
EMPIRICAL SUPPORT FOR SELF KIT: A RATIONAL EMOTIVE EDUCATION PROGRAM

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Abstract

A recent national screening study, focused on socio-emotional problems in children, revealed that in Romanian educational settings there is real need for psychological counselling programmes. Taking together the result from two experimental studies, the present paper offers empirical support for the efficiency of a newly developed rational emotive education program (SELF kit). In the first study, a 3x2 factorial design (intervention type X team expertise) was applied; working with preschool children (223), a 12 weeks intervention programme was implemented. The second study tested the efficiency of Self Kit program in primary school children: 94 pupils were implied in a 2X2 experimental design (intervention X assessment moment). The results from both studies revealed a real beneficial impact of SELF kit programme on children socio-emotional competences. Limits, future directions and implications are discussed.

Keywords: Self kit program, rational emotive education, socio-emotional problems in children

Introduction

Recent studies have revealed a worldwide tendency with the present generation of children to exhibit more emotional problems than they used to have in the past (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). They are lonelier and more depressed, angrier and more unrestrained, more impulsive and aggressive, being significantly more inclined to be anxious in almost all competitive circumstances. Evidently, children with such manifestations represent a real challenge to parents and teachers.

In our national context, the results from a screening study showed that the prevalence of social and emotional problems in Romanian preschool and primary school children from families with low socio-economic status is relatively high (Buzgar, Dumulescu & Opre, 2013). The researchers found a

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significant shared variance between externalising problems, internalising problems and social problems, which means that there is a high probability for these problems to appear together in real settings. Also, the common variance can prove the fact that behind those categories of problems there are the same factors. As a matter of fact, from a cognitive point of view, the emotional problems are the results of a dysfunctional way of thinking. In children, the cognitive style interferes with goal-setting and achievement, with academic success and social interaction with classmates and teachers ([Vernon & Bernard, 2006](#)).

The long-term consequences on the school achievements and the social integration of these children are, themselves, increasingly more severe. The solution to all these problems is dependent on the extent to which parents and teachers regard children's education for life adequate and efficient. More exactly, it depends on the way in which early education and young-age schooling can prevent the onset of these dysfunctionalities. Unfortunately, we can see that the educational programmes ever more frequently leave children's emotional development to chance, unilaterally overemphasising their academic training. They are often deprived even of the bare minimum of emotional literacy, the educational system leaving them unprepared for confronting reality. This is why a new vision is necessary, regarding what kindergarten and, later, school can do to ensure a comprehensive development of children. More precisely, there is need for programmes which would target both academic and socio-emotional development, so as to ensure that children and young people are better adapted to the complexity of everyday existence. Therefore, we consider that implementing Rational Emotive and Behavioural preventive programmes in educational milieus can help children improve their cognitive style and adapt easily to life-threatening events. Such programmes have been developed and recognised since the 1970's under the name Rational Emotive Education (REE).

Based on the principles of the Albert Ellis rational emotive behavioural therapy (REBT), ([Ellis, 1971](#)), the rational emotive education programme (REE) ([Knaus, 2004](#)) proved to be an efficient way of working with children who showed internalisation or externalisation problems. As studies indicated, irrational beliefs appear to be related to internalised and externalised emotional and behavioural problems ([David, Schnur, & Birk, 2004](#); [Silverman & DiGiuseppe, 2001](#)), thus, if we want to reduce negative dysfunctional behaviours and emotions, the best way to do it is to increase rational thinking. REBT was first used in a school setting in 1970, in Living School, an institution coordinated by the Institute for Rational Emotive Therapy in New York ([Bernard, Ellis, & Terjesen, 2006](#)), which involved teachers, rather than psychologists, in working with children. Since then, REE has started to be a challenge and an efficient method to be implemented in schools, and not only for preventing and optimising children's and adolescents' mental health state. Regarding the efficiency of the rational-emotive and behavioural education for a series of emotional and behavioural problems, a meta-analysis carried out in 2004 by Gonzales et. al.

revealed that this type of intervention appears to be effective both with children and adolescents with or without clinical problems. This justifies the preventive interventions focusing on problems with sub-clinical intensity, or on those that have not yet become manifest, but to which children are vulnerable. Another conclusion of this study is that the efficiency of REBT intervention is greater with pre-school and primary school children than with children of an older age.

