ANALYSIS ON THE VULNERABILITIES OF MIDDLE SCHOOL STUDENTS IN MEHEDINȚI COUNTY

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Abstract. This research is part of the “Sustainable social and educational integration through sports activities” project, which aims to increase the school attendance rate and the transit rate to ISCED level 3. Mehedinți county presents a lot of vulnerabilities for middle school students. The purpose of the current study is to emphasise the structure of vulnerabilities for the middle school population from this Romanian county. The identified vulnerabilities were structured in eight categories, namely: Roma students, students with one or both parents working abroad, remigrated students, students from disorganised or single-parent families, students raised in foster care, students who are children of immigrants or refugees in Romania, students with a degree of disability and students at risk of early school dropout. This applied research was conducted over a period of 2 years. The participants are 170 students (93 boys and 77 girls) from two schools in rural areas, who have a moderate ISCED level. The methods used in this study are: literature review, survey, mathematical and statistical method, graphical method. The research results identify the structure of vulnerabilities affecting the middle school population in Mehedinți county. The research provides a deep insight into the social challenges faced by the lower secondary population in rural areas.

Keywords: middle school students, vulnerability, structure.

Introduction

Early school dropout in Romania has one of the highest rates among the European countries. This phenomenon entails social exclusion and impacts both the individual and the community in its whole.

In modern information- and knowledge-based societies where education and lifelong learning are critically important, school dropout is a serious challenge (Wilson et al., 2011).

Social exclusion is coupled with adverse effects on the physical and mental health of an individual; for instance, ostracism or exclusion from society or a group “is a ubiquitous phenomenon across the lifespan that threatens the fundamental human need to belong to a group” (Pollatos et al., 2015, p. 1). This leads to social pain, anxiety, sadness and loneliness (Hawkley et al., 2011). The need to belong is an essential, strong and persistent motivation in the life of any human being (Baumeister & Leary, 1995).

For this reason, the Government of our country has proclaimed that decreasing the alarming phenomenon of early school dropout and enhancing the competencies and motivation of teachers and experts in the field of education are national priorities.

Early school leaving is closely related to social exclusion but also to poverty, unemployment and a bad state of health. Poverty and material deprivation seem to be prevailing in most communities but particularly in rural areas where the Roma population has
a higher percentage than 30% or even 40% and whose location exceeds 20 km from a city with increased job opportunities. Given that the job offer is generally limited in such areas, one or both parents are out of work in many families, their income only coming from social assistance, child support payments and temporary activities. (Ilisei, 2016)

The reasons and repercussions of early school dropout are extensively studied in the literature but little is known about the way in which young people manage their situation after leaving the educational system. “Developments in the social positioning of early school leavers in Austria show that their situation has deteriorated not only because of changes in the labour market (e.g., due to globalization) but also because of displacement processes that are influenced by habitus formation and capital endowment” (Nairz-Wirth & Gitschthaler, 2020, p. 398).

The number of students enrolled in the lower secondary education system decreases every year by approximately 12,000 children. This decline is a consequence of both the dynamics of the population that theoretically has the schooling age for this educational level and the annual school failure that results from early school dropout. The lower level of education specific to Roma people in comparison with non-Roma people maintains the vicious circle of social exclusion and poverty; parents cannot find jobs because they lack qualifications, which is why their income is not enough to send their children to school (Ilisei, 2016). Derrington (2007) states that students relying on “maladaptive coping strategies to deal with psychosocial stress associated with cultural dissonance and social exclusion” (p. 357) tend to leave school early. A research conducted in the United Kingdom suggests that “the experience of racism, the impact of cultural dissonance and low teacher expectations may all be contributory factors that affect the Gypsy Traveller students’ educational involvement and achievement” (Derrington & Kendall, 2008, p. 119).

