School drop - out in Romania: impact assessment of preventive-curative strategies in children

Ramona Buzgar[•], Dana Opre[••], Sebastian Pintea[•••], Adrian Opre[••••]

Abstract

Remedial activities are considered by many authors as an effective strategy for preventing and reducing school dropout. In recent years however, numerous studies showed evidence that we cannot point to one factor that influences the decision to leave school and to only one strategy to prevent or reduce it. Meanwhile the results in the field of social and emotional development emphasize the essential role of these skills in school success. This is way more and more researchers and practitioners recommend that school dropout must be looked at and addressed from a more complex perspective. In the present study we aimed to evaluate the impact of a complex intervention program, developed in order to prevent and reduce school dropout for 242 students from disadvantaged backgrounds in Vâlcea County. The children were tested at the beginning and at the end of the program using 6 scales selected from BASC and ASEBA evaluation systems. Due to the pandemic situation, the questionnaires measuring adaptability, social skills, learning abilities, affective problems, anxiety problems and ADHD problems have been completed by teachers, using google forms application. Using ANOVA with repeated measures, the data collected emphasize that the proficiency profile of primary school and secondary- school children, changes significantly between the results obtained in pre and post-test, for all variables evaluated. The data collected showed that the program increases adaptability to the school environment and learning skills, and anxiety, loneliness and inattention decrease significantly. Even though, we considered it necessary to identify demographic factors that may impact the effectiveness of such an intervention. Practical implications for similar future projects, are further discussed in the article.

Keywords: school dropout; remedial and psycho- educational intervention; social-emotional competencies

Introduction

An increasing number of specialized studies suggest that school dropout is only the final stage of a dynamic and cumulative process involving disengagement or distancing from

[•] University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania. E-mail: ramona.buzgar@usamvcluj.ro
[••] Department of Psychology, Babeş-Bolyai University, Cluj-Napoca, Romania, e-mail: danaopre@psychology.ro
[•••] Department of Psychology, Babeş-Bolyai University, Cluj-Napoca, Romania, e-mail: sebastianpintea@psychology.ro
[••••] Corresponding author, Department of Psychology, Babeş-Bolyai University, Cluj-Napoca, Romania, e-mail: adrianopre@psychology.ro

school (Korhonen et al., 2014; Fortin et al., 2013; Rumberger & Arelleno, 2007; Appleton et al., 2006). This disengagement in education can start as early as primary school, when students fail to get properly involved in academic or social activities. Poor performance in academic tasks, especially in core subjects, inappropriate behavior, repeated failure to do homework and lack of participation in extracurricular activities are all early signs of a problem that can often lead to a large number of corrective activities, corrective absences, repetition and / or repeated transfers between different educational units (Belfanz et al., 2007; Heppen & Therriault, 2008, Gottfried, 2010). In the case of dropping out of school, we cannot talk about a single cause or a single factor responsible for leaving school early. On the contrary, several risk factors can be identified (Bradshaw et al., 2008; De Witte et al., 2013). These in combination with each other and / or through mutual empowerment, increase the probability that young people / children will not complete their studies (e.g. Gleason & Dynarski, 2002). Using a careful assessment of all these factors (causal or facilitators) that are frequently associated with abandonment, specialists in the field have managed to place them in four broad categories (Hammond, Linton, Smink, & Drew, 2007):

a. Factors related to the individual (student) - for example: absenteeism, repetition, cognitive and learning difficulties, negative attitude towards school, deviant / inappropriate behavior

b. Family factors - for example: socio-economic status, lack of parental involvement in the child's school / academic life

c. Factors related to school - for example: negative school climate, too high or too low expectations of teachers towards students

d. Community factors - for example: high crime, lack of community support for schools and students

There are also studies that draw attention upon individual risk factors as internalizing and externalizing disorders on school dropout. Disruptive behavior seems to be one of the most impeding factor for educational attainment (Esch et al., 2014), while depression and anxiety are related to poor academic achievement and dropout (Quiroga et al., 2013; Marcotte et al. 2006; Fortin et al., 2013). Socio-emotional competence is a multidimensional construct that is critical to the success in school and life of children and adolescents, including those at high risk of dropping out due to disadvantaged socio-economic status, minority status or early emotional problems, or behavioral (Domitrovich, Durlak, Staley & Weissberg, 2017). The scientific studies and the reality itself has indicated that a child with reduced social interaction skills, and exhibiting difficulties with emotional self-regulation is more predisposed to dropout, than a child with poor academic results, but who has well developed socio-emotional competencies. The great stake of interventions focused on socio-emotional skills is the fact that they not only predict the academic success and professional development of future adults, but also contribute significantly to well-being and personal development, provide conditions for people to become better citizens, reduce risky behaviors (e.g. violence, substance abuse)