In effect, REBT with children and adolescents implies two types of programmes: (1) rational emotive therapy (or RET), used in individual counselling and therapy session with young people and parents or significant others, and (2) in the form of a curriculum taught to a class of children ([Hajzler & Bernard, 1991](#)), called rational emotive education, or REE. Because in many settings and in many countries it is very difficult to take a child to a psychologist, a curriculum based on REBT principles seems to be the perfect solution. Usually the REE programmes have been taught to groups of children as young as eight ([Hajzler & Bernard, 1991](#)) where the main topics were: accepting responsibility for their own emotional state, how to use cognitive, behavioural, and affective techniques to reduce self-defeating attitudes, feelings and behaviours and strategies to improve their overall functioning. The results of REE programmes showed a decrease of irrational beliefs ([Buckley, 1983](#)), a significant effect on emotional regulation mechanisms ([DiGiuseppe, & Kassino, 1976](#)), school performance ([Sapp, 1996](#)) and social skills ([Flanagan, Jonsson, Otcheva, Csapo, Bowes, Macek & Sheblanova, 1998](#)), reduced anxiety ([Rosenbaum, Fiederman, Gersten, Hirshfeld, Meminger & Herman, 1988](#)) and depressive symptoms ([Wilde, 1999](#)). Looking at the extent of the studies on REE programmes mentioned in different databases, we concluded that most of them have been applied in United States, Canada and Australia. [Diekstra \(2008\)](#) after analysing 19 meta-analyses available between 1997 and 2007, notes that Social Emotional Learning programmes or SEL had a positive impact on both externalised and internalised problems, although there are fewer studies on stress, depression, suicidal attempts, anxiety ([Diekstra, 2008](#)),.

In Europe, REBE and REE programmes are known under the name of SEL, Social and Emotional Aspects of Learning (SEAL), Skills for Life, Emotional Intelligence, Character Education, etc. All these programmes are a form of REE and focus mainly on behaviour and emotional regulation. Most of them are based on emotional intelligence principles, but in the Netherlands the “Skills for Life” programme is based and follows the REBT theory. Taking all this into consideration, we observed that in Romania, the REE programmes are translations of well known programmes, like “Rational Stories for Children” ([V. Waters](#)), “Developing Emotional Intelligence through Rational Emotive Behavioral Education” ([A. Vernon](#)), “You Can Do It! Education” ([M. Bernard](#)). But, along the positive effects ([Trip, McMahon, Bora & Chișea, 2010](#)) the studies revealed some problems – not all the stories and activities are well understood by children, the stories don’t follow the same cultural pattern as Romanian stories

do, the activities don't have the same impact on children as expected ([Cristea, Benga & Opre, 2008](#); [Opre & Giba, 2010](#); [Opre, Buzgar, Ghimbulut & Calbaza, 2011](#)), some of the subjects discussed in the group sessions are not familiar to our pupils, etc. Due to such obstacles, the effects don't live up to expectations, and thus the next step was to create programmes that could fill those gaps.

The SELF KIT programme

As scientific literature states ([Diekstra, 2008](#), [Hajzler & Bernard, 1991](#)), a good rational–emotive education curriculum is a complex programme with materials designed for educators, children and parents. Therefore, the SELF KIT (Social Emotional Learning Facilitator Kit, 2010) takes into consideration the following outlines: (1) is designed to be used by educators, psychologists as well the parents, (2) the structures respect the onto-genetic stages of development, (3) it is based on the psychological development characteristics of children, (4) is flexible regarding the structure of different educational curricula, (5) can be adapted to the specificity of different cultures. The main topics of the programme were the result of a need assessment meant to identify the emotional problems our children are confronted with. Based on teachers' and parents' answers to questionnaires, we identified 8 dysfunctional negative emotions that ought to be included in our programme: sadness/depression, separation anxiety, and fear of emotional injury /of being hurt, anger, guilt, shame, jealousy and envy. Each emotion is presented in a module that comprises: a story, a folk tale, one or more therapeutic activities, games with letters, words and images (crosswords), poems, colouring pages, encyclopedia, proverbs and sayings, board games and the audio story-telling. All these elements draw on REBT theory and principles. Each story follows the pattern of a counselling/therapy session, in which the main character is confronted with a situation that activates his/her irrational beliefs. As in a classical counselling session, another story character (the therapist) teaches "the client" how to think rationally, and how rational thoughts change the way he/she feels and behaves. The therapeutic activities dispute the main character's irrational beliefs, focusing mainly on children re-living the negative experience, or on identifying the relation between cognition and emotion and how they can replace "unhealthy thoughts" with good ones (they do this through specially designed games, role-playing, conversation or debate). The poems, the board games, the cross-words, the colouring pages are all reminiscent of the ABC cognitive model of REBT, in order to constantly remind the children of the power of rational thinking.