The media generally plays a role in maintaining gender-related stereotypes “by impairing boys’ and strengthening girls’ performance in female connoted domains and by prompting boys to align their learning goals to the gender connotation of the domain” (Latsch & Hannover, 2014, p. 112). Regarding the gender percentage of children who attend school, no significant differences can be noted between girls and boys. Nevertheless, such differences are most apparent at ages that go beyond the theoretical schooling age for middle school and emphasise that the participation of boys is superior (Horga et al., 2017).

It is worth mentioning that the percentage of middle school students in urban areas is higher than 100%, which indicates a temporary transfer from rural areas to urban areas for completing this education level. In terms of residence, it can be seen that school attendance is better for students living in urban areas compared to those from rural areas.

“Alterable school characteristics such as discipline practices, resources, school size and student-teacher ratio influence students’ educational decisions” (Tyler & Lofstrom, 2009, p. 77), to which Lofstrom (2007) adds some characteristics that are outside the direct influence of the school, such as its location and the ethnicity of students. Furthermore, supportive teachers who have high expectations for their students’ achievements are associated with lower rates of school dropout (Christenson et al., 2001).

Outdoor education, together with formal, non-formal and informal education, completes the student’s image, and therefore curricular adjustments are required. The boundaries of
adventure education are constantly expanding due to programmes that are analysed, observed and implemented worldwide. (Stoica et al., 2018)

Taking into account the aforementioned issues, programmes and policies need to be developed in order to support school attendance in rural areas and make investments in the human resource that works with these children so as to retain them in the educational system for as long as possible. Sport is often seen as an essential aspect of life because it contributes to “community identity, sense of place, social interaction and good health” (Tonts, 2005, p. 137).

A downward trend is noticed in the percentage of students attending middle school, which reveals that many children in this age group are not enrolled in the educational system. In this respect, family plays a major role in the school attendance of children and youth. The absence of one or even both parents may affect their school achievements because they lack the material resources needed to attend school but also because they usually do not enjoy support in educational, emotional and care-related terms. (Ilisei, 2016)

According to researchers, school absenteeism can be better understood in the context of school engagement “as a continuum of ranging from full engagement to school dropout, with absenteeism located somewhere along that continuum” (Tanner-Smith & Wilson, 2013, p. 69). This continuum relies on complex social mechanisms that involve school absenteeism as a predictor of school dropout (Nwigwe, 2020).

The highest rate of children who drop out of school is commonly at 13 and 14 years of age, probably because the school dropout rate is increased on completion of this educational level.

In terms of gender parity index, the differences between girls and boys are not significant, the values being close and decreasing up to about 90% in both genders (Horga et al., 2017).

Early school leaving has a quite constant rate of approximately 12% but lately it has recorded a slight increase particularly in rural areas where it has reached 15%, while school failure has gone beyond 18%. Therefore, 2 in 10 students in rural areas and 1 in 10 students in urban areas drop out of middle school. This finding highlights that major improvements are needed in rural lower secondary education in order to decrease the rate of early school leaving. As regards gender distribution, the difference points out that the number of boys who drop out of middle school is higher than the number of girls. If the percentage of repeaters in the final year of lower secondary education is taken into account, it can be seen once again that the values are increased for male students, which indicates that early school leaving during middle school is higher for boys than girls.

Early school dropout rates are a consequence of a large number of vulnerabilities. Vulnerable is a concept that means capable of being easily hurt or injured (The Merriam-Webster Dictionary, 2020); therefore, vulnerable people are weak, exposed and unprotected.

At school level, eight categories of vulnerabilities have been identified as follows: Roma children, remigrating children, children raised in foster care, children with one or both parents working abroad, children whose parents are immigrants or refugees in Romania, children from disorganised or single-parent families, children at risk of early school dropout, children with special educational needs (SEN).
The current study is part of the “Sustainable social and educational integration through sports activities” project, which aims to increase the school attendance rate and the transit rate to ISCED level 3.