(Durlak, Weissberg & Pachan, 2010; Taylor et al., 2017), and reduce even the dropout rate and learning anxiety (Wang et al., 2016). Another frequent recommendation of researchers in this field is that interventions to reduce school dropout has to begin early, especially where factors that can predispose to this phenomenon can be unequivocally identified (Stegelin, 2004). That is why most of the recommendations resulting from research on the phenomenon of early school leaving mention that interventions should aim not only to optimize academic performance, but also a number of other related factors, like social –emotional competencies. Taking into account these recommendations, starting with the fall of 2018, the World Vision Romania Foundation, together with the Romanian Patriarchate, Babes-Bolyai University and Consult Plus got involved in a large project focused on school dropout. The central aimed of the project was to carry out a complex, multidisciplinary intervention whose purpose was to increase students' involvement in school activities and implicitly, the prevention and reduction of school dropout. In this article we want to present only a part of this complex approach and results, especially the way in which remedial and personal development interventions carried out by socio-educational pedagogues and psychologists have influenced the development of children in primary and secondary school.

Aim of the study

The purpose of this research was to evaluate the impact that the Choose School- A chance for the future program, carried out in Vâlcea County (within the project POCU / 74/6/18/106002) (POCU: Operational Program Human Capital), had on the social and emotional development of students from the target group, in order to prevent school dropout. More exactly, we set out to assess the degree to which remedial and psycho-pedagogical activities have an measurable influence on several relevant variables for prevention and reduce the school dropout. The variables that we have monitoring and measure were: level of adaptability, social skills, learning skills, affective problems, anxiety problems and ADHD problems. In the same time, we aimed to explore the correlation between the effectiveness of the program and several l social and demographic variables such as: gender, ethnicity, family size, parental status etc.

Because in this research project, the group of participants was selected based on certain specific criteria, the hypotheses formulated were strictly related to the intervention group. By implementation the remedial and counselling activities we anticipated to significantly increase the level of school adaptability, learning abilities and social skills. By contrast we have expected to significantly decrease the level of affective disturbances, anxiety, and ADHD problems. For all variables we have expected a statistical significant difference between pre-intervention and post intervention faze.

Measurements

The battery of psycho-pedagogical tests used in our investigative approach consisted of scales that evaluated the 5 categories of "academic activators" identified by DiPerna,

Volpe and Elliot (2002). Due to the restrictions generated by the COVID 19 crisis, in both evaluation moments these instruments were completed online. This constrain have forced us to choose only those tests that had a teacher report form. Moreover, this criterion was also important due to the fact that the participants selected to benefit from intervention come from disadvantaged backgrounds, with very low access to technology (PC, laptop, iPad), but also with low digital skills (difficulties in filling in google forms documents). Thus, we opted for the BASC-2-TRS test batteries (Behavior Assessment System for Children-2- Teacher Rating Scale, Reynolds & Kamphaus, 2004, translated and adapted by Mitrofan N, Ion A. & Iliescu D. in 2011) and ASEBA -TRF (Achenbach System of Empirically Based Assessment- Teacher Report Form, Achenbach & Rescola, 1991, translated and adapted by Dobrean et all. in 2007). This complex test batteries, are validated on the Romanian population.

From the BASC assessment system, we used the scales of adaptability, social skills, and learning skills, and from ASEBA, the scale of emotional problems, anxiety problems, and ADHD problems scale.

The questionnaires include items evaluated on a Likert scale with 3 points or 4 points which allowed their transposition in the google forms application in order to be completed online.

Participants

The participants in this research project were selected based on the POCU project requirements. Namely, we have included children from disadvantaged backgrounds, from families with low socio-economic status, with parents working abroad, or living in the rural zone of Vâlcea County. Although at the beginning of the program (pre-intervention stage), teachers filled in evaluation forms for 352 primary students and 210 secondary -school students, at the end of the intervention only 148 primary and 94 secondary school children could be fully evaluated.