Looking for ecological validity, the main purpose of the present paper was to assess, in natural environment, the efficiency of the SELF KIT programme in developing social and emotional competences of kindergarten and primary school children. In this sense, we conducted two empirical studies ([Opre & Buzgar, 2012](#); [Buzgar, Dumulescu & Opre, 2012](#)) with the help of which we

tested the efficiency of the self kit programmes (those targeting preschoolers and school children in the lower grades).

Study 1

The objective of the first study was to assess, in a natural context, the efficiency of the SELF KIT programme in preventing and remitting the socio-emotional and behavioural issues in the case of preschool children. In this sense, we relied on two hypotheses: 1. the implementation of a socio-emotional programme which incorporates multiple competences and is systematically carried out has significantly higher preventive-corrective effects than one which incorporates only one competence, and is not applied systematically; b. the involvement of a teacher with previous REBT training greatly increases the efficiency of the intervention programme.

Method

Participants

In the first study the participants were 223 preschool children (116 girls and 107 boys), aged 4 to 6, enrolled at the University Kindergarten in Cluj-Napoca, a mainstream education institution. All children have their residence in Cluj-Napoca. 16 speak Hungarian as their mother tongue but speak Romanian very well, and 8 were included, for disruptive behaviour, in a monthly session with a school psychologist. No other problems (emotional or behavioural) were mentioned by the teachers or the psychologist.

Measures

All participants were assessed (in pre and post-intervention) by teachers and parents using the PEDa Platform (Platform for Child Development Evaluation) (Cognitrom, 2010). PEDa is a multi-method and a multi-observant evaluation system designed for parents (18 scales), teachers (36 scale) and psychologists (49 scales and tests). For this study, in accordance with our objectives, we used only the social competences scale, emotional competences scale, cognitive competences scale, motor competences scale, personal autonomy scale, disruptive behaviour scale and Spence anxiety scale (adapted for the Romanian child population). Each scale has items rated on a Likert type scale with 3, 4 or 5 points.

Procedure

There were two assessment stages and an intervention session between them. At the end of the initial evaluation (pre-intervention assessment with PEDa) the children were assigned to different intervention groups. Taking into account the fact that the teacher's educational background and a specific training can

influence the result, we chose to use the team expertise as an independent variable (REE expertise vs. no REE expertise), along with the type of intervention (of a 3x2 factorial design). One group followed the SELF Kit programme, implementing all 8 modules (1 module per week). In the second group the teacher had a conversation with the children about emotions, thoughts, good behaviour (non-systematic REE programme). The third group received no intervention. After 8 weeks, the children were again assessed, using the same instruments.

The three REE expert teachers participated in a REBT training programme focused on REBT principles, the ABC cognitive model, the structure and implementation strategies of an REE programme. Having completed the training, the teacher working with the SELF Kit conducted 4 additional separate meetings with a member of our team, in which we offered them other details about the structure of the programme, the typology of the activities, and established some ground rules for their implementation.

Results

The data collected from the pre- and post-intervention assessment carried out by teachers and parents with the PEDa instruments and applied by psychologists team were computed by SPSS. As we expected, the group that worked with the SELF Kit programme and had a teacher with REE expertise proved to be more efficient in improving the social, emotional ($F=4.14$, $p<.05$) and behavioural skills ($F=5.10$, $p<.05$) than the non-systematic REE intervention groups, regardless of the teacher expertise. There is also a significant difference ($F=5.04$, $p<.05$) between the non-systematic REE intervention group with an expert teacher and the no intervention group with no teacher expertise. As concerns the parents' and the teachers' assessments, there were no significant differences between the scores in pre- or post-intervention assessments. This means that we can consider the results as objective measurements with good reliability for the scale items. Regarding the cognitive and the personal autonomy scales, the scores revealed a significance of $p<.01$ ($F=4.41$) for the SELF Kit programme with an expert teacher compared to all the other classes of children.