Research purpose

Mehedinți county has a high rate of early school leaving and therefore a lot of vulnerabilities for the middle school population. Consequently, the purpose of this research is to emphasise the structure of vulnerabilities for middle school students living in this county.

Methodology

The research was conducted over a 2-year period, specifically between 2019 and 2021. The participants are 170 students (93 boys and 77 girls) from two schools in rural areas (Floresti Middle School and Hinova Middle School). Their ISCED is below 80% and they recorded 2,704 absences in the 2019-2020 school year.

The methods used in this study are: literature review, survey, mathematical and statistical method, graphical method.

The vulnerabilities concerned are: the student belongs to Roma ethnicity; the student is at risk of early school dropout for reasons other than those listed below such as coming from a socially assisted family, cohabitation with other students exposed to the risk of early school dropout, other forms of poverty, etc.; the student has one or both parents working abroad; the student comes from a foster home or benefits from another protection measure; the student has remigrated and needs support for school and social reintegration; the student is from a disorganised or single-parent family; the student comes from a family of immigrants or refugees in Romania; the student has a disability; the student has special educational needs.

To gather the information needed to distribute students into a category of vulnerabilities, the students’ parents had to complete a statement on including their children into a vulnerable category and avoiding double funding.

Results

Data processing based on the statement completed by parents has highlighted that, in the two investigated middle schools from Mehedinți county, there are five categories of vulnerabilities: the child is at risk of early school dropout for reasons other than those listed below such as belonging to a socially assisted family, cohabitation with other students exposed to the risk of early school dropout, other forms of poverty, etc. (RPTS); the child belongs to Roma ethnicity (ROMA); the child has one or both parents working abroad (PMS); the child is from a disorganised or single-parent family (FDM); the child has special educational needs (SEN).

Other important results regarding the middle school population from rural areas are:

Out of the 170 middle school students, 77 (45.29%) are girls and 93 (54.70%) are boys.

The highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 73 (42.94%) of the total number of students. The second
vulnerability is represented by students with SEN - 31 (18.23%). The next vulnerability includes students from disorganised or single-parent families - 23 (13.52%). Another vulnerability involves students at risk of early school dropout - 22 (12.94%). The vulnerability with the lowest percentage (which is relatively close to the previous two vulnerabilities) refers to Roma students - 21 (12.35%). These results are consistent with the data provided by the INS (National Institute of Statistics) (2003-2016) regarding school dropout rates in rural areas - 15%, school losses being 18.7%. It is thus noticed that vulnerabilities in lower secondary education have a structure dominated by students with one or both parents working abroad.

In girls, the highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 33 (42.85%) of the total number of female students. The second vulnerability is represented by students with special educational needs - 15 (19.48%). The next vulnerability involves female Roma students - 12 (15.58%). Another vulnerability includes students at risk of early school dropout - 9 (11.68%). The vulnerability with the lowest percentage refers to students from disorganised or single-parent families - 8 (10.38%).

In boys, the highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 40 (43.01%) of the total number of male students. The second vulnerability is represented by students with special educational needs - 16 (17.20%). The next vulnerability involves students from disorganised or single-parent family - 15 (16.12%). Another vulnerability includes students at risk of early school dropout - 13 (13.97%). The vulnerability with the lowest percentage refers to male Roma students - 9 (9.67%).

The comparative analysis reflects a higher percentage of vulnerabilities representing students with one or both parents working abroad and students from disorganised or single-parent families among both girls and boys. Instead, it can be noticed that the percentage of vulnerability regarding students belonging to Roma ethnicity is higher in girls than boys.

The results for the investigated middle school students are shown in Table 1.