In the primary school sample (N=148) there were 59 girls (40%) and 89 boys (60%) with an average age M=8.59 (SD= 1.35). In the secondary school sample there were 57 girls (61%) and 37 boys (39%) with an average age M= 12.78 (SD= 0.98).

A large number of students left the program due to the change determined by the pandemic situation, which made it impossible for them to participate in all the activities of the project, because of the lack of internet access or technology.

Procedure

After the initial assessment was completed, the students in the target group participated in a series of activities specific to their age. These group activities took place online and face-to-face, in a span of eight months. Every week, the project team carried out one hour of remedial education activities on Romanian language and mathematics, one personal development activity and one school counselling activity. These last categories of activities were adapted to the child's needs and had as general objectives self-knowledge,

social-awareness, emotional development, emotion regulation, social development etc. Depending on the needs identified, some of the counselling activities were performed individually.

Results and discussions

As a data analysis tool, we used the SPSS statistical program, and set the significance thresholds for statistical tests at $p < 0.05$ and $p < 0.01$ (indicators that prove the existence or non-existence of an effect and allow us to generalize the data obtained). In order to test the effectiveness of the program, we compared the test scores obtained by the students in the post-intervention stage with the results obtained in the pre-intervention stage. Because for the two educational groups (primary, respectively gymnasium) in the case of the BASC questionnaire, the items that measure the evaluated dimensions are different depending on the age, we performed a separate analysis of the data. Both in the case of 7-11 year old students (see table 1) and in the case of 11-15 year old (see table 2), the intervention had the expected effects (i.e. the healthy competence level of the children was significantly improved and the level of dysfunctional problems significantly decreased).

Table 1. The effectiveness of the program for the primary school sample

Outcomes	Pre-intervention		Post-intervention				
	M	SD	M	SD	**t**	**p**	**d**
Adaptability	14.52	4.58	17.28	4.56	-9.21	0.001	0.60
Social skills	13.54	6.04	16.53	6.52	-7.96	0.001	0.49
Learning skills	12.05	6.23	14.39	6.75	-6.02	0.001	0.37
Affective problems	3.22	2.77	2.38	2.09	3.87	0.001	0.30
Anxiety problems	1.73	2.26	0.50	1.17	6.39	0.001	0.54
ADHD problems	7.75	7.51	4.54	5.52	6.18	0.001	0.42

Analyzing the data presented in the table above, it can be seen that the proficiency profile of primary school students changes significantly, meaning there is a statistically significant difference ($p < 0.01$) between the results obtained in pre and post-test (analysis with repeated measurements), for all variables evaluated. These results lead us to conclude that the activities carried out with these children (the intervention) have enhanced their level of adaptability to the school environment, the level of social and emotional skills, an increase in the level of learning skills and a decrease in problems of inattention and hyperactivity. Analyzing the effect sizes, the direct impact of the intervention for this group varies between 0.30 and 0.60 (from small to medium), the biggest impact being on adaptability and anxiety problems. In other words, we can state that the first three hypothesis were confirmed.

Table 2. Effectiveness of the program for the secondary school sample

Outcomes	Pre-intervention		Post-intervention				
	M	SD	M	SD	t	p	d
Learning skills	12.70	8.74	16.32	9.55	-5.68	0.001	0.41
Adaptability	14.21	4.60	17.17	4.77	-7.44	0.001	0.64
Social skills	11.60	6.55	16.18	7.40	-8.19	0.001	0.69
Affective problems	2.73	2.98	1.76	3.02	5.06	0.001	0.32
Anxiety problems	1.20	1.76	0.69	1.31	5.28	0.001	0.29
ADHD problems	7.25	7.85	5.14	7.01	4.82	0.001	0.26

In table 2 we present the results obtained by comparing the data obtained in pre- and post-intervention for students in the gymnasium cycle. The observed values support that the level of development cognitive and social-emotional skills assessed in the two moments of the intervention is significantly optimized ($p < 0.01$). Therefore we can conclude that due to the intervention, learning skills, adaptability, social and emotional skills of pre-adolescents improved significantly. On the other hand, the level of anxiety and ADHD symptoms decreased significantly. In the same time, if we look at the effect size of the intervention, we find that its size is moderate to high (0.30-0.60), especially in the case of social skills and adaptability of students to the school environment. We can thus state that the formulated hypotheses are confirmed, the value of the effect size making us claim that the observed effects are outcomes of the intervention.