Discussion and conclusions to Study 1

The data obtained proved that the SELF KIT programme (the version for kindergarten) is efficient in reducing both internalisation and externalisation problems with children aged 4 to 6. On the other hand, from the literature we know that working with children as young as 4 can be very difficult, especially if you want to change their thoughts – irrational beliefs, in our case. They have problems differentiating between emotion, cognition and behaviour. They don't have an appropriate and discriminative emotion vocabulary. Most of the children we worked with were not able to identify or name other emotions besides

“happiness” or “sadness” and their synonyms. Therefore, the first step in working with emotional development programmes for young children is to help them name, identify/recognize and describe emotions. At this age children play a lot, so the games in our programme, such as the memory–game, prove to be of big help for emotion recognition and naming of emotions. The activities helped them identify personal situations when they reacted in the same manner, but with the help of the characters they could learn how to deal with that situation in the future – could learn what to do. The activities and the poems also encouraged children to change the way they think and feel by outlining the connection between thought and emotion, and by making them realise how good thoughts aid everyone in feeling better and behaving in a proper manner.

The results support the idea that a systematic and complex intervention has significantly better effects on children than a non-systematic one. So if the child is presented with a large and diverse material that immerses him in the topic, he/she understands at the end what we want him to learn.

As we expected, the teacher’s expertise was also an important factor that influenced the efficiency of our programme. We observed that even if they had taken up the training programme, for those with a poor understanding of the ABC model, it was very difficult to make connections between B (beliefs) and C (consequences). Although they would sometimes ask about what the child was thinking of, they didn’t differentiate between irrational or rational beliefs and which one was causing the child to feel in a specific way. In the no-intervention group and in the ones with no REE teacher expertise, the teachers focused only on behaviour modifications. More exactly, they only used rewards or penalties to change children’s behaviour. No effects were found for the social and emotional development of these groups. These findings are not surprising, because in the Romanian educational system we often teach educators how to change behaviours only by giving or taking something to/from the children (i.e. by rewards or penalties). That was how we knew where the development was heading (the children learn what to do and not to do and why – the parents or teacher’s explanation). The teachers rarely cross the line to the other side – e.g., what the child is thinking and feeling, and why he always says “ok, I understand,” but after a few minutes or days, he does it again. For other details see Opre and Buzgar (2012)

Study 2

The objective of the second study was to test the efficiency of the SELF KIT programme in preventing/remitting socio-emotional and behavioural problems with school-children in the lower grades. In this sense, we started from the following hypothesis: implementing some preventing-curative sequences of the SELF KIT programme (the version devised for school children in the lower grades), focused on specific emotional, social and behavioural problems, will

significantly reduce the intensity and incidence of internalisation and externalisation problems, as well as of those of a social nature, in the case of primary school children.

In our research, we opted for a quasi-experimental study of a 2x2 bifactorial design. The manipulated variables were represented by the intervention programme (present/missing), respectively, by the moment of assessment (pre- and post-intervention). The dependent variables were represented by the symptoms specific to the internalisation and externalisation problems, to social problems assessed with the help of the general ASEBA sub-scale.

Method

Participants

The participants in our study were pupils in four primary school classes. The test groups consisted of pupils in two schools in Cluj-Napoca (2nd grade: 29 – 9 boys and 20 girls, respectively, 4th grade: 22 – 11 boys and 11 girls). The control groups were represented by two same grade classes from Arad – 23 (10 boys and 11 girls) and, respectively, from Suceava – 20 (12 boys and 8 girls).

Measures

In order to identify and assess the possible internalisation, externalisation and social problems we used the Achenbach System of Empirically Based Assessment (ASEBA), developed by Thomas Achenbach and Leslie Rescorla. ASEBA was translated and adjusted for the Romanian population by Anca Dobrea et. al., in 2009. ASEBA includes a set of questionnaires for assessing the competences, adaptive functioning and the socio-emotional problems of children and adolescents. For our research, we used two of the three ASEBA questionnaires, namely, the one intended for teachers (TRF) and the one targeting children (YSR/self-assessment).