Table 1. Results for the investigated middle school students

<table>
<thead>
<tr>
<th>Vulnerability</th>
<th>GIRLS – 77</th>
<th>BOYS – 93</th>
<th>TOTAL – 170</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMS</td>
<td>33</td>
<td>42.85%</td>
<td>40</td>
</tr>
<tr>
<td>SEN</td>
<td>15</td>
<td>19.48%</td>
<td>16</td>
</tr>
<tr>
<td>FDM</td>
<td>8</td>
<td>10.38%</td>
<td>15</td>
</tr>
<tr>
<td>RPTS</td>
<td>9</td>
<td>11.68%</td>
<td>13</td>
</tr>
<tr>
<td>ROMA</td>
<td>12</td>
<td>15.58%</td>
<td>9</td>
</tr>
</tbody>
</table>

To have a full picture of the structure of vulnerabilities, the data for middle school students in grades 5 and 8 were processed and interpreted.

Thus, the results obtained for grade 5 are as follows:

Out of the 41 students in grade 5, 18 (43.90%) are female and 23 (56.09%) are male.

The highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 14 (34.14%) of the total number of 5th graders. The second vulnerability includes students at risk of early school dropout - 11 (26.82%). The next vulnerability refers to students with special educational needs - 7 (17.07%). Another
vulnerability involves students of Roma ethnicity - 5 (12.19%). The vulnerability with the lowest percentage (but almost equal to the previously mentioned two vulnerabilities) is represented by students from disorganised or single-parent families - 4 (9.75%). It can be noticed that the vulnerabilities specific to lower secondary education have a structure dominated by students with one or both parents working abroad and students at risk of early school leaving.

In girls, the highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 8 (44.44%) of the total number of female students in grade 5. The second vulnerability includes students at risk of early school dropout - 4 (22.22%). The next vulnerability refers to students with special educational needs - 3 (16.66%). Another vulnerability involves female Roma students - 2 (11.11%). The vulnerability with the lowest percentage is represented by students from disorganised or single-parent families - 1 (5.55%).

In boys, the highest percentage is recorded for the vulnerability affecting children at risk of early school dropout - 7 (30.43%) of the total number of male students in grade 5. The second vulnerability involves students with one or both parents working abroad - 6 (26.08%). The next vulnerability includes students with special educational needs - 4 (17.39%). Another vulnerability refers to students from disorganised or single-parent families - 3 (13.04%). The next vulnerability (with the same percentage as the previous one) is represented by Roma students - 3 (13.04%).

The comparative analysis reflects a higher percentage of the vulnerability representing students who have one or both parents working abroad in the case of girls, while the percentage is higher for male students at risk of early school leaving. The other vulnerabilities (students from disorganised or single-parent families, students with special educational needs and Roma students) indicate higher percentages in boys compared to girls.

The results for 5th grade students are shown in Table 2 and Figure 1.

Table 2. Results for 5th grade students

<table>
<thead>
<tr>
<th></th>
<th>GIRLS – 18</th>
<th>BOYS – 23</th>
<th>TOTAL – 41</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMS</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>SEN</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>FDM</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>RPTS</td>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>ROMA</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

237
Out of the 21 students in their last year of middle school education, 10 (47.61%) are female and 11 (52.38%) are male.

The highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 8 (38.09%) of the total number of 8th grade students. The second vulnerability involves students with special educational needs - 5 (23.80%). The next vulnerability includes students from disorganised or single-parent families - 4 (19.04%). Another vulnerability refers to Roma students - 3 (14.28%). The vulnerability with the lowest percentage is represented by students at risk of early school dropout - 1 (4.76%). It can thus be noticed that the vulnerabilities specific to 8th graders have a structure dominated by students with one or both parents working abroad and students with special educational needs.

In girls, the highest percentage is recorded for the vulnerability affecting children with special educational needs - 4 (40%) of the total number of female students in grade 8. The second vulnerability includes students with one or both parents working abroad - 2 (20%). The next vulnerability refers to female Roma students - 2 (20%). Another vulnerability involves students at risk of early school dropout - 1 (10%). With the same percentage as the previous one, the next vulnerability is represented by students from disorganised or single-parent families - 1 (10%).