Correlates of change

As we have already mentioned, this research also aimed to identify possible predictors of intervention effectiveness. Therefore, the difference between individual performance between post and pre intervention (Delta) was also computed for the group of participants who participated in both stages of the study (pre and post -intervention, N = 148 students, respectively N = 94). Factors such as age, gender, ethnicity, family size (number of children in the family), parental status and attendance in the project activities were taken into account.

As far as age is concerned, for both primary and secondary school samples, there were no significant correlations with the effectiveness of the program. However, there are several negative low to medium intensity correlations, even if not significant with the change in social skills (r= -0.15 for the primary school sample), learning skills (r= -0.18 for the secondary school sample) and anxiety problems (r= -0.17 for the secondary school samples). This means that the effectiveness of the intervention tends to be greater for the younger ages, inside each educational cycle (see table 3).

Table 3. The correlations between age and effectiveness of the program

Effectiveness upon	Age	
	Primary school sample (N=148)	Secondary school sample (N=94)
Adaptability	.059	-.048
Social skills	-.157	-.129
Learning abilities	-.106	-.182
Affective problems	.035	.030
Anxiety problems	.040	-.176
ADHD problems	.083	-.095

** p< 0.01, * p< 0.05

Regarding the gender differences, the effectiveness of the program was assessed. The results have revealed that for the primary school sample, for boys, the program had a significantly higher effectiveness for social skills (p <0.05), and a marginally significant higher effectiveness for anxiety problems (p= 0.06). For the secondary school sample, the data suggest that only in the case of problems related to attention deficit and hyperactivity there is a significant difference, with a significantly higher effectiveness for boys. So, we can state that for boys, the intervention program had a big impact on social and emotional skills (see table 4).

Table 4. Gender differences in the effectiveness of the program

Effectiveness upon	Primary school sample (N=148)					Secondary school sample (N=94)				
	Boys		Girls			Boys		Girls		
	M	SD	M	SD	t	M	SD	M	SD	t
Adaptability	3.07	3.48	2.29	3.86	1.27	3.59	3.55	2.42	3.81	1.49
Social skills	3.63	4.52	2.02	4.48	2.13*	5.00	5.34	4.18	5.36	.73
Learning abilities	2.82	4.72	1.61	4.67	1.53	4.41	5.57	3.09	6.53	1.01
Affective problems	-.83	2.22	-.86	3.21	.07	-1.24	2.40	-.77	1.39	-1.20
Anxiety problems	-1.53	2.11	-.80	2.63	-1.86ª	-.51	1.02	-.51	.89	-.02
ADHD problems	-3.54	5.87	-3.54	5.87	-.77	-3.14	4.77	-1.35	3.74	-2.02*

** p< 0.01, * p< 0.05, ªp< 0.10

In what concerns the ethnicity, for primary education level, Romanian students significantly reduced their emotional problems compared to Roma students. In the case of secondary school children, the data revealed significant differences (p<0.01) in the efficiency of the intervention for: adaptability, social and learning skills, respectively emotional problems, in the sense that Romanian students registered significantly higher improvements than Roma students, in 4 of the 6 evaluated dimensions. This result, in our opinion, can be interpreted from two different angles: a. On the one hand, the proposed

intervention is more useful for Romanian children, which means that in future projects it will be possible to follow the same principles of intervention as in this project; b. on the other hand, the fact that for Roma adolescents, the intervention seems to have smaller effects, suggest that maybe in the future, the intervention strategies should be thought differently for them - for example, (possibly) more remedial sessions will be needed, the intervention should respond more to their specific educational and personal needs; perhaps it would even be appropriate for the intervention to be designed only after identifying their development profile (i.e. to have as a starting point, objective data, specific to the group to be intervened). For this specific factor (ethnicity), we have to take into account also the number of attendances and the implication in the remedial and counselling activities, which was higher for Romanians. Although we couldn't find a significant correlation between ethnicity and the implication of students in project activities, this factor might influence the results of future intervention programs.