Procedure

At the beginning, a pre-test assessment of participants was carried out, including both the test and the control groups, by using ASEBA – the version for primary school teachers and the self-assessment version for 4th graders. Next came the intervention session, applied only to the test groups, for the duration of 10 weeks, after which a reassessment of all subjects in all groups was carried out. The scales were applied by different persons than those who had previously conducted the intervention. During the second stage, we proceeded to the application of the SELF KIT (Buzgar & Opre, 2011). This was done during the second semester of the 2011-2012 school year, the activities included being applied in class by two members of the team which had designed the SELF KIT, in collaboration with the teachers of the respective classes. The programme was

implemented 2 hours / week, for the duration of 10 weeks, and was applied to both of the test classes involved in the study.

Results

For processing the collected data, we used a split-plot ANOVA, involving an inter-subject variable (the intervention) and an intra-subject one (the moment of assessment). The differences between the two groups at the moment of the assessment were tested by us separately for each of the aforementioned dependent variables: internalisation, externalisation, social problems.

Results for the 2nd grades

Internalisation. Regarding the effect of the interaction between the moment of assessment (pre- and post testing) and the test group, no significant effect was achieved ($F(1,50)=2,92$, $p=0,093$). This suggests that no statistically provable change could be observed as a result of this intervention regarding the symptoms associated with internalisation problems in the case of the two groups. With all these, given the 0.09 significance threshold, we can say that there is a tendency in this sense, and increasing the number of participants and the duration of the intervention could lead to significant effects. Furthermore, the data revealed that there is no significant effect caused by the moment of assessment ($F(1,50)=0,97$, $p=0,33$) as concerns the symptoms associated with externalisation problems. On the other hand, regarding the effect of the group (test vs. control), we did identify a significant effect ($F(1,50)=5,7$, $p=0,02$).

Externalisation. The Levene test for equality of variances proved that we did not violate the homogeneity of variance, therefore we are entitled to conduct the subsequent analyses. Regarding the effect of the interaction between the moment of assessment (pre- and post testing) and the test group, no significant effect of it was identified ($F(1,50)=0,78$, $p=0,37$). There is also no significant effect caused by the moment of assessment ($F(1,50)=0,55$, $p=0,46$) regarding the symptoms associated with externalisation problems, which suggests that there was no significant change in this respect between the pre- and post test moments. Furthermore, we could not identify a significant effect of the group (test vs. control) either ($F(1,50)=2,72$, $p=0,1$).

Despite the fact that we could not observe significant effects, we can notice a slight increase in the average of the control group in the post-test interval, while with the test group there is a noticeable decrease in this respect.

Social problems. The Levene test for equality of variances indicates that there is no homogeneity of variance. Nevertheless, given that this test is highly sensitive to the number of participants, it is quite probable that this coefficient may be significant, even if in reality there is a greater likelihood to commit the type I error. Thus, with some reservations, we can interpret the results obtained.

Regarding the effect of the interaction between the moment of assessment (pre- and post testing) and the test group, no significant effect was observed ($F(1,50)=0,7$, $p=0,99$). This indicates that there is no significant change in time regarding the symptoms associated with social problems with either of the two groups. Furthermore, there is no significant effect of the moment of assessment ($F(1,40)=1,86$, $p=0,17$) regarding the symptoms associated with social problems, which suggests that there was no significant modification of it between the pre and post-test moments. Instead, the analysis of the effect of the group (test vs. control) reveals a highly significant effect ($F(1,50)=11,4$, $p=0,001$).

Results for the 4th grades

Internalisation. The Levene test for equality of variances shows no homogeneity of variance in this case. With some reservations though, we can interpret the results obtained.

Regarding the effect of the interaction between the moment of assessment (pre- and post testing) and the test group, we are near the significance threshold ($F(1,40)=2,97$, $p=0,09$). This indicates that there is a tendency towards change in time regarding the symptoms associated with internalisation problems with each of the two groups. However, there is no significant effect caused by the moment of assessment ($F(1,40)=2,37$, $p=0,13$) as concerns the symptoms associated with internalisation problems, which shows that there was no significant modification of them between the pre- and post-test moments.

On the other hand, as concerns the effect of the group (test vs. control), we could identify a significant effect ($F(1,40)=9,93$, $p=0,003$). With all this, if we consider the eta coefficient (0.190), we can say that this effect is relatively small.

Externalisation. The Levene test for equality of variances indicates that we did not violate the homogeneity of variance, which permits us to conduct the subsequent analysis. Regarding the effect of the interaction between the moment of assessment (pre- and post testing) and the test group, we noticed a significant effect of the interaction ($F(1,40)=9,1$, $p=0,004$). This result proves that there is a significant change in time regarding the symptoms associated with externalisation problems with each of the two groups, at the two moments of assessment.