In boys, the highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 6 (54.54%) of the total number of male students in grade 8. The second vulnerability includes students from disorganised or single-parent families - 3 (27.27%). The next vulnerability refers to female Roma students - 2 (20%). Another vulnerability involves students with special educational needs - 1 (9.09%). With the same percentage as the previous one, the next vulnerability is represented by Roma students - 1 (9.09%).

The comparative analysis reflects a higher percentage of the vulnerability representing students who have one or both parents working abroad in the case of boys, while the percentage is higher for female students with special educational needs.
The research conducted by Badea et al. (2020) in the north-eastern region of Romania reveals a significantly higher percentage of the vulnerability related to the risk of early school leaving for both genders (47.22% compared to 4.76% in this research).

The results for 8th grade students are shown in Table 3 and Figure 2.

Table 3. Results for 8th grade students

<table>
<thead>
<tr>
<th></th>
<th>GIRLS – 10</th>
<th>BOYS – 11</th>
<th>TOTAL – 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMS</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>SEN</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>FDM</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>RPTS</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ROMA</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 2. Results for vulnerability structure – 8th grade students

**Discussion and Conclusion**

The vulnerability structure by gender reveals some similarity between girls and boys. At the same time, gender structures are consistent with the general structure of vulnerabilities in lower secondary education. Thus, the highest percentage is recorded for the vulnerability involving male and female children with one or both parents working abroad, but there is a difference of almost 4 points in favour of boys.

Two other major vulnerabilities refer to students at risk of early school leaving, with a higher percentage for boys, and students with special educational needs, with a higher percentage for girls.

The next vulnerability includes Roma students, whose values are identical for both genders.

The largest gender-related difference between vulnerabilities is over 10 points in favour of boys and is represented by children from disorganised or single-parent families.

The highest percentage is recorded for the vulnerability affecting children with one or both parents working abroad - 42.94% of the total number of students. The second vulnerability involves students with special educational needs - 18.23%. The next vulnerability includes...
students from disorganised or single-parent families - 13.52%. Another vulnerability refers to students at risk of early school leaving - 12.94%. The vulnerability with the lowest percentage (but almost equal to the previously mentioned two vulnerabilities) is represented by children of Roma ethnicity - 12.35%. (Figure 3) It can be noticed that the vulnerabilities specific to lower secondary education have a structure dominated by students with one or both parents working abroad.

Previous research (Badea et al., 2020) conducted in the north-eastern region of Romania shows a reversal of the proportions of vulnerabilities, in the sense that the dominant vulnerability is represented by students at risk of early school dropout (46.31% compared to 12.94%), while the vulnerability representing students with one or both parents working abroad (11.57% compared to 42.94%) is in last place.

![Figure 3. Vulnerability structure – General results](image)

There are 43.90% females and 56.09% males in grade 5 but the gender ratio is less distinct in 8th grade students, where 47.61% are girls and 52.38% are boys. This trend indicates that school losses during lower secondary education are significantly higher in the case of boys compared to girls. This phenomenon is also highlighted by Horga et al. (2017), who have found that the gender difference in school dropout rates for cohorts indicates that a larger number of middle school boys drop out of school, compared to the number of girls.

In a research carried out in Vaslui County, this phenomenon is even more relevant because the gender ratio is reversed in middle school; thus, there are 37.31% girls and 62.68% boys in grade 5, but there are 61.11% girls and 38.88% boys in grade 8 (Badea et al., 2020).

The decline is obvious in most of the indicators analysed for lower secondary education (the number of students in grade 5 is 41, while the number of students in grade 8 is only 21), in the case of children from families at risk of marginalisation from rural areas. Thus, at 14 years of age, only 60% of children living in rural areas are still enrolled in the lower secondary education system (Horga et al., 2017).
Authors’ Contribution

All authors have equally contributed to this study and should be considered as main authors.

References