Table 5. Ethnical differences in the effectiveness of the program

	Primary school sample (N=148)					Secondary school sample (N=94)				
Effectiveness upon	Romanian		Roma			Romanian		Rroma		
	M	SD	M	SD	t	M	SD	M	SD	t
Adaptability	2.63	3.54	3.18	3.95	-.81	4.96	6.69	.08	2.04	3.57**
Social skills	2.85	4.75	3.43	4.09	-.67	3.53	4.01	1.00	2.00	3.01**
Learning abilities	2.38	5.08	2.28	3.71	.12	5.51	5.90	1.92	1.63	2.99**
Affective problems	-1.14	2.19	-.05	3.54	-2.24*	-1.22	2.04	-.28	1.02	-2.20*
Anxiety problems	-1.24	2.29	-1.25	2.56	.01	-.54	1.01	-.44	.71	-.47
ADHD problems	-3.36	5.97	-2.88	7.29	-.40	-1.97	4.59	-2.36	3.26	.389

** p< 0.01, * p< 0.05, [a]p< 0.10

Also, there were some other important factors that could predict the efficiency of the intervention program for pre-adolescents. The data emphasize that the number of children in the family correlates significantly with the effectiveness of the intervention on anxiety problems (negative correlation, p<0.01). Adolescents who have divorced or separated parents, have a low / limited improvement in learning skills compared to students whose parents are married (p<0.01).

Table 6. The correlations between the number of children in each family and the effectiveness of the program

Effectiveness upon	No. of children	
	Primary school sample (N=148)	Secondary school sample (N=94)
Adaptability	.091	-.178
Social skills	.065	-.154
Learning abilities	-.004	-.199
Affective problems	-.010	-.035
Anxiety problems	-.003	-.299**
ADHD problems	.010	-.130

** p< 0.01, * p< 0.05

We also noted that the degree of presence in the project activities is significantly and positively associated with the efficiency of the intervention on the areas of

adaptability, social skills and learning skills (table 7). In other words, the higher the number of students attendances in the project activities, the better they developed their relationship skills, learning or perfecting skills (for all domains $p<0.01$) and their ability to successfully adapt to the school environment and at the specific demands of the school was higher ($p<0.05$). These three areas of development are very important for the adolescent, because, on the one hand, the level of self-efficacy related to school can change in a positive way (so it can increase motivation / self-determination for school), and on the other hand optimizing interactions in the school environment, creates a supportive, reliable educational space (this in turn favors academic performance).

Table 7. The correlations between the presence in the project activities and the effectiveness of the program

Effectiveness upon	Presence (daily activities/month)	
	Primary school sample (N=148)	Secondary school sample (N=94)
Adaptability	.029	.260*
Social skills	.136	.268**
Learning abilities	-.045	.392**
Affective problems	.017	-.084
Anxiety problems	.089	.141
ADHD problems	.088	.023

** p< 0.01, * p< 0.05

Another important information observed for this age group in relation to school adaptability was that the highest efficiency of the program implemented within the project, occurs in students who spend more time with someone else rather than with their parents or just their mother. In other words, those teenagers who do not spend most of their time with close family members, become more adapted to the school / educational context as a result of participating in the activities within the project. In our opinion this is a salient aspect because in Romania, especially in rural zones, the majority of the parents are working abroad and grandparents or other family members are taking care of the children. Our data emphasize that there is a real need to design these types of intervention programs in order to help learners adapt to school and complete their education.

Limitations and future directions

Besides the relevant results revealed, our research has several limits that could impose caution when interpreting these results.

First, the instruments used to measure the psychological concepts, were addressed to teachers, who reported all the answers and so the teachers' subjectivity might have influenced the data.

Second, for pragmatic reasons, our research did not include a control group. Consequently, we could not quantify the proportion of the total change generated by other factors than the intervention (e.g. endogenous changes, maturation).

Third, there are also some limitations from a statistical point of view. First, even if the pre-intervention sample generated sufficient statistical power for our analysis, the sample size from the post-intervention phase represented less than half of the initial sample. Besides the deficit of statistical power, the reduced sample size in post-intervention phase could actually generate an over-estimation of change if the reason for attrition was the inefficiency of the intervention.

Fourth, the Covid-19 Pandemic overlapped with the activities of the project. This means that the changes in teaching and evaluation methods, and generally in the way school adapted to these circumstances, could have been generated a set of potentially confounding variables, that were not measured nor controlled.

As far as future research directions are concerned, our study could be developed as a more complex investigation regarding school dropout by including additional variables, such as: cognitive abilities (attention, cognitive inhibition, comprehension, computational abilities, etc.), motivation for study, school identification, motor skills etc. Beside the efficacy asessment, the analysis of the mechanisms of change would be also relevant. This could allow us to identify the active components of the intervention and to find the contribution of each component to the total efficacy. Also, it would be relevant to expand the set of potential moderators of the effect, both the individual characteristics of children and the characteristics of the counselor and the way the intervention is delivered.