Even though we found a significant effect of the assessment, we proceeded with the interpretation of the main effects. Thus, we can see there are no main effects of the moment of assessment ($F(1,40)=3,88$, $p=0,56$) and of the group ($F(1,40)=0,27$, $p=0,06$), but given that the effect of the interaction is significant, we can say that there is a significant effect of the intervention on the symptoms associated with externalisation problems.

Social problems. The Levene test for equality of variances indicates that we did not violate the homogeneity of variance. The analysis of the effect of the interaction between the moment of assessment (pre- and post testing) and the test group revealed to us that there is a significant effect of the interaction

($F(1,40)=5,2$, $p=0,027$). Thus, we can say that there is a statistically significant change in time regarding the symptoms associated with social problems with each of the two groups, both at the pre- and post-test moments.

Despite the significant effect of the assessment, we carried out the interpretation of the main effects as well. Thus, we can notice that there is a significant effect of the moment of assessment ($F(1,40)=15,4$, $p=0,001$) regarding the symptoms associated with social problems, which proves that there was a significant modification of them between the pre- and post-test moments.

Regarding the effect of the group (test vs. control), we identified a significant effect ($F(1,40)=5,23$, $p=0,027$). Thus, regarding the social problems, the results show significant differences between the two groups.

The integrative analysis leads us to the following results. For the 2nd grades we did not obtain significant effects of the interaction, but we did obtain a main effect of the group for the internalisation, respectively, the social problems. For the 4th grades we obtained effects of the interaction for the externalisation and social problems, main effects of the group for all the categories of problems, and an effect of the assessment stage for the last category of problems – the social ones. Therefore, we can say that for the two test groups involved in the study (2nd and 4th grades), there is a tendency towards attenuating the internalisation, externalisation and social problems. We do observe, however, that statistically significant changes were the case only with the 4th grades, for the externalisation and social problems. Of course, this result can be explained also by the incidence and severity of the socio-emotional and behavioural problems, which, according to the literature, become more prominent at the end of primary school. As a result, a corrective intervention is even more justified and, implicitly, its effects are more easily observable.

Discussions and conclusions to Study 2

Given the diversity and severity of the problems identified with the national test group assessed in the first study, we considered it appropriate to test the efficiency of an EREC programme of prevention and correction of socio-emotional problems in two different educational contexts. More exactly: a. with a test group of children in a district school of Cluj-Napoca which present similarities from a socio-economic viewpoint with the children tested during the screening stage; b. with a test group of children in a centrally-located school, situated at the other end of the line as concerns the aforementioned socio-demographic variables.

Our results are in line with those obtained by previous studies regarding the efficiency of rational-emotional and behavioural educational programmes. These offer strong arguments with regards to the effects upon domains like disruptive behaviour ([Zelie, Stone & Lehr, 1980](#)), emotional and social problems

(Waever & Matthews, 1993), irrationality (Rosenbaum, McMurray & Campbell, 1991), etc.

The results of the intervention applied in class provides proof in support of the efficiency of the SELF KIT programme, as concerns both the development and furthering of emotional and social competences and the diminishing of the internalisation and externalisation problems. Significant effects of the intervention were identified with a reduced strength of effect. This is justifiable, given that, for reasons independent from the researchers, there existed a number of constraints resulting in the classroom application of the programme for only 10 weeks and with a frequency of only 2 hours per week. In most situations, significant results were obtained after an intervention of about 18-20 weeks.

Thus, we obtained significant results of the intervention for the externalisation and social problems in the case of 4th graders. By observing the averages and the differences with the two groups in the pre- and post-testing period, we can say that both for the internalisation problems with the 4th grade and for all the categories of assessed problems with the 2nd grade, there are noticeable tendencies towards diminishing the associated behaviours in the post-test stage. Thus, although we did not obtain only significant effects of the interaction, which could unequivocally indicate that the changes between the pre- and post-testing stages are significantly different for the two groups, there are nonetheless noticeable differences pointing in the direction we speculated about.

