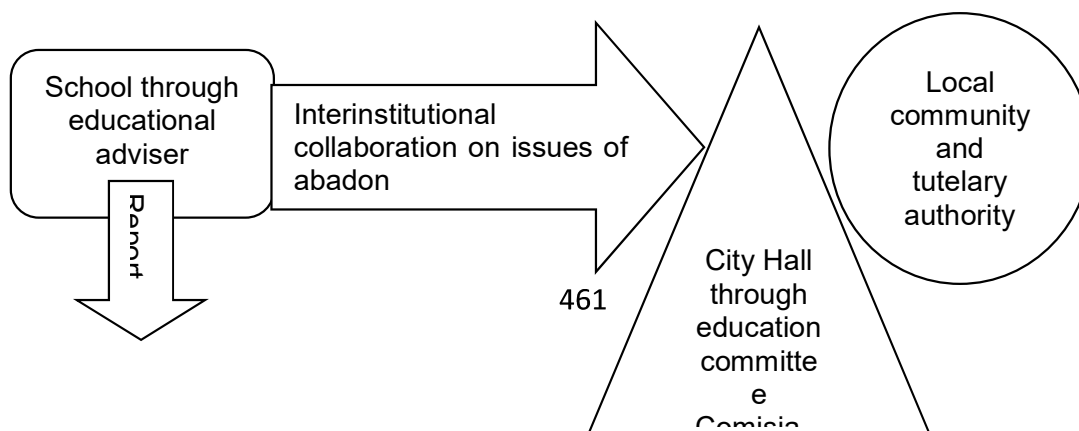
According to data in Table no.1, between 2008-2009 ESDR grew by 0.7%; for the period 2009-2011 (apart from 2010 when there was a slight decrease of ESDR) ESDR also increased and for 2011 it was 0.9% higher compared to 2009. From 2011, ESDR decreased annually by 0.1% by 2013.

4. A proposed model for addressing the high rate of school dropout in Romania

Consequently, if our target for Romania is 11.3% by 2020, if keeping this pace, it will be difficult to achieve this goal. To meet the objective of reaching 11.3% within 7 years (starting from the current ESDR of 17% for 2015) needs that all problematic issues in the education system must be urgently addressed. Moreover, it is necessary an effective collaboration with all institutions, mentoring, evaluation and control bodies, both locally and nationally, to include consulting with the involved actors and stakeholders. To meet the strategic objectives, we proposed as a theoretical approach to describe some possible applicable sollutions:

a) inter-institutional cooperation as a help factor and cooperation with schools

Here we might illustrate the decisive role of the main credit providers, especially in rural areas where school dropout is higher. Within City Hall there is social staff, people responsible for education, even among local councilors is formed the education committee. A support in this process of identification, monitoring and financial support of families with children whose participation in the educational process is interrupted or inexistent could play an important role.



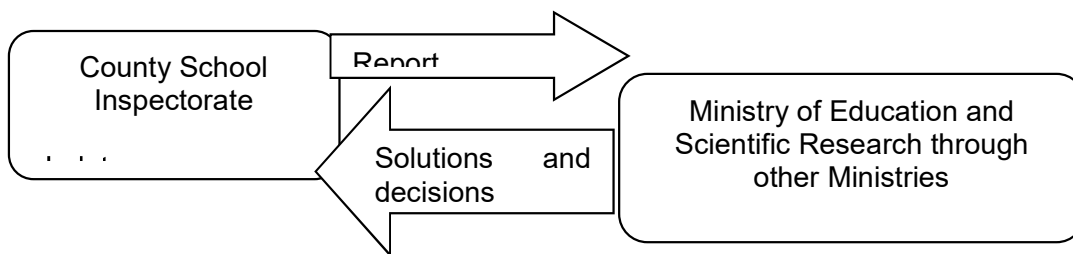


Figure 1. Communication-information circuit

Source: own elaboration

As described in the above figure, each of the actors on the stage of relations with the education system, whether direct or indirect, must play a role to some extent on sustaining and monitoring the neediest social level of poor people. For children from this environment, some with SEN (special education needs), the help of each of us - individual or institution - is unquestionable. At one point, the intervention of a mayor in a village or commune, can mean much more than any amount allocated to motivate someone to attend school, or even re-enroll in courses. As personal opinion based on the managerial experience in rural educational system, one of the authors (Cs. Cs.) can mention that in several rural schools where he had classes, and with students with SEN, several dropouts etc., it would be difficult for a school principal to address the situation alone and without support from mayor and local council, due to lack of communication networks, motivation or because of families who either do not want to send their children to school (being involved in different jobs) or are overwhelmed by certain situations (where the child is the boss at home).

b) collaboration with local entrepreneurs on motivating families where children dropout school, by providing financial incentives by the entrepreneurs by deducting the amounts of taxes owed to the state, by supporting primary and secondary school sector. Given that investment in primary and secondary education must be a priority on schooling, on condition to be completed by evaluation of good results in school, which can then result in economic growth, the role of the local business environment can be beneficial both to individual and sector of local economic development which subsequently leads to national economic growth and development.

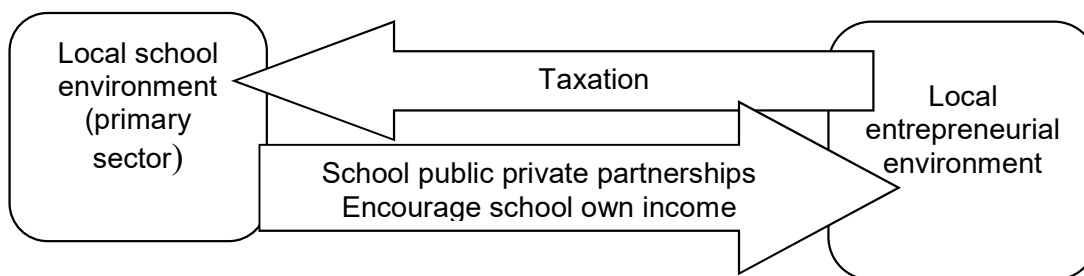


Figure 2. Cooperation between school and private environment

Source: own elaboration

If a school does not have an adequate budget to ensure school upgrading, public - private partnerships would be the best solution. It is a possible, beneficial aspect for funding educational activities for children with SEN syndrome, a solution would be tax deduction to motivate teachers by local entrepreneurial environment or encourage children, students by

funding education, especially where further study is done by moving students from rural to urban area. Regardless of who or what funding sources exist or will be, these allocations will contribute to generating extra revenues for the state, even after completion of studies. Another important aspect would be to encourage schools to generate their own income, either from rental of premises and land, even agricultural (rural) or by conducting classes, authorized tutoring, or any other aspect that could bring added income in schools, with the destination to spend only for equipment.

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