Conclusions and practical implications

The concern for keeping children and adolescents in school is both challenging and complex. Research in this area has shown that the most effective strategies to reduce school dropout require preventive interventions for children at risk of dropping out of school before they enter high school. These interventions need additional support (eg guidance, counselling), as well as actions to monitor risk indicators, which allow for the correct guidance of interventions. There are aspects that the decision makers and the people directly involved in the implementation, within this project, have capitalized on. The intervention itself also aimed at carrying out activities that could lead to increased school performance, involvement in teaching and thus to the extension of the schooling period by (a) providing direct, individualized guidance and support for the fulfillment of tasks from home, participating in class activities; (b) student participation in counseling and career guidance classes - activities validated in terms of efficiency through specialized studies (Wahner, 1995; Wagner, Blackorby, & Hebbeler, 1993). Therefore, we can unequivocally state that the results obtained here, within the project, come to add and confirm the data obtained in other similar studies found in the national and international literature. In the following statements we resume and formulate same conclusions regarding the most relevant results from this research.

For primary school children:

a. the intervention carried out in the project had a statistically significant effect ($p < 0.01$) on all evaluated dimensions (analysis with repeated measurements)

b. for the analyzed sample, the activities had the same effect regardless of the chronological age.

c. in terms of social skills and anxiety problems, intervention is more effective for boys than for girls

d. Romanian students significantly reduced their emotional problems compared to Roma students

e. the greatest effect of the intervention in terms of reducing problems of affectivity, anxiety and ADHD, was recorded for students who spend most of their time with their mother. In contrast, adaptability has improved the most for students who spend the most time with both parents.

f. students who spend most of their time with their mother, had the lowest level of adaptability when entering the project; it was optimized through the activities in the project

g. students who spend more time with someone other than their parents had the lowest initial score on social skills

h. ethnicity (translated by different educational principles and values) is an important vulnerability for all dimensions that impact the child's ability to respond successfully to the challenges of the school environment.

For secondary-school children:

a. the intervention carried out had a statistically significant effect ($p < 0.01$) on all evaluated dimensions (Analysis with repeated measurements)

b. for the analyzed sample, the activities had the same effect regardless of the chronological age.

c. in terms of social skills and anxiety problems, intervention is more effective for boys than for girls

d. Romanian students significantly reduced their emotional problems compared to Roma students

e. the greatest effect of the intervention in terms of reducing problems of affectivity, anxiety and ADHD, was recorded for students who spend most of their time with their mother. In contrast, adaptability has improved the most for students who spend the most time with both parents.

f. students who spend most of their time with their mother, had the lowest level of adaptability when entering the project; it was optimized through the activities in the project

g. students who spend more time with someone other than their parents had the lowest initial score on social skills

h. ethnicity (translated by different educational principles and values) is an important vulnerability for all dimensions that impact the child's ability to respond successfully to the challenges of the school environment.

Analyzing both the numerical data collected in the two stages of testing, and especially the result of the analyzes and interpretations we performed in this study, it is clear that the multidimensional intervention implemented by experts in the project led to changes in accordance with the expectations expressed. The intervention included both remedial activities (to increase school performance) and social and emotional development activities. Even if in the initially assessed groups (primary and secondary school) about half of the children had serious deficits in the assessed skills, we find that the intervention had effects on all. That mean that students made a real progress regardless of the initial level of school or socio-emotional competencies. Obviously, as in the context of any correctly conducted study, attention must also be drawn to certain investigative or outcome limits. Thus, although almost all dimensions evaluated and monitored showed statistically significant changes, the magnitudes of the effect of the intervention varied between small, moderate and medium values. This may be due to several factors (the presence of confused variables): a. the relatively small number of children who were evaluated in both stages (those who were evaluated in pre-test vs. post-test); b. the changes due to the natural biological maturation of children and adolescents; c. the atypical implementation of the project activities, in the conditions of the pandemic generated by the new coronavirus, etc. Therefore, we can argue that the intervention led to objectively noticeable effects that are in line with the general purpose of the project, namely to reduce the number or severity of variables that favor school dropout. Moreover, it is obvious that the school population in our country is in great need of such projects. They are needed to support children who have multiple vulnerabilities and who urgently require such support activities provided by a qualified human resource. There are several reasons why such initiatives should continue in the coming years. Here are just a few:

1. the educational contexts in our country are of a high heterogeneity, and some require remedial interventions and extensive recovery

2. school dropout continues to provoke Romanian education sistem, at all levels

3. functional illiteracy is on the rise and forces us to intervene

4. The Romanian education system needs a multilevel and multifaceted intervention - support and specific domain corrections, prophylactic - curative interventions at the level of socio-emotional competencies and, obviously, an axiological / moral sanogenesis.

However, taking into account the outcomes, but also the limits of the study, we can make some recommendations or future directions of action that (we believe) can be useful to others who assume projects similar to the one analysed here. These are:

a. remedial activities aimed at optimizing school results must be accompanied (in some cases even preceded) by specific activities for the development of social and emotional skills;

b. children from single-parent families are a vulnerable group in relation to all dimensions measured in the project; we therefore consider that for them individualized

psychological counselling activities would be extremely useful in the context of such remedial interventions and could enhance their compliance with remedial activities;

c. adolescents who do not spend time with their parents could be a separate vulnerable group, and interventions aimed at them should aim to identify factors that determine these vulnerabilities (emotional, cognitive, social), in order to subsequently propose prevention programs or specific intervention;

d. psycho-social and cognitive development strategies must be implemented from primary school. Building a robust school self-efficacy can be the basis of educational identity and can thus reduce school dropout. In this project, the small number of children present at both times of the evaluation can be a testament to the risk of dropping out of school from an early stage, their subsequent efforts to reintegrate into school are very large and costly;

e. it is necessary to assess the vocational and educational identity of adolescents in high school, as this can provide very clear directions for intervention for this age group. Although we aimed to assess this dimension as well, the prevention measures imposed by the COVID-19 pandemic prevented us in this respect, the students being unable to complete the specific questionnaires, which require assisted self-reporting. However, we recommend that this dimension be taken into account in subsequent projects and studies addressed to this population.

In conclusion, we add to those already formulated, 3 more recommendations that integrate in our opinion, the guidelines of any preventive intervention addressed to vulnerable school populations.

a. Experts who implement such intervention programs have to combine discipline remedial activities with the principles of social and emotional learning. This can be done through a training program addressed to counsellors / teachers; in the training sessions, beyond the elements of terrorist-empirical substantiation, concrete examples of practical activities that facilitate social and emotional development can be presented (by using the principles of rational-emotional and behavioral education)

b. The counsellors (psychologists and pedagogues) involved in the project to prove that they possess, in advance, skills to perform activities designed to develop children's emotional and social skills. In this sense, a set of specific training strategies will be used, supported by a series of means / support materials developed ad hoc - therapeutic stories, didactic-formative games, team activities, role play, etc.

c. The implementation team directly involved (teachers, counsellors) must permanently benefit from support and advice provided by people with psychological and pedagogical expertise.

Summarizing, by virtue of an integrative analysis of the results obtained by involving all the actors of this partnership, we can say, without hesitation, that they prove the success of the project program. Moreover, we consider that they are a real plea for collaboration - the work of teachers with educational counsellors, psychologists and pedagogues. We are convinced that such a professional collaboration will favour the

achievement of the goal pursued by all those who are sincerely concerned about the educational, psychological and moral health of the young generation.

Acknowledgement

This research was supported by Human Capital Operational Program, project POCU/ 74/6/18/106002 *"Choose school- A chance for the future".*

References

Appleton, J., Christenson, S., Kim, D., & Reschly, A.L. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. *Journal of School Psychology, 44*, 427-445.Balfanz, R. & HERZOG, L. & Mac Iver, D. (2007). Preventing Student Disengagement and Keeping Students on the Graduation Path in Urban Middle-Grades Schools: Early Identification and Effective Interventions. *Educational Psychologist*, 42. pp.223-235. Doi: 10.1080/00461520701621079

Bradshaw, C. P., O'Brennan, L. M., and McNeely, C. A. (2008). Core competencies and the prevention of school failure and early school leaving. *New Dir. Child Adolesc. Dev.* 122, 19–32. doi: 10.1002/cd.226