Furthermore, the fact that we obtained different effects of the intervention with the two grades may be ascribable, in part, to the different characteristics of the schools where these children study. This can be explained if we take into account the results of studies which point out the existence of a number of factors affecting the implementation of socio-emotional development programmes in schools, including factors pertaining to community (financing, public policies) and the characteristics of the school (climate, vision, leadership, communication) (Durlak & DuPre, 2008). For this reason, in prospective studies we intend to include as moderating variables aspects which pertain to the climate and the organisational culture of the school with a view to identifying their extent and direction of impact upon the SELF KIT intervention.

In addition, age might influence receptivity to intervention and its efficiency. Given that the SELF KIT programme is based primarily on cognitive intervention strategies, its significant effect on the emotional and social problems in the 4th grade may be augmented by the higher degree of cognitive maturity of these children, as compared to 2nd graders.

These results are in line with previous studies that reported small, towards moderate effects in the case of primary preventive interventions (Cuijpers, van Straten, Smits & Smit, 2006). In addition, our results show that after the application of the SELF KIT programme, there has been an improvement in the perception of children's behaviour by the teachers. Moreover, the results are in agreement with a meta-analytical study that reveals a significant effect of the

socio-emotional development programmes both upon academic results and children's behaviour (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011).

A strong point of the SELF KIT programme, quite likely to speak in favour of its efficiency, is that its implementation had in view a number of emotional and social problems that frequently have similar development antecedents and are comorbid (Hammen & Compas, 1994). Thus, consistent with Biglan, Brennan, Foster, & Holder (2004), we consider that the intervention had a simultaneous impact on certain multiple symptoms and dysfunctionality, quite common in mid-childhood (Biglan, Brennan, Foster & Holder, 2004).

Moreover, the two teachers of the two test classes participating in our study remarked and pointed out that, after the application of the SELF KIT, one could observe objective improvements in the children's academic achievements, that is, improvements that are objectively observable and worthy of analysis and consideration. This may be in line with the results of other studies that have come to support the fact that preventive interventions targeting the socio-emotional abilities specific to the school population appear to have significantly positive indirect effects upon other areas, including the targeted academic ones (Walker & Shinn, 2002). For example, it was observed that the implementation for the duration of two years of a curriculum based on the learning of socio-emotional competences and on problem-solving became associated with improvements of the socio-emotional competences (Aber, Brown, & Jones, 2003), as well as with the results on standardised mathematics tests (Brown, Roderick, Lantieri & Aber, 2004). Other studies revealed similar effects, especially concerning the impact on the academic field, which can be associated with the exposure to an intervention which presupposes the learning of socio-emotional competences (e.g., Durlak et al., 2011; Flay and Allred, 2003; Flay, Allred & Ordway, 2001).

Although we obtained a number of significant results, not all our hypotheses could be confirmed. In this context, we must advise caution, as there are variables that depend on the individual, the family, the social and economic environment, which may diminish the impact of the intervention, but also on the relatively short time allotted to the application of the programme. On the other hand, taking into account the results of other similar studies, we may consider the existence of a latent effect of the programme (Smolkowski, Biglan, Barrera, Taylor, Black, & Blair, 2005). Thus, we expect that these will be translated into further benefits, such as engagement with school or the reduction of disruptive behaviour in secondary school (Eddy, Reid, Stoolmiller & Fetrow, 2003; Lochman & Wells, 2004). Moreover, a number of qualitative analyses conducted by us demonstrated that it is highly probable that the effects of the intervention may be more prominent in the case of certain aspects like recognising emotions and/or correctly labelling them (aspects which may well be yet unobservable at the level of behaviour). In addition, there is the possibility that these changes may not be identifiable by means of the instruments used by us in our study.

General conclusions

Our preliminary studies revealed that there is a need for changing focus on teacher training in Romanian pre-school and school classes, and there is an acute need for valid and adapted REE programmes. In this respect, it is necessary to develop curriculum-based programmes that can help pre-school and primary school children to develop their social, emotional and behavioural skills before the age of eight, when behaviour and socio-emotional functioning seems to settle down (Huesmann & Guerra, 1997).

Naturally, these studies present some limitations too. The number of subjects involved in the study, the fact that we only worked with kindergarten and schools from the urban area, the short period of time for the intervention, etc. Therefore, we will continue to implement the programme with the children in the SELF KIT programme group and with the expert teacher. We also plan to extend the study to a larger number of children from different educational institutions, from different regions of the country, so as to get more data, which we hope will increase the validity and the efficiency of the SELF KIT programme, as a rational–emotive education programme.

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