De Witte, K., Cabus, S., Thyssen, G., Groot, W., and van den Brink, H. M. (2013). A critical review of the literature on school dropout. *Educ. Res. Rev.* 10, 13–28. doi: 10.1016/j.edurev.2013.05.002

DiPerna, J. C., Volpe, R. J., & Elliott, S. N. (2002).A model of academic enablers and elementary reading/language arts achievement. *School Psychology Review*, 31, 298-312

Domitrovich, C.E, Durlak, J.A., Staley, K.C., Weissberg, R.P. (2017). Social-Emotional Competence: An Essential Factor for Promoting Positive Adjustment and Reducing Risk in School Children. Child Dev. Mar; 88(2):408-416. doi: 10.1111/cdev.12739

Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A Meta-Analysis of After-School Programs That Seek to Promote Personal and Social Skills in Children and Adolescents. *American Journal of Community Psychology*, 45, 294-309 http://dx.doi.org/10.1007/s10464-010-9300-6

Esch, P., Bocquet, V., Pull, C., Couffignal, S., Lehnert, T., Graas, M., et al. (2014). The downward spiral of mental disorders and educational attainment: a systematic review on early school leaving. *BioMed. Central Psychiatry* 14:237. doi: 10.1186/s12888-014-0237-4

Fortin, L., Marcotte, D., Diallo, T.M., Potvin, P., & Royer, É. (2013). A multidimensional model of school dropout from an 8-year longitudinal study in a general high school population. *European Journal of Psychology of Education, 28*, 563-583.

Gleason, P. & Dynarski, M. (2002). Do we know whom to serve? Issues in using risk factors to identify dropouts. Journal of Education for Students Placed at Risk, 7, 25–41.

Gottfried, M. A. (2010). Evaluating the Relationship Between Student Attendance and Achievement in Urban Elementary and Middle Schools: An Instrumental Variables Approach. *American Educational Research Journal*, *47*(2), 434–465. https://doi.org/10.3102/0002831209350494

Hammond, C., Linton, D., Smink, J., & Drew, S. (2007). *Dropout risk factors and exemplary programs.* Retrieved from National Dropout Prevention Center, Communities In Schools, http://www.dropoutprevention.org/resource/major_reports/communities_in_schools

Heppen, J. B., & Therriault, S. B. (2008). Developing Early Warning Systems to Identify Potential High School Dropouts. Washington DC: The National High School Center at the American Institutes for Research.

Korhonen, J., Linnanmäki, K., and Aunio, P. (2014). Learning difficulties, academic well-being and educational dropout: a person-centred approach. *Learn. Individ. Differ.* 31, 1–10. doi: 10.1016/j.lindif.2013.12.011

Marcotte, D., Lévesque, N., & Fortin, L. (2006). Variations of cognitive distortions and school performance in depressed and non-depressed high school adolescents: a two-year longitudinal study. *Cognitive Therapy and Research*, 30, 211–225.

Prevatt, F., & Kelly, D. (2003). Dropping out of School A Review of Intervention Programs. *Journal of School Psychology*, 41, 377-395.

Quiroga, C. V., Janosz, M., Bisset, S., and Morin, A. J. S. (2013). Early adolescent depression symptoms and school dropout: mediating processes involving self-reported academic competence and achievement. *J. Educ. Psychol.* 105, 552–560. doi: 10.1037/a0031524

Rumberger R.W., Arellano B. (2007) Understanding and Addressing Achievement Gaps During the First Four Years of School in the United States. In: Teese R., Lamb S., Duru-Bellat M., Helme S. (eds) International Studies in Educational Inequality, Theory and Policy. Springer Science & Business Media, DOI: 10.1007/978-1-4020-5916-2_31 ISBN 9781402059162

Stegelin, D. (2004). Early childhood education. In F. P. Schargel & J. Smink (Eds.) Helping students graduate: A strategic approach to dropout prevention, 115-123. Larchmont, NY: Eye on Education.

Taylor, R.D., Oberle. E., Durlak, J.A., Weissberg, R.P., (2017). Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Dev.* Jul; 88(4):1156-1171. doi: 10.1111/cdev.12864. PMID: 28685826.

Wang, H., Chu, J., Loyalka, P., Xin, T., Shi, Y., Qu, Q., Yang, C. (2016). Can Social Emotional Learning Programs Reduce School Dropout in Developing Countries?. *Journal of Policy Analysis and Management*, 35(4), 818-847.

.